

UW Board of Trustees Committee on Academic and Student Affairs  
**Agenda-FINAL 04.26.2024**

**Closed Session:** If necessary, a separate agenda and materials for the Closed Session.

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**ACADEMIC AND STUDENT AFFAIRS**  
**COMMITTEE MEETING MATERIALS**

**AGENDA ITEM TITLE:** Master List of Degrees, (Sullivan, Carman)

- OPEN SESSION
- CLOSED 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.

PRIOR RELATED COMMITTEE DISCUSSIONS/ACTIONS:

The Board reviews and approves the Master List of Degrees and Majors annually each May.

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 of the master list.

ACTION REQUIRED AT THIS COMMITTEE MEETING:

Consideration for approval the Master List of Degrees and Majors.

PROPOSED MOTION:

“I move to approve the 2024 Master List of Degrees and Majors.”

UNIVERSITY OF WYOMING  
**MASTER LIST OF DEGREES AND MAJORS**  
as authorized by the Trustees  
**May 2024**  
*Prepared by the Office of Academic Affairs*

- 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.
- Unless an additional delivery method is notated in parentheses ( ), programs are available through in-person instruction. When a delivery method is listed, the program is available through in-person instruction as well as the listed method. Programs available 100% Online may also be completed through Hybrid delivery.
- Degree concentrations are only listed where concentrations have different delivery modes.
- Joint programs are not included on the master list as separate degrees.
- 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, LIFE SCIENCES, and NATURAL RESOURCES**

***Bachelor of Science***

Agricultural Business  
Agricultural Communications  
Animal and Veterinary Science  
Biology  
Botany  
Design, Merchandising and Textiles  
Human Development and Family Sciences  
Human Nutrition and Food  
Microbiology  
Molecular Biology  
Physiology  
Plant Production and Protection  
**Ranch Management and Agricultural Leadership**  
Rangeland Ecology and Watershed Management  
Wildlife and Fisheries Biology and Management  
Zoology

***Master of Arts***

Molecular Biology

***Master of Science***

Agricultural Economics  
Animal and Veterinary Science  
Botany

## **COLLEGE OF AGRICULTURE, LIFE SCIENCES, and NATURAL RESOURCES (cont.)**

### ***Master of Science (cont.)***

Entomology  
Family and Consumer Sciences  
    Design, Merchandising and Textiles  
    Human Development and Family Sciences (100% Online)  
    Human Nutrition and Food  
Food Science and Human Nutrition (*interdisciplinary*)  
Molecular Biology<sup>@</sup>  
Nutrition and Dietetics  
Plant Sciences  
Rangeland Ecology and Watershed Management  
Soil Science  
Zoology and Physiology

### ***Doctor of Philosophy***

Animal and Veterinary Science  
Botany  
Entomology  
Molecular Biology  
Plant Sciences  
Rangeland Ecology and Watershed Management  
Soil Sciences  
Zoology and Physiology

@ = 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 ARTS and SCIENCES**

### ***Bachelor of Arts***

African American and Diaspora Studies  
American Studies  
Anthropology  
Art Education  
Art History  
Communication  
Criminal Justice (100% Online)  
English  
European Languages, Literature, and Film Studies (Pending BOT approval May 2024)  
French (Discontinued, approved by BOT March 2024)  
Gender and Women's Studies  
German (Discontinued, approved by BOT March 2024)  
History  
International Studies  
Journalism  
Music  
Native American and Indigenous Studies  
Philosophy  
Psychology (Discontinued, approved by BOT March 2024)  
Political Science  
Religious Studies  
Sociology (100% Online)  
Spanish

Studio Art  
Theatre and Dance

**COLLEGE OF ARTS and SCIENCES (cont.)**

***Bachelor of Fine Arts***

Studio Art#  
Theatre and Dance#  
Visual Communication Design

***Bachelor of Music***

Jazz Performance  
Music Education  
Music Performance

***Bachelor of Science***

Communication#  
Political Science#  
Psychology (100% Online Completion)

***Master of Arts***

American Studies (*interdisciplinary*)  
Anthropology  
Communication  
English (Hybrid)  
History  
International Studies (*interdisciplinary*)  
**Philosophy** (Discontinued, approved by BOT March 2024)  
Political Science  
**Sociology** (Discontinued, approved by BOT March 2024)  
Spanish

***Master of Fine Arts in Creative Writing***

***Master of Music***

***Master of Music Education***

***Master of Public Administration*** (100% Online)

***Master of Science***

Psychology

***Doctor of Philosophy***

Anthropology  
**English (Pending BOT approval May 2024)**  
Psychology

# = This major counted under a previously listed undergraduate degree in the College of Arts and Sciences.

## **COLLEGE OF BUSINESS**

### ***Bachelor of Science in Business***

Accounting (100% Online)  
Business Economics  
Entrepreneurship  
Finance  
Management (100% Online)  
Marketing (100% Online)  
Professional Selling

### ***Bachelor of Science in Economics***

#### ***Master of Business Administration***

Business Administration  
Business Administration – Executive<sup>^</sup> (100% Online)  
Business Administration – Advanced Accounting (100% Online)  
Business Administration – Energy (100% Online)

#### ***Master of Science***

Accounting (100% Online)  
Economics  
**Finance (100% Online)**

#### ***Doctor of Philosophy***

Economics  
Management and Marketing

<sup>^</sup> = This listing not counted as a separate major

## **COLLEGE OF EDUCATION**

### ***Bachelor of Applied Science***

Major: Career and Technical Education (100% Online Completion)  
Areas of Concentration:  
Business (100% Online)  
Family and Consumer Science (100% Online Completion)

### ***Bachelor of Arts***

Major: Elementary Education (100% Online Completion)  
Major: Elementary and Special Education (K-12) (100% Online Completion)  
Major: Secondary Education  
Areas of Concentration:  
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, Physics, or Earth Science. Earth Science majors choose concurrent majors in Geology or Environmental Systems Science\*  
Social Studies Education with concurrent majors in History or Political Science\*

### ***Bachelor of Science***

Major: Agricultural Education with concurrent majors in Animal and Veterinary Science, Agricultural Business or Agricultural Communication

\* = 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.)**

***Master of Arts***

Major: Education

Areas of Concentration:

Curriculum & Instruction\* (100% Online)

Educational Leadership\* (100% Online)

Higher Education Administration\* (100% Online)

Literacy Education\* (100% Online)

Special Education\* (100% Online)

***Master of Arts in Teaching***

Mathematics<sup>&</sup> (100% Online)

Physics<sup>&</sup> (100% Online)

***Master of Science***

Major: Counseling

Areas of Concentration:

Mental Health Counseling\*

School Counseling\*

Major: Education<sup>&</sup>

Areas of Concentration:

**Instructional Technology\*** (Discontinued, approved by BOT March 2024)

Learning Design & Technology\* (100% Online)

Major: Natural Science (interdisciplinary) (Hybrid)

***Master of Science in Teaching***

Major: Mathematics<sup>&</sup> (100% Online)

Major: Natural Science (interdisciplinary)<sup>&</sup> (Hybrid)

***Doctor of Education***

Major: Education

Areas of Concentration:

**Adult & Post Secondary Education\*** (Discontinued, approved by BOT March 2024)

Curriculum & Instruction\* (100% Online)

**Educational Administration\***

Educational Leadership\* (100% Online)

Higher Education Administration (100% Online)

Learning Design & Technology\* (100% Online)

Mathematics Education\* (100% Online)

***Doctor of Philosophy***

Major: Counselor Education and Supervision

Major: Curriculum and Instruction

Areas of Concentration:

Curriculum Studies\* (100% Online)

Literacy Education\* (Hybrid)

Mathematics Education\* (Hybrid)

Science Education\* (Hybrid)

Major: Education<sup>&</sup>

Area of Concentration:

**Adult & Post Secondary Education\***

**Educational Administration\*** (Discontinued, approved by BOT March 2024)

**Higher Education Administration\*** (Discontinued, approved by BOT March 2024)

**Instructional Technology\*** (Discontinued, approved by BOT March 2024)

**Learning Design & Technology\***

**COLLEGE OF EDUCATION (cont.)**

- Literacy Education** \* (Discontinued, approved by BOT March 2024)
- Mathematics Education** \* (Discontinued, approved by BOT March 2024)
- Science Education** \* (Discontinued, approved by BOT March 2024)

\* = 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)  
& = This major counted under a previously listed graduate degree in the College of Education.

**COLLEGE OF ENGINEERING AND PHYSICAL SCIENCES (CEPS)**

***Bachelor of Arts***

- Chemistry
- Geology and Earth Sciences** (Discontinued, approved by BOT March 2024)
- Mathematics** (Discontinued, approved by BOT March 2024)
- Physics
- Statistics** (Discontinued, approved by BOT March 2024)

***Bachelor of Science***

- Astronomy/Astrophysics
- Chemistry %
- Chemistry (ACS approved) ^
- Environmental Geology/Geohydrology
- Geography
- Geology
- Mathematics %
- Physics %
- Statistics %

- 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 Arts***

- Mathematics

***Master of Arts in Teaching***

- Mathematics &

***Master of Engineering***

- Energy & Petroleum Engineering** (Approved May 2023, begins in Fall 2024)

***Master of Science in Teaching***

- Mathematics &

- Physics &

***Master of Science***

- Architectural Engineering
- Artificial Intelligence (Pending BOT approval May 2024)**



## COLLEGE OF ENGINEERING AND PHYSICAL SCIENCES (CEPS) (cont.)

Atmospheric Science  
Chemical Engineering  
Chemistry  
Civil Engineering  
Computer Science  
Electrical Engineering  
Environmental Engineering  
Geology  
Geophysics

Quantum Information Science & Engineering (Pending BOT approval May 2024)

Mathematics<sup>&</sup>  
Mechanical Engineering  
Petroleum Engineering  
Physics  
Statistics

### ***Doctor of Philosophy***

Atmospheric Science  
Chemical Engineering  
Chemistry  
Civil Engineering  
Computer Science  
Electrical Engineering  
Geology  
Geophysics  
Mathematics  
Mechanical Engineering  
Petroleum Engineering  
Physics

<sup>^</sup> = This listing not counted as a separate major

<sup>&</sup> = This major counted under a previously listed graduate degree in the College of Engineering and Physical Sciences.

<sup>%</sup> = This major counted under a previously listed undergraduate degree in the College of Engineering and Physical Sciences.

<sup>!</sup> = The School of Computing is incubating in the College of Engineering and Physical Sciences.

## COLLEGE OF HEALTH SCIENCES

### ***Bachelor of Science***

Kinesiology and Health Promotion  
Medical Laboratory Science (Hybrid)  
Physical Education Teaching  
Speech, Language and Hearing Sciences

***Bachelor of Science in Dental Hygiene*** (Hybrid)

***Bachelor of Science in Nursing*** (Three options - On campus BASIC traditional, 100% Online Completion, and 2<sup>nd</sup> degree Hybrid)

### ***Bachelor of Social Work***

### ***Master of Science***

Health Services Administration (Hybrid)  
Kinesiology and Health (100% Online)

## **COLLEGE OF HEALTH SCIENCES (cont.)**

Nursing (100% Online)  
Speech-Language Pathology

*Master of Social Work*

*Doctor of Nursing Practice*

*Doctor of Pharmacy*

## **COLLEGE OF LAW**

*Juris Doctor*

## **HAUB SCHOOL OF ENVIRONMENT and 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

## **HONORS COLLEGE**

Bachelors in Honors Interdisciplinary Inquiry concurrent major

## **SCHOOL OF COMPUTING<sup>!</sup>**

*Bachelor of Science*

Geospatial Information Science and Technology  
**Bachelor of Science in Applied Software Development (100% Online)**

*Master of Science*

Geospatial Information Science and Technology - Professional Option (100% Online)  
Geospatial Information Science and Technology – Thesis Option

! = The School of Computing is incubating in the College of Engineering and Applied Science

## **SCHOOL OF ENERGY RESOURCES**

*Bachelor of Science*

Energy Resource Management and Development  
Energy and Environmental Systems<sup>\$</sup>  
Professional Land Management<sup>\$</sup>

<sup>\$</sup> = This is not a separate major and is considered a concentration within that major (ex. Bachelor of Science with a concentration in Energy and Environmental Systems or Bachelor of Science with a concentration in Professional Land Management)

## **CROSS-COLLEGE INTERDISCIPLINARY GRADUATE DEGREES**

*Juris Doctor/Master of Arts in Environment and Natural Resources* #

*Juris Doctor/Master of Public Administration* #

*Master of Science*

Ag Econ/Water Resources#

Botany/Water Resources#

Civil Engineering/Water Resources#

Economics/Water Resources#

Entomology/Water Resources#

Geographic Information Science & Technology/Water Resources

Geology/Water Resources#

Geophysics/Water Resources#

Rangeland Ecology/Water Resources#

Soil Science/Water Resources#

Zoology & Physiology/Water Resources#

# = This listing not counted as a separate major

## **ACADEMIC AFFAIRS**

*Bachelor of General Studies* (100% Online Completion)

*Master of Science*

Biomedical Sciences

*Master of {affiliated degree}/Environment and Natural Resources* ^

*Doctor of Philosophy*

Biomedical Sciences

Ecology and Evolution

Hydrologic Science

Molecular and Cellular Life Sciences

Neuroscience

^ = This listing not counted as a separate major

## **UW at CASPER**

*Bachelor of Applied Science*

Organizational Leadership (100% Online)

## Aggregate List of Certificates and Teacher Endorsements Offered at UW May 2024

### *Graduate Certificates*

Community and Public Health (100% Online)  
Community College Leadership (100% Online)  
Early Birth to Five Certificate and Teacher Endorsement (100% Online)  
Early Birth to Eight Teacher Endorsement (100% Online)  
Early Childhood Special Education (birth to five) (100% Online)  
Early Childhood Special Education Teacher Endorsement (100% Online)  
Energy Business (100% Online)  
English as a Second Language Teacher Endorsement and Certificate (100% Online)  
Financial Planning (100% Online)  
Geospatial Information Science & Technology (GIS&T) (100% Online)  
Literacy Certificate and Wyoming Reading Teacher Endorsement (K-6) (100% Online)  
Literacy Certificate and Wyoming Reading Teacher Endorsement (6-12) (100% Online)  
Literacy Certificate and Wyoming Reading Teacher Endorsement (K-12) (100% Online)  
Music Performance  
Online Instruction (100% Online)  
Play Therapy (100% Online)  
Reclamation and Restoration Ecology  
Remote Sensing (100% Online)  
School District Superintendent (100% Online)  
School Principalship (100% Online)  
School Social Work (100% Online)  
Teachers of American Indian Children (100% Online)  
Teaching Elementary School (Hybrid)  
Teaching Middle School Math  
Teaching Middle School Science  
Teaching Secondary Content (Hybrid)  
Unmanned Aerial Systems (drones) (100% Online)

### *Undergraduate Certificates*

American Sign Language  
American Studies  
Arts Entrepreneurship (Derived from approved Music Entrepreneurship Certificate – updated documentation in progress) (100% Online)  
Audio Technology  
Cadastral Surveying (100% Online)  
Carbon Capture Utilization and Storage (CCUS) (100% Online)  
Computer Science Education  
Construction Management  
Cybersecurity  
Early Childhood Program Director  
Geographic Information Science (GIS)  
Land Administration (100% Online)  
Music Entrepreneurship (100% Online) (replaced by Arts Entrepreneurship Certificate)  
Agribusiness Leadership, UW at Casper (100% Online) (pending BOT approval May 2024)  
Health Leadership, UW at Casper (100% Online) (pending BOT approval May 2024)  
Organizational Leadership, UW at Casper (100% Online)(pending BOT approval May 2024)  
Remote Sensing (Hybrid)

**Academic Affairs and Student Affairs**  
**COMMITTEE MEETING MATERIALS**

**AGENDA ITEM TITLE:** Notice of Intent: Graduate Certificate in Collaborative Practice,  
(Ahern, Koprowski, Smutko)

- OPEN SESSION
- CLOSED 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 of Environment and Natural Resources proposes a new graduate certificate in Collaborative Practice. This hybrid delivery program will comprise twelve credit hours, including nine-credit hours of required courses and a three-credit hour elective, and will serve both on-campus and distance students. The proposed program will build competencies in collaborative decision-making and problem-solving and will deepen students' knowledge in the application of collaborative processes in specific contexts. Currently, the Haub School offers a minor in Collaborative Practice, and the proposed graduate certificate will replace the minor as the minor will be phased out. No new resources will be required to launch the Collaborative Practice certificate program.

**PRIOR RELATED COMMITTEE DISCUSSIONS/ACTIONS:**

N/A

**WHY THIS ITEM IS BEFORE THE COMMITTEE:**

A Notice of Intent to the Board will allow the program proposers to complete review internally with the shared-governance bodies (Faculty Senate, ASUW, and Staff Senate), and Academic Forum (Deans and Directors). Academic Affairs and the School of Graduate Education support the degree proposal. The Request for Authorization will be submitted for the Board's consideration and approval later in the Fall of 2024.

**ACTION REQUIRED AT THIS COMMITTEE MEETING:**

Consideration for approval of the Notice of Intent for the Collaborative Practice graduate certificate.

**PROPOSED MOTION:**

"I move to approve the Notice of Intent for the Collaborative Practice graduate certificate."

# Graduate Certificate in Collaborative Practice Notice of Intent for a New Certificate Program Haub School of Environment & Natural Resources

## 1. The name of the proposed Academic Program and the mode of delivery

Name of Program: Certificate in Collaborative Practice

Delivery Mode: Hybrid delivery. Some courses will be offered online, others will be in-person. Our intent is to convert courses to online delivery by Fall Semester 2026

The proposed certificate will serve both on-campus and distance students as well as non-degree seeking professionals who are not matriculated into our graduate program.

## 2. A description of the new Academic Program that includes an outline of the anticipated curriculum and learning outcomes

Students pursuing the Collaborative Practice certificate will:

- build process competencies in collaborative decision making and problem solving, and
- deepen their knowledge in the application of collaborative processes in specific contexts (natural resources, health, education, business, etc.).

Certificate Requirements:

- 12 credits
- **Core Courses (9 credit hours).** Core courses will build students' process competencies in collaborative practice. *All three core courses are currently being offered and are taught regularly. No new courses will be created for this certificate.*
  - AGEC/ENR 5450 Negotiation. 3 credit-hours; online and/or traditional mode. This course is "owned" by the Department of Agricultural & Applied Economics (Ag Econ) but has been taught by Haub School faculty or Haub School adjunct faculty since 2012. It has been taught as an online as well as in-person. The Haub School will continue to coordinate with Ag Econ to ensure that this course continues to be instructed.
  - ENR 5910/5920 Principles and Methods in Collaborative Practice. 3 credit-hours; traditional mode, will be converted to online. Students may enroll in either 5910, a combined on-campus and distance-based course, or 5920, an off-campus, workshop-based course primarily targeted toward working professionals offered in conjunction with the Ruckelshaus Institute's Collaboration Program in Natural Resources.
  - ENR 5921 Collaborative Practicum. 3 credit-hours; will be available online and traditional modes. Under the guidance and instruction of ENR faculty, students will have the opportunity to apply the skills and information gained in ENR 5910/5920 to real-world situations. Students will gain practical experience in collaboration, facilitative leadership, and conflict resolution and to develop and refine skills in one or more of the learning objectives and expected competencies.
- **Elective Courses (3 credit hours).** Electives will deepen students' process competencies or build knowledge for application of collaborative governance in specific contexts (natural

resources, health, education, business, etc). *All elective courses currently exist and are taught at UW.* As more courses become available online across the UW campus, we expect some of these courses to become available to our online learners.

- Students choose an elective in consultation with the Haub School graduate advisor.
- Examples of courses that could fulfill process or content learning objectives include the following, although students may propose other courses.

#### Examples of Process Competency Electives

- COJO 5620 Intergroup Communication
- COJO 5250 Seminar in Organizational Communication
- COJO 5230 Media, Science, & Society
- POLS 5685 Program Evaluation and Policy Analysis
- POLS 5080 Organizational Development
- POLS 5385 Environment & Resource Conflict
- POLS 5540 Public Policy Perspectives
- POLS 5710 Conflict Resolution & Management

#### Examples of Context Specific Electives

- Natural Resources Focus
  - LAW 6660 Environmental Law
  - LAW 6800 Public Lands Law
  - LAW 6860 Water Rights and Policy
  - REWM 5250 Water Resources Seminar
  - POLS 5385 ENV & Resource Conflict
- Education Focus
  - EDAD 5650 Educational Leader as Communicator
  - EDAD 5720 Educational Leader as Change Agent

### **3. Information about content and how the Academic Program may relate to other offerings**

Currently the Haub School offers a graduate minor in collaborative practice. We plan to phase out the minor and replace it with the proposed certificate. The certificate has the same requirements as the minor but broadens the offering to non-degree seeking and online students.

### **4. A plan for obtaining a market analysis of anticipated student demand and enrollment, and a plan for evaluation and analysis of post-graduation employment market demand**

Collaborative practice methods can be employed in a wide variety of work and career settings including business management, law and legal services, consulting, healthcare, education, government and public administration, and nonprofits. We will conduct job market research including market analysis from Gray Associates' data, and survey other academic programs that offer comparable degrees or certificates.

**5. A preliminary budget, including potential funding sources, projected expenses and revenues, and potential faculty, academic professionals, lecturers, professors of practice, and staff**

Because the proposed certificate is identical to the existing minor, no additional resources will be required for instruction. The Haub School plans to utilize existing faculty members to teach the required courses and no new courses will be created. We will use the expertise of an online course designer that we currently have on staff to assist in converting existing courses to an online format.

The certificate is expected to be revenue generating for the Haub School and the University according to the most recent revenue model for online education.

**6. Proposed timeline for staged implementation over five years, including campus and Board review**  
Launch Fall 2025

**7. Information on other required approvals, such as accreditation bodies and the Higher Learning Commission;**

N/A

**8. Evidence of how the new Academic Program aligns with the University's mission, strategic plan, and existing academic degree program array**

The certificate in Collaborative Practice will contribute to UW's strategic plan by:

- Enhancing student success and providing students with 21<sup>st</sup> century skills to prepare them for careers in a changing economy
- Increasing enrollment and engagement with student populations who seek credentials in specialty areas and who may wish to eventually enroll in a degree program
- Raising UW's scholarly capacity nationally and internationally by offering online learning opportunities

The Haub School's 2023-28 strategic plan identifies several action strategies that are consistent with the creation of the proposed graduate certificate including:

- Evolving our graduate curriculum by offering graduate concentrations in core strength disciplines
- Expanding and improving our digital learning programs and online courses
- Finalizing our graduate program low residency/online track
- Maximizing benefits of flexible course calendars and innovating delivery strategies
- Bundling courses to accommodate professional calendars
- Leveraging certificates as a pathway to build online programs and increase diversity

**9. A 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.**

We live in a world beset by wicked problems that must be addressed in a complex governance context. Society's public, private and civic sectors have adapted to these new conditions through "collaborative governance" an umbrella term for cross-boundary, multi-institutional arrangements of public policy decision making. Often referred to as a "21<sup>st</sup>-century skill," collaboration is valued



across a wide range of jobs in the national economy as one of several skills needed to solve non-routine problems. In the environmental field, the use of cross-boundary, multi-institutional processes has grown. For example, in federal government Congress established the US Institute for Environmental Conflict Resolution (USIECR) and at the same time, a number of agencies established programs and hired collaboration specialists to apply collaborative processes in federal planning and environmental assessments. According to a USIECR report, the application of collaborative processes by federal government agencies increased by 47% between 2007 and 2017. The use of collaborative processes has grown similarly in state and local government as well as in the private sector, and in fields beyond environmental management. Practitioners with skills in organizing and facilitating collaborative processes find government-, nonprofit- and private-sector employment in a variety of disciplines including education, community development, health care, transportation, as well as environment. The federal Office of Personnel Management has integrated many specific conflict management and collaboration skills into their hiring and promotion requirements for civil service positions. The result is that demand for employees with collaboration skills is strong.

Since its inception in 1993 the Haub School has been the UW center of excellence in the practice and training of collaborative problem solving. We hold the Spicer Chair in Collaborative Practice, an endowed position whose primary mission is to enhance our understanding of the complexities and difficulties of resolving contentious environmental and natural resource conflicts. The Ruckelshaus Institute, a division of the Haub School, promotes collaborative decision making in its mission to advance the understanding and resolution of complex environmental and natural resource challenges. Hence, the proposed certificate sits firmly within the Haub School's purview and does not duplicate other programs across the UW campus.

**Academic Affairs and Student Affairs**  
**COMMITTEE MEETING MATERIALS**

**AGENDA ITEM TITLE: Notice of Intent: Graduate Certificate in Environment and Natural Resource (ENR) Law & Policy, (Ahern, Koprowski, Smutko)**

- OPEN SESSION
- CLOSED 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 of Environment and Natural Resources proposes a new graduate certificate in Environment and Natural Resource (ENR) Law & Policy. This hybrid delivery program will comprise nine credit hours, including a three-credit hour required course and six credit hours of electives. As proposed, the program will provide flexibility for students to pursue their specific policy interests across the environment and natural resource spectrum. Many careers require knowledge and understanding of environmental laws and policies including environmental management, environmental regulation, consulting, public administration, and nonprofit administration. This proposed graduate certificate will not require new resources, as all of the courses are already being taught.

**PRIOR RELATED COMMITTEE DISCUSSIONS/ACTIONS:**

N/A

**WHY THIS ITEM IS BEFORE THE COMMITTEE:**

A Notice of Intent to the Board will allow the program proposers to complete the review internally with the shared-governance bodies (Faculty Senate, ASUW, and Staff Senate), and Academic Forum (Deans and Directors). Academic Affairs and the School of Graduate Education support the degree proposal. The Request for Authorization will be submitted for the Board's consideration and approval later in the Fall of 2024.

**ACTION REQUIRED AT THIS COMMITTEE MEETING:**

Consideration for approval of the Notice of Intent for the Graduate Certificate in Environment and Natural Resources Law & Policy.

**PROPOSED MOTION:** "I move to approve the Notice of Intent for the Graduate Certificate in Environment and Natural Resource Law & Policy."

**Graduate Certificate in Environment and Natural Resource (ENR) Law & Policy**  
**Notice of Intent for a New Certificate Program**  
**Haub School of Environment & Natural Resources**

**1. The name of the proposed Academic Program and the mode of delivery**

Name of Program: Graduate Certificate in Environment and Natural Resource (ENR) Law & Policy

Delivery Mode: Hybrid delivery. Initially some courses will be offered online, others will be in-person. Our intent is to convert courses to online delivery by Fall Semester 2026

The proposed certificate will serve on-campus and distance students and non-degree seeking professionals who have not matriculated into our graduate program.

**2. A description of the new Academic Program that includes an outline of the anticipated curriculum and learning outcomes**

Students pursuing the ENR Law & Policy certificate will:

- Understand the fundamentals of environmental law and environmental policymaking
- Understand the key federal environmental and public land statutes
- Apply their knowledge of environmental laws and policies within the context of their professional careers in environment and natural resources planning, management, and policy

Certificate Requirements:

- 9 credits. *All courses comprising the certificate are currently being offered and are taught regularly. No new courses will be created for this certificate.*
- **Required Course (3 credit hours)**
  - ENR 5750, ENR Law & Policy. 3 credit-hours. Currently offered in person and will be converted to hybrid course in 2025 and then as an online course in 2026. This course provides the foundation for understanding the fundamentals of environmental law and policy.
- **Elective Courses (6 credit hours).** Electives provide avenues for specializing in a particular area of environmental law and policy.
- At least 3 of the 6 elective credits must come from the following list of courses:
  - ENR 5760, Wildlife Law (an online section will be created)
  - ENR 5770, NEPA Law and Policy (hybrid course)
  - ENR 5780, Public Lands (hybrid course)
  - ERS 4120, Federal Public Land Law
  - ERS 4130, Oil and Gas Law
  - ERS 4135, Advanced Energy Law
  - LAW 6510-01, Administrative Law
  - LAW 6700-01, Indian Law (online)
  - LAW 6915-01, Agricultural Law
  - LAW 6860-01, Water Law & Policy

- Up to 3 credits of the 6 elective credits may come from the following list of courses:
  - AGEC/ENR 5450, Negotiation
  - INST 5385, Environment & Resource Conflict
  - AGEC 4720, Water Resource Economics
  - AGEC 4700, Econ of Range Resources
  - POLS/INST 5555, Political Ecology: Conservation/Sustainability

### **3. Information about content and how the Academic Program may relate to other offerings**

Content: This certificate provides flexibility for students to pursue their specific policy interests across the environment and natural resource spectrum. The required course, ENR Law and Policy (ENR 5750), equips students with a strong law and policy foundation. It covers foundational concepts including law and policy development frameworks, administrative law, constitutional law, enforcement, clean air and water laws, toxic substances and waste, natural resources laws, energy law, public lands law, and federal Indian law. With this broad understanding, students can then choose two tailored electives based on their focus area such as water, energy, lands, or wildlife policy from the range of offerings by the Haub School and partner programs across campus. This intentional certificate structure allows the curriculum to adapt to each student's unique passions and goals within the environment and natural resources policy realm.

Relationship to other offerings: This certificate builds on the existing JD/MA degree offered jointly by the Haub School and the College of Law. While that program enables law students to concurrently pursue an MA in Environment and Natural Resources, this new certificate meets distinct needs. It provides focused law and policy training for graduate students and working professionals not enrolled in law school, enabling those students to develop relevant expertise for non-legal careers that will also be engaged in legal and regulatory processes.

This certificate will also have a strong relationship to the Haub School's Environment, Natural Resources and Society (ENRS) MS program. Students in the Haub School's ENRS program have expressed keen interest in supplementing their degree with more targeted policy and law knowledge. By offering crucial skills inclusive or beyond the MS coursework, this certificate equips those students to stand out to employers.

Overall, the certificate fills an important niche, complementing the Haub School's existing JD/MA and ENRS degrees and attracting both current and prospective Haub School graduate students seeking to amplify and specialize their studies. The curriculum translates core competencies into professional advantages after graduation.

### **4. A plan for obtaining a market analysis of anticipated student demand and enrollment, and a plan for evaluation and analysis of post-graduation employment market demand**

Many careers require some degree of knowledge and understanding of environmental laws and policies including environmental management, environmental regulation, consulting, public

administration, and nonprofit administration. This certificate may also be of value to non-degree seeking professionals looking to advance their skill sets and career. We will conduct job market research including market analysis from Gray Associates' data, and survey other academic programs that offer comparable degrees or certificates.

**5. A preliminary budget, including potential funding sources, projected expenses and revenues, and potential faculty, academic professionals, lecturers, professors of practice, and staff**

Because all the courses that comprise the proposed certificate are already being taught at UW, no additional resources will be required for instruction. We will use the expertise of an online course designer on staff to help convert existing courses to an online format.

The certificate is expected to be revenue generating for the Haub School and the University according to the most recent revenue model for online education.

**6. Proposed timeline for staged implementation over five years, including campus and Board review**  
Launch Fall 2025

**7. Information on other required approvals, such as accreditation bodies and the Higher Learning Commission;**

N/A

**8. Evidence of how the new Academic Program aligns with the University's mission, strategic plan, and existing academic degree program array**

The certificate in Collaborative Practice will contribute to UW's mission, vision, and values by:

- Enhancing student success and providing students with skills to prepare them for careers in a changing economy
- Increasing enrollment and engagement with student populations who seek credentials in specialty areas and who may wish to eventually enroll in a degree program
- Raising UW's scholarly capacity nationally and internationally by offering online learning opportunities
- Advancing a University value that recognizes Wyoming's wild and working lands as an asset to be utilized, understood, stewarded, and treasured
- Leveraging the value proposition that UW is an intellectual powerhouse that fosters transdisciplinary collaboration to address the most complex challenges facing Wyoming, America, indigenous nations, and the world.

The Haub School's 2023-28 strategic plan identifies several action strategies that are consistent with the creation of the proposed graduate certificate including:

- Evolving our graduate curriculum by offering graduate concentrations in core strength disciplines
- Expanding and improving our digital learning programs and online courses
- Finalizing our graduate program low residency/online track
- Maximizing benefits of flexible course calendars and innovating delivery strategies
- Bundling courses to accommodate professional calendars

- Leveraging certificates as a pathway to build online programs and increase diversity

**9. A 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.**

Environmental regulations and policies are constantly evolving, requiring working professionals to regularly update their knowledge. However, it is challenging for them to return to school full-time and acquire the knowledge and skills that will help them advance in their careers. The University of Wyoming is uniquely positioned to fill this gap, and provide specialized training for graduate students, through a new Graduate Certificate in ENR Law and Policy at the Haub School of Environment and Natural Resources.

This certificate will equip students and working professionals with the knowledge and skills to craft scientifically-grounded environmental policies, laws, and management strategies. It combines the Haub School's strength in interdisciplinary environmental law and policy with complementary expertise from collaborating departments. The curriculum covers fundamentals of environmental law and policy while allowing flexibility to specialize, preparing graduates to meet diverse career needs.

Nationally, the environmental law and policy field lacks career development programs for working professionals. The proposed certificate fills an important gap and can provide an accessible opportunity for career advancement through part-time, online study options. This format increases access for nontraditional students while generating enrollment revenue.

Wyoming faces urgent environmental challenges related to natural resource management where policy and legal solutions informed by science are needed. The certificate can supply professionals with state and federal resource management agencies, nonprofits, and businesses lacking personnel trained across these disciplines. It leverages UW's strengths to meet growing workforce demands in Wyoming and beyond.

Obtaining a law degree is a three-year commitment that prepares students for careers as practicing attorneys advocating, advising, and representing clients, or in other roles applying legal knowledge and skills. However, not all careers that require expertise in law and policy require a law degree. We're leveraging our expertise in the Haub School together with partnerships across campus, including the College of Law, to offer a graduate certificate that will be helpful for professionals and students in environmental and natural resource policy, planning, and management. While the UW College of Law offers a certificate in Energy Environmental & Natural Resources Law, that certificate is available only to students enrolled in the Law School. The proposed certificate meets distinct needs. It offers focused law and policy training for students and working professionals not enrolled in law school, and builds relevant expertise for students and working professionals in non-legal careers engaged in legal and regulatory processes.

**ACADEMIC AND STUDENT AFFAIRS**  
**COMMITTEE MEETING MATERIALS**

**AGENDA ITEM TITLE: Request for Authorization: Undergraduate Organizational Leadership Certificate, (Barrett, Pickett)**

- OPEN SESSION
- CLOSED 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 of Applied Science degree (BAS) is a completely online program designed for individuals who need or desire additional breadth in skills, knowledge, and professional expertise to enhance their capabilities in their own careers and in the organizations in which they work. The proposed certificate would allow students who already have completed their degree, are working on another degree, or need leadership skillsets to enroll in the organizational leadership program. With the certificate, we are reaching a population of potential students beyond UW, who are already in the workforce needing leadership support.

PRIOR RELATED COMMITTEE DISCUSSIONS/ACTIONS:

The Board approved the Notice of Intent during the November 2023 meeting.

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 Request for Authorization.

ACTION REQUIRED AT THIS COMMITTEE MEETING:

Consideration for approval of the Request for Authorization, BAS Organizational Leadership Certificate.

PROPOSED MOTION:

"I move to approve the Request for Authorization for the BAS Organizational Leadership Certificate."

# New Degree or Certificate Proposal Feasibility Study Template

## **Feasibility Study for New Organizational Leadership Certificate**

### **Executive Summary**

Scheduled for Fall 2024, the certificate program in Organizational Leadership is anticipated to commence with no initial startup costs as all courses are already available and offered on a regular schedule. The program's asynchronous delivery mode ensures flexibility for working professionals seeking to enhance their leadership skills and career ladder. However, future semesters may necessitate additional course sections and adjunct instructors to accommodate potential growth and demand beyond the anticipated launch.

### **Description:**

The Organizational Leadership certificate targets individuals with an existing degree(s) or professionals already active in the workforce. This program aims to engage a broader demographic, extending beyond UW, to support working individuals seeking to enhance their leadership capabilities and promotion prospects. Many prospective students are not looking to pursue another degree but rather aspire to acquire these essential skills through an online learning format. This asynchronous approach accommodates the diverse schedules of non-traditional, employed students.



## **Table of Contents**

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

Learning Outcomes

Curriculum Map and Program Structure

Course Descriptions

Assessment Plan

Degree Program Evaluation

New Resources Required

Substantive Change Determination

Executive Summary of Demand Statistics

## **Feasibility Study Required Contents:**

### **Overview and Description of Degree or Certificate, Purpose, Strategic Play Overlay**

The Organizational Leadership certificate aligns seamlessly with the Bachelor's in Applied Science (BAS) in Organizational Leadership, sharing identical student learning objectives as outlined in the BAS program. This certificate caters to individuals seeking an alternative to pursuing an additional degree in an asynchronous learning environment. Tailored to meet the needs of non-traditional students juggling work commitments, this certificate offers essential leadership skills necessary for professional growth. The proposed certificate aligns to the strategic plan and president's goals listed:

- Strategic Direction 1: Enhance academic, distance education, and advising programs to support student success and increased student enrollment with particular focus on recruitment, retention, and graduation rates.
- Strategic Direction 4: Prioritize and foster excellence in core areas of academics and research that are responsive to the needs of students, employers, and the State.

### **Learning Outcomes**

SLO (Student Learning Outcome) 1: Students will learn and compare a variety of leadership and management theories that represent and reflect on organizational structures.

SLO 2: Students will analyze and demonstrate how diversity in a workplace is necessary to produce results and innovative change.

SLO 3: Students will explore ethical theories and understand how those theories are useful in approaching decisions that have moral implications.

SLO 4: Students will demonstrate proficiency in verbal and written communication of information and research data as is needed to be successful within an organizational structure.

SLO 5: Students will implement AI (Artificial Intelligence) tools and software in ethical and professional ways to bring resources and benefits to the organizational structure.

### **Curriculum Map and Program Structure – Certificate will be 12 credits in total.**

Students will choose two of the three in bold italics:

***ORGL 3100 – 3 credits***

***ORGL 4100 – 3 credits***

***ORGL 4200 – 3 credits***

ORGL 4960 – 3 credits

ORGL 4900 – 3 credits

**Course Descriptions – All courses are online asynchronous**

ORGL 3100 – Innovation & Creativity	Students will acquire knowledge through a survey of leading theories of organizational change. Students will learn the core principles of each theory, which involves inspiring positive changes in those led. The leader is vested in the success of every single member involved in the process. Students will begin to understand how to empower an organization to create, plan, and innovate to achieve success and produce positive results within its structure.
ORGL 4100 – Diversity & Change	Students will develop an understanding of complex organizational concepts required to run a successful, diverse team, including a foundation of common legal and regulatory compliance. Students will learn how to relate and apply concepts including organizational structure, management theories, common elements of industrial/organizational (I/O) psychology, and topics in human resource management (hiring and termination processes, conflict resolution strategies, etc.).
ORGL 4200 – Ethics in Organization	To foster critical reflection and more self-aware leadership, the course begins with a survey of three of the most influential moral theories: utilitarianism, deontology (Kantian ethics), and virtue ethics. We will then read and reflect about how context matters, that reasoning about the best course of action may be different in an institutional setting than in one’s private life or a typical interpersonal setting. In addition, what kind of context also matters, such as in a public agency versus a not-for-profit versus a private corporation. In the final weeks of the semester, we will critically examine case studies of moral issues in a range of institutional settings.
ORGL 4960 – Internship	Students will be given an opportunity to complete a 42.5-85-hour leadership project, either in their own place of employment or an internship location of their choosing, even in an online setting. This gives students practical experience in a leadership setting. Required to complete academic assignments such as reflections journals, goal setting, project presentation, and final evaluation assignments in addition to their field-based responsibilities.
ORGL 4900 – Capstone: Leadership in Practice (Elective Option)	Students will be provided with four case studies in leadership and cohesive organizations, the climate of an organization, ethics, and innovation/creativity. The student will have an organization summary, the dilemma, and possible courses of actions to analyze the dilemma, organizational structure and create their own solution(s).

**Assessment Plan**

Student learning outcomes will be assessed in each of the individual courses as outlined in the program curriculum map.

Student Learning Outcomes (SLOs)	ORGL 3100	ORGL 4100	ORGL 4200	ORGL 4900	ORGL 4960
Students will compare a variety of leadership and management theories that are present in organizational structures.	X	X		X	
Students will demonstrate the importance of diversity in the workplace necessary to produce innovative change and results in the organizational structure.	X	X	X	X	X
Students will explore ethical theories and understand how ethical decisions are made by organizational structures and critically reflect and analyze data and problems within these structures.			X	X	
Students will demonstrate	X	X	X	X	X

verbal and written communication of research data, and peer/instructor interactions needed to be successful within the organizational structure.					
Students will implement AI (Artificial Intelligence) tools and software in ethical and professional ways to bring resources and benefit to the organizational structure.	X	X	X	X	

**Degree Program Evaluation**

Annually, our students will be given an opportunity to complete a gap analysis survey. Each question on the survey have been designed around our student learning objectives. There is at least one question for each learning objective. In addition to these survey questions, demographic questions are asked to better understand the results. Course evaluations will also be used to determine the effectiveness of each individual course.

**Substantive Change Determination**

Higher Learning Commission (HLC), UW’s regional accrediting agency, must approve all substantive changes to UW’s offering. HLC considers substantive change as the addition of a program (degree or certificate/credential level) not previously included in the institution’s accreditation, usually judged to be a program that is a significant departure from normal offerings, the addition of a program with 50%+ new coursework required, or the addition or change to an existing program which will be delivered 50%+ through alternative (hybrid, online) delivery. Substantive change may also be defined as a new program which does not meet the above guidelines, but which requires a significant amount of financial investment to be made. Please contact the HLC Accreditation Liaison Officer (currently Steve Barrett, [steveb@uwyo.edu](mailto:steveb@uwyo.edu)) to make this determination.

## **New Resources Required**

Describe new resources required, including:

- Faculty and instructional staffing – We currently have a new faculty lecturer position that will teach three of our ORGL courses per year. As additional sections are required due to increased course enrollments, we will have highly qualified adjunct instructors who are in leadership roles teaching additional course sections.
- Program administration and staff support – The BAS director will oversee the certificate. Additional staffing support would be helpful, especially in advising.
- Technology – Since all our programs and courses are already online, we have the existing technology we need to be successful.
- Library and digital resources – UW Libraries have extensive resources available to online students; UW Information Technology provides access to important software licenses, including Office 365, Adobe, and statistical analysis packages.
- Marketing – We are currently working with the UW advising team on all our fully online programs at the university. The new certificate will be marketed through this effort as well as marketing initiatives that our UW Casper teams has, such as brochures, social media, classroom visits, and outreach to other institutions and businesses.

## **Executive Summary of Demand Statistics**

With the addition of our certificate program in an online asynchronous format, we anticipate an expanded market scope, encompassing more students on a national scale. Our current Organizational Leadership program enrolls an average of 100 students per academic year, with approximately 88% being in-state. There is a lot of room for national-level marketability and growth. According to the U.S. Department of Labor, post-secondary certificate holders earn up to 20% more than without a certificate and are in high demand with the increase in the workforce credential requirements. They also discussed how certificates can be earned in six months to a year, decreasing costs for students. The sustained high demand for this program, exemplified by its top ranking in Gray Associate's Data, prompted us to consider introducing a certificate program in leadership. This strategic move aims to grant access to leadership courses, offering individuals with a bachelor's degree or relevant work experience an opportunity to earn an Organizational Leadership certificate, thus equipping them with vital skills in this domain.

Market and student demand statistics, inclusive of peer comparisons regarding enrollment size, completions, and trajectory (growth or decline) of similar programs, provide compelling insights:

- The fully online nature of the Organizational Leadership certificate broadens its market reach. Nationally, online degree completions surged from 242,403 in 2019 to 272,767 in 2021, marking a 12.52% increase over three years. Regionally, the growth was notable, increasing from 36,294 in 2019 to 43,390 in 2021, a 19.53% rise. Moreover, national online certificate completions witnessed a substantial upsurge from 72,770 in 2019 to 97,006 in 2021, indicating a 33.28% increase. Regionally, the completion numbers soared from 3,703 in 2019 to 5,534 in 2021, a significant 49.5% increase.

- Specifically, business-related online certificate completions experienced a noteworthy 14.98% increase nationally and 17.728% regionally.

Analyzing the CIP Code 52.0213 for Organizational Leadership revealed substantial growth: a 26.858% increase in online bachelor's programs nationally and a striking 71.428% completion rate regionally. Notably, certificate completions in this area showcased an 89.01% regional increase, emphasizing the abundance of business career opportunities within this code and its ongoing growth.

Employment trends and projections, aligning with the core competencies of the degree or certificate, remain robust:

- Over the past three years, business-related fields have exhibited consistent employment strength.
- The Bureau of Labor Statistics forecasts a robust 10-year growth for business-related fields, particularly in Organizational Leadership, at both the bachelor and undergraduate certificate levels.
- The Organizational Management employment market remains largely unsaturated, offering abundant employment prospects.

Post-completion trends and considerations:

- Certificates, when integrated or coordinated with undergraduate or graduate degrees, can be advantageous.
- Stackable certificates that collectively contribute to a degree hold significant value for future enrollments and align with our growth plan.
- Certificates serve as an expedited enrollment avenue, acting as a steppingstone for students aspiring to pursue a bachelor's degree in the future.

Furthermore, the mean average salary for Organizational Leadership in our region stands at \$86,389, further substantiating the viability and relevance of this program.

(All data referenced from Gray Associates data.)

# UNIVERSITY OF WYOMING

## **Office of Academic Affairs**

1000 E. University Avenue  
Dept. 3302, 312 Old Main  
Laramie, WY 82071  
307.766.4286 • fax: 307.766.2606

May 7, 2024

Board of Trustees:

This letter serves as a Letter of Commitment for the University of Wyoming at Casper leadership certificates:

- Organization Leadership Certificate
- Agribusiness Leadership Certificate
- Health Leadership Certificate

## **Needs**

The leadership certificates target individuals with existing degrees or professionals already active in the workforce. These certificate programs aim to engage a broader demographic, extending beyond UW, to support working individuals seeking to enhance their leadership capabilities. Many prospective students are not looking to pursue another degree but rather aspire to acquire these essential skills through an online, self-paced learning format. This asynchronous approach accommodates the diverse schedules of our non-traditional, employed student base.

## **Requirements**

- Organization Leadership Certificate - certificate will be 12 credits in total.
- Agribusiness Leadership Certificate - certificate will be 12 credits in total.
- Health Leadership Certificate - certificate will be 14 credits in total.

## **Resources**

Scheduled for Fall 2024, the certificate programs in leadership are anticipated to commence with no initial startup costs as all courses are already available. The program's asynchronous delivery mode ensures flexibility for working professionals seeking to enhance their leadership skills and long-term career prospects. However, future semesters may necessitate additional course sections and adjunct instructors to accommodate potential growth and demand beyond the anticipated launch.



**Timeline**

The present implementation timeline is designed to enable students to enroll in these certificate programs in the Fall 2024.

**Campus Review**

I affirm that the university community, including the Executive Team, Deans and Directors, Faculty Senate, Staff Senate and ASUW, have been provided the opportunity to review and present feedback on the proposed programs.

Best,

A handwritten signature in black ink, appearing to be 'Kevin Carman', written in a cursive style.

Kevin Carman  
Provost and Executive Vice President

This template is intended to be used as a basic guide to generate a projection of additional expenses and revenues at the University.

Cells in orange are variables which can be updated as needed. Please enter information in numerical tab order.

Cells in gray calculate automatically

	Fiscal Year			
	1	2	3	4
<b>Revenue</b>				
Cumulative Total NEW headcount enrollment	20	30	40	50
NEW Resident enrollment (# of new students entering the program each year)				
NEW Non Resident Enrollment (# of new students entering the program each year)				
<i>Resident (credit hours delivered outside of NEW Program)</i>	0	0	0	0
Resident (credit hours delivered in NEW Program)	324	486	648	828
<i>Non Resident (credit hours delivered outside of NEW Program)</i>	0	0	0	0
Non Resident (credit hours delivered in NEW Program)	36	54	72	90
<b>Total Resident credit hours generated**</b>	324	486	648	828
<b>Total Non Resident credit hours generated**</b>	36	54	72	90
Per Credit Tuition*				
Resident (Posted Tuition Rate)	\$134	\$139	\$145	\$151
Nonresident (Posted Tuition Rate)	\$537	\$558	\$581	\$604
Prior Year's Non Resident Discount Rate (updated annually by the budget office)	30%	30%	30%	30%
Estimated Actual Non Resident Per Credit Tuition	\$376	\$391	\$407	\$423
<i>Total Resident Tuition generated outside of NEW Program</i>	\$0	\$0	\$0	\$0
Total Resident Tuition in NEW Program	\$43,416	\$67,729	\$93,917	\$124,806
<i>Total Non Resident Tuition outside of NEW Program</i>	\$0	\$0	\$0	\$0
Total Non Resident Tuition in NEW Program	\$13,532	\$21,111	\$29,273	\$38,055
<b>Total Tuition from NEW Enrollment</b>	<b>\$56,948</b>	<b>\$88,840</b>	<b>\$123,191</b>	<b>\$162,861</b>
<b>Fees</b>				
Program Per Credit Hour	\$0	\$0	\$0	\$0

\* note that this program does not have a college "home," and program fee will vary by focus area and accrue to the appropriate college. Thus, to simplify and keep the budget conservative, the fee has been set to

\$0 for the pro forma

Program Fee Revenue	\$0	\$0	\$0	\$0
<i>Advising Fee Per Credit Hour</i>	\$6.00	\$6.00	\$6.00	\$6.00
<i>Advising Fee Revenue</i>	\$2,160	\$3,240	\$4,320	\$5,508
<i>Mandatory Fee (Per Full Time Student)</i>	\$690.00	\$690.00	\$690.00	\$690.00
<i>Mandatory Fee Revenue</i>	\$13,800	\$20,700	\$27,600	\$34,500
<b>Total New Revenue Generated Within New Program</b>	<b>\$56,948</b>	<b>\$88,840</b>	<b>\$123,191</b>	<b>\$162,861</b>
<b>Total New Revenue Generated Outside of the Program</b>	<b>\$15,960</b>	<b>\$23,940</b>	<b>\$31,920</b>	<b>\$40,008</b>
<b>Total New Revenue Generated</b>	<b>\$72,908</b>	<b>\$112,780</b>	<b>\$155,111</b>	<b>\$202,869</b>

**New Program Expense Assumptions**

Compensation and benefits				
Faculty	\$15,000	\$15,000	\$15,000	\$15,000
Other administrative staff				
Graduate Assistants				
Supplies	\$5,000	\$5,000	\$5,000	\$5,000
Travel	\$5,000	\$5,000	\$5,000	\$5,000
Marketing	\$10,000	\$5,000	\$5,000	\$5,000
Capital expense	0	0	0	0
Other (specify)	0	0	0	0

**Projected Financial Results for New Program**

	FY1	FY2	FY3	FY4
Total Expenses	\$35,000	\$30,000	\$30,000	\$30,000
Total New Revenues Remaining with Program	\$56,948	\$88,840	\$123,191	\$162,861
<b>New Program's Total Surplus or Deficit</b>	<b>\$21,948</b>	<b>\$58,840</b>	<b>\$93,191</b>	<b>\$132,861</b>
Operating margin (surplus or deficit / revenues)	0.39	0.66	0.76	0.82

\* UW's Board of Trustees' current working policy is to raise tuition by 4% each year  
 Last updated 2/27/19

Enter Course of Study, Credit Hours, indicate if the course is new and if the course will be offered through distance education

	15	NEW Course	Distance Option
<b>Freshman Fall</b>			
Course	3		
Q	3		
USP C1	3		
USP FYS	3		
Course	3		
<b>Freshman Spring</b>	15		
USP PN	3		
USP H	3		
USP V	3		
Course	3		
Course	3		
<b>Sophomore Fall</b>	16		
USP PN	3		
USP C2	3		
Course	3		
Course	4		
Course	3		
<b>Sophomore Spring</b>	15		
USP H	3		
Course	3		
Course	3		
Course	3		
Course	3		
<b>Junior Fall</b>	15		
Course	3		
Course	3		
Course	3		
Course	3		
Course	3		
<b>Junior Spring</b>	15		
Course	3		
Course	3		
Course	3		
Course	3		
Course	3		
<b>Senior Fall</b>	15		
Course	3		
Course	3		
Course	3		
Course	3		
Course	3		
<b>Senior Spring</b>	15		
USP C3	3		
Course	3		
Course	3		
Course	3		
Course	3		
<b>Total Hours</b>	120		

**NEW CREDIT HOURS OFFERED  
BY ACADEMIC YEAR**

		1		2		3		4	
New Course hours		Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
<b>Freshman Fall</b>									
Course	FALSE	3	0	0	0	0	0	0	0
Q	FALSE	3	0	0	0	0	0	0	0
USP C1	FALSE	3	0	0	0	0	0	0	0
USP FYS	FALSE	3	0	0	0	0	0	0	0
Course	FALSE	3	0	0	0	0	0	0	0
<b>Freshman Spring</b>									
USP PN	FALSE	3		0	0		0	0	0
USP H	FALSE	3		0	0		0	0	0
USP V	FALSE	3		0	0		0	0	0
Course	FALSE	3		0	0		0	0	0
Course	FALSE	3		0	0		0	0	0
		30	0	0	0	0	0	0	0

<b>Sophomore Fall</b>					0		0		0
USP PN	FALSE	3			0		0		0
USP C2	FALSE	3			0		0		0
Course	FALSE	3			0		0		0
Course	FALSE	3			0		0		0
Course	FALSE	3			0		0		0
<b>Sophomore Spring</b>						0		0	0
USP H	FALSE	3				0		0	0
Course	FALSE	3				0		0	0
Course	FALSE	3				0		0	0
Course	FALSE	3				0		0	0
Course	FALSE	3				0		0	0
		30	0	0	0	0	0	0	0

<b>Junior Fall</b>									
Course	FALSE	3					0		0
Course	FALSE	3					0		0
Course	FALSE	3					0		0
Course	FALSE	3					0		0
Course	FALSE	3					0		0
<b>Junior Spring</b>								0	0
Course	FALSE	3						0	0
Course	FALSE	3						0	0
Course	FALSE	3						0	0
Course	FALSE	3						0	0
Course	FALSE	3						0	0
		30	0	0	0	0	0	0	0

<b>Senior Fall</b>									0
--------------------	--	--	--	--	--	--	--	--	---

Course	FALSE	3								0
Course	FALSE	3								0
Course	FALSE	3								0
Course	FALSE	3								0
Course	FALSE	3								0
<b>Senior Spring</b>										0
USP C3	FALSE	3								0
Course	FALSE	3								0
Course	FALSE	3								0
Course	FALSE	3								0
		27	0	0	0	0	0	0	0	0
Total Hours		117	0	0	0	0	0	0	0	0

Teaching load	fall	spring								
faculty line 1	9	6	0	0	0	0	0	0	0	0
faculty line 2	9	6	0	0	0	0	0	0	0	0
faculty line 3	9	6	0	0	0	0	0	0	0	0
faculty line 4	9	6	0	0	0	0	0	0	0	0

		0.43				
Compensation	Salary	Benefits	1	2	3	4
faculty line 1		\$0	0	\$0	\$0	\$0
faculty line 2		\$0	0	\$0	\$0	\$0
faculty line 3		\$0	0	\$0	\$0	\$0
faculty line 4		\$0	0	\$0	\$0	\$0
			0	\$0	\$0	\$0

For more specific salary and benefit data please contact the Budget Office at 766-9028



# UNIVERSITY OF WYOMING

## Title IV (Federal Student Aid) Program Eligibility Determination (For programs that seek to be eligible for Title IV financial aid awards to students)

Certain non-degree seeking programs are eligible for Title IV financial aid. In order for these programs to gain and maintain Title IV financial aid eligibility, federal regulations must be followed to report information about the program to the Department of Education.

Answers to the following questions will determine if the program is considered eligible (circle one) –

1. **Yes** Does the coursework lead to a certificate awarded by the institution?
  - a. If YES, continue below to question 2.
  - b. If NO, stop. This program is not considered to be Title IV eligible.
  
2. **No** Is the program an embedded certificate in which ALL certificate recipients are enrolled in a degree program and students are awarded the certificate for completing hours as part of and not exceeding those required for the degree plan? **(Example: A student needs 120 hours to graduate with the degree. The student takes 120 hours and within those hours chooses required electives that satisfy the certificate requirements. After completing 120 hours the student is awarded the degree and certificate. No additional hours are needed for the certificate.)**
  - a. If YES, stop. This is not a stand-alone program. Title IV aid would be offered based on the degree program as long as the degree program is Title IV eligible (most degree programs at UW are Title IV eligible).
  - b. If NO, continue to question 3. Certificate is considered a stand-alone program in which hours required for the certificate are in excess of those required for the degree plan. This program must be approved in order for students to be eligible for Title IV financial aid. **(Example: A student needs 120 hours to graduate with the degree. In order to earn a certificate, the student must take an additional 6 hours, bringing the total hours taken to 126. Since the student is taking hours in excess of those required for the degree, the certificate is stand-alone.)**
  
3. **No** Do any of the recognized occupations for which this certificate prepares students require a state or federal certification or licensure?
  - a. IF YES, continue to question 4
  - b. IF NO, please complete the remainder of the Program Worksheet (excluding question 4 below). This program COULD be considered for Title IV financial aid eligibility.
  
4. **Yes** Have you updated your website to include the required disclosures as described in [34 CFR 668.43](#)? **Generally, institutions must provide a list of all States for which the institution has determined that: its curriculum meets; curriculum does not meet; and has not made a determination that curriculum meets the State educational requirements for licensure or certification.**
  - a. IF YES, please complete the remainder of the Program worksheet. This program COULD be considered for Title IV financial aid eligibility.
  - b. If NO, stop here and contact the University Compliance & Review Specialist to discuss what information is needed and where it must be posted. Return to this worksheet once you have completed the necessary steps.

## Program Worksheet

Please answer the following questions about the program. The information ensures the University of Wyoming remains compliant with federal regulations to ensure that this program and other degree programs remain eligible for Title IV financial aid.

Title of the program	Organizational Leadership Certificate Health Leadership Certificate Agribusiness Leadership Certificate (All three are identical credit hours)
Total tuition and required fees for the entire program, assuming normal time to completion	\$3,672
Total estimated costs of books and supplies for the entire program	\$300
If the student will be required to live on campus, total costs to the student for on-campus room and board for the entire program, assuming normal time to completion	n/a
Total fees or expenses that students will have in addition to those already entered for tuition and required fees, books and supplies, and room and board (for example: optional equipment, parking permits, etc.)	\$2,000 - laptop/technology
Normal time to complete the program that will be published in the catalog and other publications. Enter the amount as <b>weeks of instruction</b> and include only whole numbers. This information is required by the Department of Education.	32 Weeks
List the website that contains information on the program.	Program: Organizational Leadership, B.A.S. - University of Wyoming - Acalog ACMST™ (uwyo.edu) Welcome to UW at Casper (uwyo.edu)
List name, email, and phone number for the point of contact to make updates to the website listed above.	Jessica Steward, jstewar5@uwyo.edu (307) 268-2147
List name, email, and phone number for the point of contact to update print material and advertisements for this program.	Jessica Steward, jstewar5@uwyo.edu (307) 268-2147

1. **No** If applicable, has this program been programmatically approved by federal/state accrediting agencies as required for graduates to be eligible for employment? (i.e., Dental certificates are accredited by the Commission on Dental Accreditation)
  - a. If YES, please attach accreditation documentation to this form.
  - b. If NO, please explain.

[This certificate is not part of an accrediting agency.](#)



2. **Term or Module** Is the program **term based** or module based? (circle one)
  - a. **Please choose** If module, is there more than a 2 week break between modules? (select one)

### Certification Statement

By signing below, I certify that the information reported here is complete and accurate. I understand that information provided on this form will be reviewed to determine the program's Title IV eligibility for financial aid and additional documentation may be requested.



December 21, 2023

\_\_\_\_\_  
Signature of Dept. Head

\_\_\_\_\_  
Date

Please attach the following documentation with this completed worksheet.

1. A copy of the Feasibility Study Template
2. A copy of the program of study.
3. A copy of the program certificate approval by the Faculty Senate and Provost's Office.
4. A copy of the certificate approval documentation for the program (if applicable).
5. If applicable, a copy of any required programmatic accreditation in order for graduates of program to be eligible for occupation.
6. If applicable, a copy of any federal or state licensure or certification requirements for occupations for which this program prepares students.
7. Send completed/signed form to the Director of Scholarships & Financial Aid.

**ACADEMIC AND STUDENT AFFAIRS**  
**COMMITTEE MEETING MATERIALS**

**AGENDA ITEM TITLE: Request for Authorization: Undergraduate Agribusiness Leadership Certificate , (Barrett, Pickett)**

- OPEN SESSION
- CLOSED 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 Undergraduate Agribusiness Leadership certificate would align closely with the University’s mission, especially given UW’s founding as a land grant institution. Agriculture, economics, and leadership are all an important part of Wyoming’s economy. By helping to train the next generation of agricultural leaders, the program fits UW’s mission to promote economic and community development. The certificate will be entirely asynchronous, and thus is readily accessible to people across the state (and beyond). The core Agriculture and Organizational Leadership courses are based on rigorous scholarship and the application of knowledge, which are also parts of the University’s mission.

PRIOR RELATED COMMITTEE DISCUSSIONS/ACTIONS:

The Board approved the Notice of Intent during the November 2023 meeting.

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 Request for Authorization.

ACTION REQUIRED AT THIS COMMITTEE MEETING:

Consideration for approval of the Request for Authorization, Undergraduate Agribusiness Leadership Certificate.

PROPOSED MOTION:

“I move to approve the Request for Authorization for the Undergraduate Agribusiness Leadership Certificate.”

# New Degree or Certificate Proposal Feasibility Study Template

## **Feasibility Study for New Agribusiness Leadership Certificate**

### **Executive Summary**

Scheduled for Fall 2024, the certificate program in Agribusiness Leadership is anticipated to commence with no initial startup costs as all courses are already available. The program's asynchronous delivery mode ensures flexibility for working professionals seeking to enhance their leadership skills and long-term career prospects in the agribusiness setting. However, future semesters may necessitate additional course sections and adjunct instructors to accommodate potential growth and demand beyond the anticipated launch.

### **Description:**

The Agribusiness Leadership certificate targets individuals with existing degrees or professionals already active in the workforce. This program aims to engage a broader demographic, extending beyond UW, to support working individuals seeking to enhance their leadership capabilities. Many prospective students are not looking to pursue another degree but rather aspire to acquire these essential skills through an online, self-paced learning format. This asynchronous approach accommodates the diverse schedules of our non-traditional, employed student base.

## **Table of Contents**

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

Learning Outcomes

Curriculum Map and Program Structure

Course Descriptions

Assessment Plan

Degree Program Evaluation

New Resources Required

Substantive Change Determination

Executive Summary of Demand Statistics

## **Feasibility Study Required Contents:**

### **Overview and Description of Degree or Certificate, Purpose, Strategic Play Overlay**

The Agribusiness Leadership certificate aligns in part with the BAS in Organizational Leadership, sharing three of its courses, and three agribusiness courses. This certificate addresses a void in the educational preparation of our workforce by catering to individuals seeking a credential in an asynchronous learning environment as an alternative to pursuing an additional degree. Tailored to meet the needs of place-bound non-traditional students juggling work commitments, this certificate offers essential leadership skills essential for professional growth and improved long-term career prospects. The certificate would align with the strategic plan and president's goals listed:

- Strategic Direction 1: Enhance academic, distance education, and advising programs to support student success and increased student enrollment with particular focus on recruitment, retention, and graduation rates.
- Strategic Direction 4: Prioritize and foster excellence in core areas of academics and research that are responsive to the needs of students, employers, and the State.

### **Learning Outcomes**

AgBusn Leadership SLO (Student Learning Outcome) 1: Students will become better prepared to assume supervisory and other leadership roles within ag-related organizations.

AgBusn Leadership SLO 2: Students will demonstrate knowledge of agribusiness concepts and exhibit the qualities of a successful leader.

AgBusn Leadership SLO 3: Students will incorporate organization design, agribusiness marketing, management, and finance concepts to comprehensively assess and enhance the organization's performance.

AgBusn Leadership SLO 4: Students will demonstrate the ability to communicate research data findings verbally and/or written within ag-related organizational structures.

### **Curriculum Map and Program Structure – Certificate will be 12 credits in total.**

#### **Choose two of the three courses:**

AGEC 4050 - 3 credits

AGEC 4060 - 3 credits

AGEC 4500 - 3 credits

#### **Choose two of the three courses:**

ORGL 3100 – 3 credits

ORGL 4100 – 3 credits

ORGL 4960 – 3 credits

**Course Descriptions – All courses are asynchronous/online.**

<p>AGEC 4050, Agribusiness Marketing</p>	<p>Students develop a strategic marketing plan for an agricultural and food product. Content includes study of aspects of the global food industry influencing consumer demand; contemporary topics in food marketing and policy; agricultural supply marketing; marketing research methods; marketing profitability measures; pricing; new product information; branding; and industry competitive analysis. <i>*AGEC or ECON 1020 Prerequisite</i></p>
<p>AGEC 4060, Agribusiness Management</p>	<p>Applies quantitative, economic, financial, and managerial analysis to the agribusiness sector. <i>*AGEC or ECON 1020 and MATH 1400 Prerequisite</i></p>
<p>AGEC 4500, Agricultural Finance</p>	<p>Principles of financial management; compounding and discounting; leverage and capital budgeting and alternatives in resource control. <i>*AGEC or ECON 1020 Prerequisite</i></p>
<p>ORGL 3100 – Innovation &amp; Creativity</p>	<p>Students will acquire knowledge through a survey of leading theories of organizational change. Students will learn the core principles of each theory, which involves inspiring positive changes in those led. The leader is vested in the success of every single member involved in the process. Students will begin to understand how to empower an organization to create, plan, and innovate to achieve success and produce positive results within its structure.</p>
<p>ORGL 4100 – Diversity &amp; Change</p>	<p>Students will develop an understanding of complex organizational concepts required to run a successful, diverse team, including a foundation of common legal and regulatory compliance. Students will learn how to relate and apply concepts including organizational structure, management theories, common elements of industrial/organizational (I/O) psychology, and topics in human resource management (hiring and termination processes, conflict resolution strategies, etc.).</p>
<p>ORGL 4960 - Internship</p>	<p>Students will be given an opportunity to complete a 42.5 hour agribusiness leadership project, either in their own place of employment or an internship location of their choosing, even in an online setting. This gives students practical experience in a leadership setting. Required to complete academic assignments such as reflections journals, goal setting, project presentation, and final evaluation assignments in addition to their field-based responsibilities.</p>

**Assessment Plan**

Student learning outcomes will be assessed in each of the individual courses as outlined in the program curriculum map.

Student Learning Outcomes (SLOs)	AGEC 4050	AGEC 4060	AGEC 4500	ORGL 3100	ORGL 4100	ORGL 4960
Students will become better prepared to assume supervisory and other leadership roles within ag-related organizations.	X	X	X	X	X	X
Students will demonstrate knowledge of agribusiness concepts and exhibit the qualities of a successful leader.		X	X	X	X	X
Students will incorporate organization design, agribusiness marketing, management, and finance concepts to			X		X	X

comprehensively assess and enhance the organization's performance.						
Students will demonstrate the ability to communicate research data findings verbally and/or written within ag-related organizational structures.	X	X	X	X	X	X

### Degree Program Evaluation

Annually, our students will be given an opportunity to complete a gap analysis survey. Each question on the survey has been designed around our student learning objectives. There is at least one question for each learning objective. In addition to these survey questions, demographic questions are asked to better understand the results. Course evaluations will also be used to determine the effectiveness of each individual course.

### Substantive Change Determination

Higher Learning Commission (HLC), UW's regional accrediting agency, must approve all substantive changes to UW's offering. HLC considers substantive change as the addition of a program (degree or certificate/credential level) not previously included in the institution's accreditation, usually judged to be a program that is a significant departure from normal offerings, the addition of a program with 50%+ new coursework required, or the addition or change to an existing program which will be delivered 50%+ through alternative (hybrid, online) delivery. Substantive change may also be defined as a new program which does not meet the above guidelines, but which requires a significant amount of financial investment to be made. Please contact the HLC Accreditation Liaison Officer (currently Steve Barrett, [steveb@uwyo.edu](mailto:steveb@uwyo.edu)) to make this determination.

### New Resources Required

Describe new resources required, including:



- Faculty and instructional staffing - We currently have a new faculty lecturer position that will teach three of our ORGL courses per year and three AGEC courses. As additional sections are required due to increased course enrollment, we will have highly qualified adjunct instructors who are in leadership roles teaching additional course sections.
- Program administration and staff support – The BAS director and department chair for the department of Agricultural and Applied Economics will oversee the certificate. Additional staffing support will be necessary as the program grows.
- Technology – Since all our programs and courses are already online, we have the existing technology we need to be successful.
- Library and digital resources – Same as technology.
- Marketing – We are currently working with the UW advising team and the Office of Online and Continuing Education on all our fully online programs at the university. The new certificate will be marketed through this effort as well as marketing efforts that our UW Casper team has, such as brochures, social media, visiting classrooms, other institutions, and businesses.

### **Executive Summary of Demand Statistics\***

With the addition of our Agribusiness Leadership certificate program in an online asynchronous format, we anticipate an expanded market scope, encompassing more students on a national scale. Our current Organizational Leadership program enrolls an average of 100 students per academic year, with approximately 88% being in-state. There is a lot of room for national-level marketability and growth. According to the U.S. Department of Labor, post-secondary certificate holders earn up to 20% more than without a certificate and are in high demand with the increase in the workforce credential requirements. Also, certificates can be earned in six months to a year, decreasing costs for students. The sustained high demand for this program, exemplified by its top ranking in Gray Associate’s Data, prompted us to consider introducing a certificate program in leadership. This strategic move aims to grant access to leadership courses, offering individuals with a bachelor's degree or relevant work experience an opportunity to earn an Agribusiness Leadership certificate, thus equipping them with vital skills in this domain.

Market and student demand statistics, inclusive of peer comparisons regarding enrollment size, completions, and trajectory (growth or decline) of similar programs, provide compelling insights:

- The fully online nature of the certificate broadens its market reach. Nationally, online degree completions surged from 242,403 in 2019 to 272,767 in 2021, marking a 12.52% increase over three years. Regionally, the growth was notable, increasing from 36,294 in 2019 to 43,390 in 2021, a 19.53% rise. Moreover, national online certificate completions witnessed a substantial upsurge from 72,770 in 2019 to 97,006 in 2021, indicating a 33.28% increase. Regionally, the completion numbers soared from 3,703 in 2019 to 5,534 in 2021, a significant 49.5% increase.
- Specifically, business-related online certificate completions experienced a noteworthy 14.98% increase nationally and 17.728% regionally. Regionally, online certificate completions with ag-related focus increased from none in 2019 to 34 in 2021. There is a market opportunity with the limited online ag-focused offerings.

Analyzing the CIP Code 52.0213 for Organizational Leadership revealed substantial growth: a 26.858% increase in online bachelor's programs nationally and a striking 71.428% completion rate regionally. Notably, certificate completions in this area showcased an 89.01% regional increase, emphasizing the abundance of business career opportunities within this code and its ongoing growth.

Analyzing the Ag Business Operations CIP Code 01.0102, it revealed a 65.789% increase in online bachelor completions and a 3.56% decline in overall bachelor completions. The Ag Business Operations CIP Code 01.0102 revealed a 16.666% increase in online undergraduate certificate completions and a 19.387% decline in overall undergraduate certificate completions. Both validate the demand for online degree and certificate completions.

Employment trends and projections, aligning with the core competencies of the degree or certificate, remain robust:

- Over the past three years, business-related fields have exhibited consistent employment strength.
- The Bureau of Labor Statistics forecasts a robust 10-year growth for business-related fields, particularly in Organizational Leadership, at both the bachelor and undergraduate certificate levels.
- The Organizational Management employment market remains largely unsaturated, offering abundant employment prospects.
- Agribusiness employment is in constant demand regionally and is a need in Wyoming. Agriculture is the third largest industry in the state.

Post-completion trends and considerations:

- Certificates, when integrated or coordinated with undergraduate or graduate degrees, can be advantageous.
- Stackable certificates that collectively contribute to a degree hold significant value for future enrollments and align with our growth plan.
- Certificates serve as an expedited enrollment avenue, acting as a stepping stone for students aspiring to pursue a bachelor's degree in the future.

The average salary for agribusiness and organizational leadership (calculated as a mean between the two) is \$77,000 annually.

(All data referenced from Gray Associates data.)

# UNIVERSITY OF WYOMING

## **Office of Academic Affairs**

1000 E. University Avenue  
Dept. 3302, 312 Old Main  
Laramie, WY 82071  
307.766.4286 • fax: 307.766.2606

May 7, 2024

Board of Trustees:

This letter serves as a Letter of Commitment for the University of Wyoming at Casper leadership certificates:

- Organization Leadership Certificate
- Agribusiness Leadership Certificate
- Health Leadership Certificate

## **Needs**

The leadership certificates target individuals with existing degrees or professionals already active in the workforce. These certificate programs aim to engage a broader demographic, extending beyond UW, to support working individuals seeking to enhance their leadership capabilities. Many prospective students are not looking to pursue another degree but rather aspire to acquire these essential skills through an online, self-paced learning format. This asynchronous approach accommodates the diverse schedules of our non-traditional, employed student base.

## **Requirements**

- Organization Leadership Certificate - certificate will be 12 credits in total.
- Agribusiness Leadership Certificate - certificate will be 12 credits in total.
- Health Leadership Certificate - certificate will be 14 credits in total.

## **Resources**

Scheduled for Fall 2024, the certificate programs in leadership are anticipated to commence with no initial startup costs as all courses are already available. The program's asynchronous delivery mode ensures flexibility for working professionals seeking to enhance their leadership skills and long-term career prospects. However, future semesters may necessitate additional course sections and adjunct instructors to accommodate potential growth and demand beyond the anticipated launch.

**Timeline**

The present implementation timeline is designed to enable students to enroll in these certificate programs in the Fall 2024.

**Campus Review**

I affirm that the university community, including the Executive Team, Deans and Directors, Faculty Senate, Staff Senate and ASUW, have been provided the opportunity to review and present feedback on the proposed programs.

Best,

A handwritten signature in black ink, appearing to be 'Kevin Carman', written in a cursive style.

Kevin Carman  
Provost and Executive Vice President

This template is intended to be used as a basic guide to generate a projection of additional expenses and revenues at the University.

Cells in orange are variables which can be updated as needed. Please enter information in numerical tab order.

Cells in gray calculate automatically

	Fiscal Year			
	1	2	3	4
<b>Revenue</b>				
Cumulative Total NEW headcount enrollment	20	30	40	50
NEW Resident enrollment (# of new students entering the program each year)				
NEW Non Resident Enrollment (# of new students entering the program each year)				
<i>Resident (credit hours delivered outside of NEW Program)</i>	0	0	0	0
Resident (credit hours delivered in NEW Program)	324	486	648	828
<i>Non Resident (credit hours delivered outside of NEW Program)</i>	0	0	0	0
Non Resident (credit hours delivered in NEW Program)	36	54	72	90
<b>Total Resident credit hours generated**</b>	324	486	648	828
<b>Total Non Resident credit hours generated**</b>	36	54	72	90
Per Credit Tuition*				
Resident (Posted Tuition Rate)	\$134	\$139	\$145	\$151
Nonresident (Posted Tuition Rate)	\$537	\$558	\$581	\$604
Prior Year's Non Resident Discount Rate (updated annually by the budget office)	30%	30%	30%	30%
Estimated Actual Non Resident Per Credit Tuition	\$376	\$391	\$407	\$423
<i>Total Resident Tuition generated outside of NEW Program</i>	\$0	\$0	\$0	\$0
Total Resident Tuition in NEW Program	\$43,416	\$67,729	\$93,917	\$124,806
<i>Total Non Resident Tuition outside of NEW Program</i>	\$0	\$0	\$0	\$0
Total Non Resident Tuition in NEW Program	\$13,532	\$21,111	\$29,273	\$38,055
<b>Total Tuition from NEW Enrollment</b>	<b>\$56,948</b>	<b>\$88,840</b>	<b>\$123,191</b>	<b>\$162,861</b>
<b>Fees</b>				
Program Per Credit Hour	\$0	\$0	\$0	\$0

\* note that this program does not have a college "home," and program fee will vary by focus area and accrue to the appropriate college. Thus, to simplify and keep the budget conservative, the fee has been set to

\$0 for the pro forma

Program Fee Revenue	\$0	\$0	\$0	\$0
<i>Advising Fee Per Credit Hour</i>	\$6.00	\$6.00	\$6.00	\$6.00
<i>Advising Fee Revenue</i>	\$2,160	\$3,240	\$4,320	\$5,508
<i>Mandatory Fee (Per Full Time Student)</i>	\$690.00	\$690.00	\$690.00	\$690.00
<i>Mandatory Fee Revenue</i>	\$13,800	\$20,700	\$27,600	\$34,500
<b>Total New Revenue Generated Within New Program</b>	<b>\$56,948</b>	<b>\$88,840</b>	<b>\$123,191</b>	<b>\$162,861</b>
<b>Total New Revenue Generated Outside of the Program</b>	<b>\$15,960</b>	<b>\$23,940</b>	<b>\$31,920</b>	<b>\$40,008</b>
<b>Total New Revenue Generated</b>	<b>\$72,908</b>	<b>\$112,780</b>	<b>\$155,111</b>	<b>\$202,869</b>

**New Program Expense Assumptions**

Compensation and benefits				
Faculty	\$15,000	\$15,000	\$15,000	\$15,000
Other administrative staff				
Graduate Assistants				
Supplies	\$5,000	\$5,000	\$5,000	\$5,000
Travel	\$5,000	\$5,000	\$5,000	\$5,000
Marketing	\$10,000	\$5,000	\$5,000	\$5,000
Capital expense	0	0	0	0
Other (specify)	0	0	0	0

**Projected Financial Results for New Program**

	FY1	FY2	FY3	FY4
Total Expenses	\$35,000	\$30,000	\$30,000	\$30,000
Total New Revenues Remaining with Program	\$56,948	\$88,840	\$123,191	\$162,861
<b>New Program's Total Surplus or Deficit</b>	<b>\$21,948</b>	<b>\$58,840</b>	<b>\$93,191</b>	<b>\$132,861</b>
Operating margin (surplus or deficit / revenues)	0.39	0.66	0.76	0.82

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

Last updated 2/27/19

Enter Course of Study, Credit Hours, indicate if the course is new and if the course will be offered through distance education

	15	NEW Course	Distance Option
<b>Freshman Fall</b>			
Course	3		
Q	3		
USP C1	3		
USP FYS	3		
Course	3		
<b>Freshman Spring</b>	15		
USP PN	3		
USP H	3		
USP V	3		
Course	3		
Course	3		
<b>Sophomore Fall</b>	16		
USP PN	3		
USP C2	3		
Course	3		
Course	4		
Course	3		
<b>Sophomore Spring</b>	15		
USP H	3		
Course	3		
Course	3		
Course	3		
Course	3		
<b>Junior Fall</b>	15		
Course	3		
Course	3		
Course	3		
Course	3		
Course	3		
<b>Junior Spring</b>	15		
Course	3		
Course	3		
Course	3		
Course	3		
Course	3		
<b>Senior Fall</b>	15		
Course	3		
Course	3		
Course	3		
Course	3		
Course	3		
<b>Senior Spring</b>	15		
USP C3	3		
Course	3		
Course	3		
Course	3		
Course	3		
<b>Total Hours</b>	120		

**NEW CREDIT HOURS OFFERED  
BY ACADEMIC YEAR**

		1		2		3		4	
New Course hours		Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
<b>Freshman Fall</b>									
Course	FALSE	3	0	0	0	0	0	0	0
Q	FALSE	3	0	0	0	0	0	0	0
USP C1	FALSE	3	0	0	0	0	0	0	0
USP FYS	FALSE	3	0	0	0	0	0	0	0
Course	FALSE	3	0	0	0	0	0	0	0
<b>Freshman Spring</b>									
USP PN	FALSE	3		0	0	0	0	0	0
USP H	FALSE	3		0	0	0	0	0	0
USP V	FALSE	3		0	0	0	0	0	0
Course	FALSE	3		0	0	0	0	0	0
Course	FALSE	3		0	0	0	0	0	0
		30	0	0	0	0	0	0	0

<b>Sophomore Fall</b>					0	0	0		
USP PN	FALSE	3			0	0	0	0	
USP C2	FALSE	3			0	0	0	0	
Course	FALSE	3			0	0	0	0	
Course	FALSE	3			0	0	0	0	
Course	FALSE	3			0	0	0	0	
<b>Sophomore Spring</b>						0	0	0	
USP H	FALSE	3				0	0	0	0
Course	FALSE	3				0	0	0	0
Course	FALSE	3				0	0	0	0
Course	FALSE	3				0	0	0	0
Course	FALSE	3				0	0	0	0
		30	0	0	0	0	0	0	0

<b>Junior Fall</b>									
Course	FALSE	3					0	0	
Course	FALSE	3					0	0	
Course	FALSE	3					0	0	
Course	FALSE	3					0	0	
Course	FALSE	3					0	0	
<b>Junior Spring</b>								0	0
Course	FALSE	3						0	0
Course	FALSE	3						0	0
Course	FALSE	3						0	0
Course	FALSE	3						0	0
Course	FALSE	3						0	0
		30	0	0	0	0	0	0	0

<b>Senior Fall</b>									0
--------------------	--	--	--	--	--	--	--	--	---



Course	FALSE	3								0
Course	FALSE	3								0
Course	FALSE	3								0
Course	FALSE	3								0
Course	FALSE	3								0
<b>Senior Spring</b>										0
USP C3	FALSE	3								0
Course	FALSE	3								0
Course	FALSE	3								0
Course	FALSE	3								0
		27	0	0	0	0	0	0	0	0
Total Hours		117	0	0	0	0	0	0	0	0

Teaching load	fall	spring								
faculty line 1	9	6	0	0	0	0	0	0	0	0
faculty line 2	9	6	0	0	0	0	0	0	0	0
faculty line 3	9	6	0	0	0	0	0	0	0	0
faculty line 4	9	6	0	0	0	0	0	0	0	0

		0.43				
Compensation	Salary	Benefits	1	2	3	4
faculty line 1		\$0	0	\$0	\$0	\$0
faculty line 2		\$0	0	\$0	\$0	\$0
faculty line 3		\$0	0	\$0	\$0	\$0
faculty line 4		\$0	0	\$0	\$0	\$0
			0	\$0	\$0	\$0

For more specific salary and benefit data please contact the Budget Office at 766-9028



# UNIVERSITY OF WYOMING

## Title IV (Federal Student Aid) Program Eligibility Determination (For programs that seek to be eligible for Title IV financial aid awards to students)

Certain non-degree seeking programs are eligible for Title IV financial aid. In order for these programs to gain and maintain Title IV financial aid eligibility, federal regulations must be followed to report information about the program to the Department of Education.

Answers to the following questions will determine if the program is considered eligible (circle one) –

1. **Yes** Does the coursework lead to a certificate awarded by the institution?
  - a. If YES, continue below to question 2.
  - b. If NO, stop. This program is not considered to be Title IV eligible.
  
2. **No** Is the program an embedded certificate in which ALL certificate recipients are enrolled in a degree program and students are awarded the certificate for completing hours as part of and not exceeding those required for the degree plan? **(Example: A student needs 120 hours to graduate with the degree. The student takes 120 hours and within those hours chooses required electives that satisfy the certificate requirements. After completing 120 hours the student is awarded the degree and certificate. No additional hours are needed for the certificate.)**
  - a. If YES, stop. This is not a stand-alone program. Title IV aid would be offered based on the degree program as long as the degree program is Title IV eligible (most degree programs at UW are Title IV eligible).
  - b. If NO, continue to question 3. Certificate is considered a stand-alone program in which hours required for the certificate are in excess of those required for the degree plan. This program must be approved in order for students to be eligible for Title IV financial aid. **(Example: A student needs 120 hours to graduate with the degree. In order to earn a certificate, the student must take an additional 6 hours, bringing the total hours taken to 126. Since the student is taking hours in excess of those required for the degree, the certificate is stand-alone.)**
  
3. **No** Do any of the recognized occupations for which this certificate prepares students require a state or federal certification or licensure?
  - a. IF YES, continue to question 4
  - b. IF NO, please complete the remainder of the Program Worksheet (excluding question 4 below). This program COULD be considered for Title IV financial aid eligibility.
  
4. **Yes** Have you updated your website to include the required disclosures as described in [34 CFR 668.43](#)? **Generally, institutions must provide a list of all States for which the institution has determined that: its curriculum meets; curriculum does not meet; and has not made a determination that curriculum meets the State educational requirements for licensure or certification.**
  - a. IF YES, please complete the remainder of the Program worksheet. This program COULD be considered for Title IV financial aid eligibility.
  - b. If NO, stop here and contact the University Compliance & Review Specialist to discuss what information is needed and where it must be posted. Return to this worksheet once you have completed the necessary steps.

## Program Worksheet

Please answer the following questions about the program. The information ensures the University of Wyoming remains compliant with federal regulations to ensure that this program and other degree programs remain eligible for Title IV financial aid.

Title of the program	Organizational Leadership Certificate Health Leadership Certificate Agribusiness Leadership Certificate (All three are identical credit hours)
Total tuition and required fees for the entire program, assuming normal time to completion	\$3,672
Total estimated costs of books and supplies for the entire program	\$300
If the student will be required to live on campus, total costs to the student for on-campus room and board for the entire program, assuming normal time to completion	n/a
Total fees or expenses that students will have in addition to those already entered for tuition and required fees, books and supplies, and room and board (for example: optional equipment, parking permits, etc.)	\$2,000 - laptop/technology
Normal time to complete the program that will be published in the catalog and other publications. Enter the amount as <b>weeks of instruction</b> and include only whole numbers. This information is required by the Department of Education.	32 Weeks
List the website that contains information on the program.	Program: Organizational Leadership, B.A.S. - University of Wyoming - Acalog ACMST™ (uwyo.edu) Welcome to UW at Casper (uwyo.edu)
List name, email, and phone number for the point of contact to make updates to the website listed above.	Jessica Steward, jstewar5@uwyo.edu (307) 268-2147
List name, email, and phone number for the point of contact to update print material and advertisements for this program.	Jessica Steward, jstewar5@uwyo.edu (307) 268-2147

1. **No** If applicable, has this program been programmatically approved by federal/state accrediting agencies as required for graduates to be eligible for employment? (i.e., Dental certificates are accredited by the Commission on Dental Accreditation)
  - a. If YES, please attach accreditation documentation to this form.
  - b. If NO, please explain.

[This certificate is not part of an accrediting agency.](#)

2. **Term or Module** Is the program **term based** or module based? (circle one)
  - a. **Please choose** If module, is there more than a 2 week break between modules? (select one)

### Certification Statement

By signing below, I certify that the information reported here is complete and accurate. I understand that information provided on this form will be reviewed to determine the program's Title IV eligibility for financial aid and additional documentation may be requested.



\_\_\_\_\_  
Signature of Dept. Head

December 21, 2023

\_\_\_\_\_  
Date

Please attach the following documentation with this completed worksheet.

1. A copy of the Feasibility Study Template
2. A copy of the program of study.
3. A copy of the program certificate approval by the Faculty Senate and Provost's Office.
4. A copy of the certificate approval documentation for the program (if applicable).
5. If applicable, a copy of any required programmatic accreditation in order for graduates of program to be eligible for occupation.
6. If applicable, a copy of any federal or state licensure or certification requirements for occupations for which this program prepares students.
7. Send completed/signed form to the Director of Scholarships & Financial Aid.

**ACADEMIC AND STUDENT AFFAIRS**  
**COMMITTEE MEETING MATERIALS**

**AGENDA ITEM TITLE: Request for Authorization: Undergraduate Health Leadership Certificate , (Barrett, Pickett)**

- OPEN SESSION
- CLOSED 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 Health Leadership Certificate would align closely with the University’s mission. Healthcare services are an important part of Wyoming’s economy. By helping to train the next generation of health service administrators, the program fits UW’s mission to promote economic and community development. The certificate will be entirely 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.

PRIOR RELATED COMMITTEE DISCUSSIONS/ACTIONS:

The Board approved the Notice of Intent during the November 2023 meeting.

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 Request for Authorization.

ACTION REQUIRED AT THIS COMMITTEE MEETING:

Consideration for approval of the Request for Authorization, Undergraduate Health Leadership Certificate.

PROPOSED MOTION:

“I move to approve the Request for Authorization for the Undergraduate Health Leadership Certificate.”

# New Degree or Certificate Proposal Feasibility Study Template

## Feasibility Study for New Health Leadership Certificate

### Executive Summary

Scheduled for Fall 2024, the certificate program in Health Leadership is anticipated to commence with no initial startup costs as all courses are already available. The program's asynchronous delivery mode ensures flexibility for working professionals in the healthcare industry seeking to enhance their leadership skills and career prospects. However, future semesters may necessitate additional course sections and adjunct instructors to accommodate potential growth and demand beyond the anticipated launch.

### **Description:**

The Health Leadership certificate targets individuals with existing degrees or professionals already active in the workforce. This program aims to engage a broader demographic, extending beyond UW, to support working individuals seeking to enhance their leadership capabilities. Many prospective students are not looking to pursue another degree but rather aspire to acquire these essential skills through a smaller credential delivered in an online, self-paced learning format. This asynchronous approach accommodates the diverse schedules of our non-traditional, employed student base.

## **Table of Contents**

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

Learning Outcomes

Curriculum Map and Program Structure

Course Descriptions

Assessment Plan

Degree Program Evaluation

New Resources Required

Substantive Change Determination

Executive Summary of Demand Statistics

## **Feasibility Study Required Contents:**

### **Overview and Description of Degree or Certificate, Purpose, Strategic Play Overlay**

The Health Leadership certificate aligns seamlessly with the BAS in Organizational Leadership and the Health Services Administration concentration currently within the BAS program. This certificate addresses a void in our workforce by catering to individuals seeking an asynchronous learning credential as an alternative to pursuing an additional degree. Tailored to meet the needs of non-traditional students juggling work commitments, this certificate offers essential leadership skills for professional growth. The certificate would align to the strategic plan and president's goals listed.

- Strategic Direction 1: Enhance academic, distance education, and advising programs to support student success and increased student enrollment with particular focus on recruitment, retention, and graduation rates.
- Strategic Direction 4: Prioritize and foster excellence in core areas of academics and research that are responsive to the needs of students, employers, and the State

### **Learning Outcomes**

Health Leadership SLO (Student Learning Outcome) 1: Students will become better prepared to assume supervisory and other leadership roles within a healthcare organization.

Health Leadership SLO 2: Students will demonstrate knowledge of the theories and evidence of the qualities of a successful leader.

Health Leadership SLO 3: Students will incorporate organization design and process skills into healthcare settings to comprehensively assess and enhance the organization's performance.

Health Leadership SLO 4: Students will demonstrate the ability to communicate research data findings verbally and/or written within the healthcare organization structure.

### **Curriculum Map and Program Structure – Certificate will be 14 credits in total.**

PHCY 4050 - 2 credits

PHCY 4341 - 3 credits

PHCY 4441 - 3 credits

### **Choose two of the three courses:**

ORGL 3100 – 3 credits

ORGL 4100 – 3 credits

ORGL 4960 – 3 credits



**Course Descriptions – All courses are asynchronous/online.**

PHCY 4050 - Evolution of American Health	This course explores the professionalization of healthcare over the past century. The influence of computerized health information, and the trend toward empowerment of patients through the democratization of health services is also explored.
PHCY 4341 - Intro to Healthcare Quality	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 - Intro to Health Institution Leadership	This course provides undergraduates information through analysis of theory and application. The course will use discussion boards to highlight examples of leadership roles and discuss differences in types of leadership roles. Organizational, team, and individual dimensions of leadership are examined. Students assess their own leadership skills for strengths and areas to improve.
ORGL 3100 – Innovation & Creativity	Students will acquire knowledge through a survey of leading theories of organizational change. Students will learn the core principles of each theory, which involves inspiring positive changes in those led. The leader is vested in the success of every single member involved in the process. Students will begin to understand how to empower an organization to create, plan, and innovate to achieve success and produce positive results within its structure.
ORGL 4100 – Diversity & Change	Students will develop an understanding of complex organizational concepts required to run a successful, diverse team, including a basic foundation of common legal and regulatory compliance. Students will learn how to relate and apply concepts including organizational structure, management theories, common elements of industrial/organizational (I/O) psychology, and topics in human resource management (hiring and termination processes, conflict resolution strategies, etc.).
ORGL 4960 - Internship	Students will be given an opportunity to complete a 42.5 hour health leadership project, either in their own place of employment or an internship location of their choosing, even in an online setting. This gives students practical experience in a leadership setting. Required to complete academic assignments such as reflections journals, goal setting, project presentation, and final evaluation assignments in addition to their field-based responsibilities.

**Assessment Plan**

Student learning outcomes will be assessed in each of the individual courses as outlined in the program curriculum map.

Student Learning Outcomes (SLOs)	PHCY 4050	PHCY 4341	PHCY 4441	ORGL 3100	ORGL 4100	ORGL 4960
Students will become better prepared to assume supervisory and other leadership roles within a healthcare organization.	X	X	X	X	X	X
Students will demonstrate knowledge of the theories and evidence of the qualities of a successful leader.		X	X	X	X	X
Students will incorporate organization design and process skills into healthcare settings to comprehensively assess and enhance the			X		X	X

organization's performance.						
Students will demonstrate the ability to communicate research data findings verbally and/or written within the healthcare organization structure.	X	X	X	X	X	X

### Degree Program Evaluation

Annually, our students will be given an opportunity to complete a gap analysis survey. Each question on the survey have been designed around our student learning objectives. There is at least one question for each learning objective. In addition to these survey questions, demographic questions are asked to better understand the results. Course evaluations will also be used to determine the effectiveness of each individual course.

### Substantive Change Determination

Higher Learning Commission (HLC), UW's regional accrediting agency, must approve all substantive changes to UW's offering. HLC considers substantive change as the addition of a program (degree or certificate/credential level) not previously included in the institution's accreditation, usually judged to be a program that is a significant departure from normal offerings, the addition of a program with 50%+ new coursework required, or the addition or change to an existing program which will be delivered 50%+ through alternative (hybrid, online) delivery. Substantive change may also be defined as a new program which does not meet the above guidelines, but which requires a significant amount of financial investment to be made. Please contact the HLC Accreditation Liaison Officer (currently Steve Barrett, [steveb@uwyo.edu](mailto:steveb@uwyo.edu)) to make this determination.

### New Resources Required

Describe new resources required, including:

- Faculty and instructional staffing – We currently have a new faculty lecturer position that will teach three of our ORGL courses per year. The School of Pharmacy will provide faculty support for the three PHCY courses. As additional sections are required due to

increased course enrollment, we will have highly qualified adjunct instructors who are in leadership roles teaching additional course sections.

- Program administration and staff support – The BAS director and the School of Pharmacy will oversee the certificate. Additional staffing support would be helpful, especially in advising.
- Technology – Since all our programs and courses are already online, we have the existing technology we need to be successful.
- Library and digital resources – Same as technology.
- Marketing – We are currently working with the UW advising team and the Office of Online and Continuing Education on all our fully online programs at the university. The new certificate will be marketed through this initiative as well as marketing efforts that our UW Casper team has, such as brochures, social media, visiting classrooms, and outreach to other institutions and businesses.

### **Executive Summary of Demand Statistics\***

With the addition of our Health Leadership certificate program in an online asynchronous format, we anticipate an expanded market scope, encompassing more students on a national scale. Our current Organizational Leadership program enrolls an average of 100 students per academic year, with approximately 88% being in-state. There is a lot of room for national-level marketability and growth. According to the U.S. Department of Labor, post-secondary certificate holders earn up to 20% more than without a certificate and are in high demand with the increase in the workforce credential requirements. They also discussed how certificates can be earned in six months to a year, decreasing costs for students. The sustained high demand for this program, exemplified by its top ranking in Gray Associate's Data, prompted us to consider introducing a certificate program in leadership. This strategic move aims to grant access to leadership courses, offering individuals with a bachelor's degree or relevant work experience an opportunity to earn a Health Leadership certificate, thus equipping them with vital skills in this domain.

Market and student demand statistics, inclusive of peer comparisons regarding enrollment size, completions, and trajectory (growth or decline) of similar programs, provide compelling insights:

- The fully online nature of the certificate broadens its market reach. Nationally, online degree completions surged from 242,403 in 2019 to 272,767 in 2021, marking a 12.52% increase over three years. Regionally, the growth was notable, increasing from 36,294 in 2019 to 43,390 in 2021, a 19.53% rise. Moreover, national online certificate completions witnessed a substantial upsurge from 72,770 in 2019 to 97,006 in 2021, indicating a 33.28% increase. Regionally, the completion numbers soared from 3,703 in 2019 to 5,534 in 2021, a significant 49.5% increase.
- Specifically, business-related online certificate completions experienced a noteworthy 14.98% increase nationally and 17.728% regionally. Regionally, online certificate completions with ag-related focus increased from none in 2019 to 34 in 2021. There is a market opportunity with the limited online ag-focused offerings.
- Analyzing the CIP Code 52.0213 for Organizational Leadership revealed substantial growth: a 26.858% increase in online bachelor's programs nationally and a striking 71.428% completion rate regionally. Notably, certificate completions in this area showcased an 89.01% regional

increase, emphasizing the abundance of business career opportunities within this code and its ongoing growth.

- The health and business leadership components are showing strong student demand. The potential program audience is diverse and will offer many students opportunities well into the future.
- 51.0701 Health/Health Care Administration/Management revealed a 24.849% increase in online bachelor completions and a 14.200% increase in overall bachelor completions.
- 51.0701 Health/Health Care Administration/Management revealed there are no undergraduate certificates offered in the nation. This is a significant opportunity for UW.
- Western Governors University (WGU) had 443 online degree completions in CIP Code 51.0701 in 2019 and 878 completions in 2021. There is a very large market nationally for potential students in Health Care Administration.

Regionally the 51.0701 6-digit CIP Code revealed a 30.752% increase in overall bachelor completions and a 30.6% increase in online completions.

Employment trends and projections, aligning with the core competencies of the degree or certificate, remain robust:

- Over the past three years, business-related fields have exhibited consistent employment strength.
- The Bureau of Labor Statistics forecasts a robust 10-year growth for business-related fields, particularly in Organizational Leadership, at both the bachelor and undergraduate certificate levels.
- BLS Three-year historic employment growth for Health and Business is strong for bachelor and undergraduate certificates.
- BLS 10-year growth (future job growth) projection for Health/Health Care Administration/Management is **very** strong at the bachelor and undergraduate certificate level.
- The Organizational Management employment market remains largely unsaturated, offering abundant employment prospects.

Post-completion trends and considerations:

- Certificates, when integrated or coordinated with undergraduate or graduate degrees, can be advantageous.
- Stackable certificates that collectively contribute to a degree hold significant value for future enrollments and align with our growth plan.
- Certificates serve as an expedited enrollment avenue, acting as a stepping stone for students aspiring to pursue a bachelor's degree in the future.

The average mean salary in our region for Health Care Administration is \$104,642.

(All data referenced from Gray Associates data.)

# UNIVERSITY OF WYOMING

## **Office of Academic Affairs**

1000 E. University Avenue  
Dept. 3302, 312 Old Main  
Laramie, WY 82071  
307.766.4286 • fax: 307.766.2606

May 7, 2024

Board of Trustees:

This letter serves as a Letter of Commitment for the University of Wyoming at Casper leadership certificates:

- Organization Leadership Certificate
- Agribusiness Leadership Certificate
- Health Leadership Certificate

## **Needs**

The leadership certificates target individuals with existing degrees or professionals already active in the workforce. These certificate programs aim to engage a broader demographic, extending beyond UW, to support working individuals seeking to enhance their leadership capabilities. Many prospective students are not looking to pursue another degree but rather aspire to acquire these essential skills through an online, self-paced learning format. This asynchronous approach accommodates the diverse schedules of our non-traditional, employed student base.

## **Requirements**

- Organization Leadership Certificate - certificate will be 12 credits in total.
- Agribusiness Leadership Certificate - certificate will be 12 credits in total.
- Health Leadership Certificate - certificate will be 14 credits in total.

## **Resources**

Scheduled for Fall 2024, the certificate programs in leadership are anticipated to commence with no initial startup costs as all courses are already available. The program's asynchronous delivery mode ensures flexibility for working professionals seeking to enhance their leadership skills and long-term career prospects. However, future semesters may necessitate additional course sections and adjunct instructors to accommodate potential growth and demand beyond the anticipated launch.

**Timeline**

The present implementation timeline is designed to enable students to enroll in these certificate programs in the Fall 2024.

**Campus Review**

I affirm that the university community, including the Executive Team, Deans and Directors, Faculty Senate, Staff Senate and ASUW, have been provided the opportunity to review and present feedback on the proposed programs.

Best,

A handwritten signature in black ink, appearing to be 'Kevin Carman', written in a cursive style.

Kevin Carman  
Provost and Executive Vice President

This template is intended to be used as a basic guide to generate a projection of additional expenses and revenues at the University.

Cells in orange are variables which can be updated as needed. Please enter information in numerical tab order.

Cells in gray calculate automatically

	Fiscal Year			
	1	2	3	4
<b>Revenue</b>				
Cumulative Total NEW headcount enrollment	20	30	40	50
NEW Resident enrollment (# of new students entering the program each year)				
NEW Non Resident Enrollment (# of new students entering the program each year)				
<i>Resident (credit hours delivered outside of NEW Program)</i>	0	0	0	0
Resident (credit hours delivered in NEW Program)	324	486	648	828
<i>Non Resident (credit hours delivered outside of NEW Program)</i>	0	0	0	0
Non Resident (credit hours delivered in NEW Program)	36	54	72	90
<b>Total Resident credit hours generated**</b>	324	486	648	828
<b>Total Non Resident credit hours generated**</b>	36	54	72	90
Per Credit Tuition*				
Resident (Posted Tuition Rate)	\$134	\$139	\$145	\$151
Nonresident (Posted Tuition Rate)	\$537	\$558	\$581	\$604
Prior Year's Non Resident Discount Rate (updated annually by the budget office)	30%	30%	30%	30%
Estimated Actual Non Resident Per Credit Tuition	\$376	\$391	\$407	\$423
<i>Total Resident Tuition generated outside of NEW Program</i>	\$0	\$0	\$0	\$0
Total Resident Tuition in NEW Program	\$43,416	\$67,729	\$93,917	\$124,806
<i>Total Non Resident Tuition outside of NEW Program</i>	\$0	\$0	\$0	\$0
Total Non Resident Tuition in NEW Program	\$13,532	\$21,111	\$29,273	\$38,055
<b>Total Tuition from NEW Enrollment</b>	<b>\$56,948</b>	<b>\$88,840</b>	<b>\$123,191</b>	<b>\$162,861</b>
<b>Fees</b>				
Program Per Credit Hour	\$0	\$0	\$0	\$0

\* note that this program does not have a college "home," and program fee will vary by focus area and accrue to the appropriate college. Thus, to simplify and keep the budget conservative, the fee has been set to



\$0 for the pro forma

Program Fee Revenue	\$0	\$0	\$0	\$0
<i>Advising Fee Per Credit Hour</i>	\$6.00	\$6.00	\$6.00	\$6.00
<i>Advising Fee Revenue</i>	\$2,160	\$3,240	\$4,320	\$5,508
<i>Mandatory Fee (Per Full Time Student)</i>	\$690.00	\$690.00	\$690.00	\$690.00
<i>Mandatory Fee Revenue</i>	\$13,800	\$20,700	\$27,600	\$34,500
<b>Total New Revenue Generated Within New Program</b>	<b>\$56,948</b>	<b>\$88,840</b>	<b>\$123,191</b>	<b>\$162,861</b>
<b>Total New Revenue Generated Outside of the Program</b>	<b>\$15,960</b>	<b>\$23,940</b>	<b>\$31,920</b>	<b>\$40,008</b>
<b>Total New Revenue Generated</b>	<b>\$72,908</b>	<b>\$112,780</b>	<b>\$155,111</b>	<b>\$202,869</b>
<b>New Program Expense Assumptions</b>				
Compensation and benefits				
Faculty	\$15,000	\$15,000	\$15,000	\$15,000
Other administrative staff				
Graduate Assistants				
Supplies	\$5,000	\$5,000	\$5,000	\$5,000
Travel	\$5,000	\$5,000	\$5,000	\$5,000
Marketing	\$10,000	\$5,000	\$5,000	\$5,000
Capital expense	0	0	0	0
Other (specify)	0	0	0	0

<b>Projected Financial Results for New Program</b>	<b>FY1</b>	<b>FY2</b>	<b>FY3</b>	<b>FY4</b>
Total Expenses	\$35,000	\$30,000	\$30,000	\$30,000
Total New Revenues Remaining with Program	\$56,948	\$88,840	\$123,191	\$162,861
<b>New Program's Total Surplus or Deficit</b>	<b>\$21,948</b>	<b>\$58,840</b>	<b>\$93,191</b>	<b>\$132,861</b>
Operating margin (surplus or deficit / revenues)	0.39	0.66	0.76	0.82

\* UW's Board of Trustees' current working policy is to raise tuition by 4% each year  
Last updated 2/27/19

Enter Course of Study, Credit Hours, indicate if the course is new and if the course will be offered through distance education

	15	NEW Course	Distance Option
<b>Freshman Fall</b>			
Course	3		
Q	3		
USP C1	3		
USP FYS	3		
Course	3		
<b>Freshman Spring</b>	15		
USP PN	3		
USP H	3		
USP V	3		
Course	3		
Course	3		
<b>Sophomore Fall</b>	16		
USP PN	3		
USP C2	3		
Course	3		
Course	4		
Course	3		
<b>Sophomore Spring</b>	15		
USP H	3		
Course	3		
Course	3		
Course	3		
Course	3		
<b>Junior Fall</b>	15		
Course	3		
Course	3		
Course	3		
Course	3		
Course	3		
<b>Junior Spring</b>	15		
Course	3		
Course	3		
Course	3		
Course	3		
Course	3		
<b>Senior Fall</b>	15		
Course	3		
Course	3		
Course	3		
Course	3		
Course	3		
<b>Senior Spring</b>	15		
USP C3	3		
Course	3		
Course	3		
Course	3		
Course	3		
<b>Total Hours</b>	120		

**NEW CREDIT HOURS OFFERED  
BY ACADEMIC YEAR**

		1		2		3		4	
New Course hours		Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
<b>Freshman Fall</b>									
Course	FALSE	3	0	0	0	0	0	0	0
Q	FALSE	3	0	0	0	0	0	0	0
USP C1	FALSE	3	0	0	0	0	0	0	0
USP FYS	FALSE	3	0	0	0	0	0	0	0
Course	FALSE	3	0	0	0	0	0	0	0
<b>Freshman Spring</b>									
USP PN	FALSE	3		0	0		0	0	0
USP H	FALSE	3		0	0		0	0	0
USP V	FALSE	3		0	0		0	0	0
Course	FALSE	3		0	0		0	0	0
Course	FALSE	3		0	0		0	0	0
		30	0	0	0	0	0	0	0

<b>Sophomore Fall</b>					0		0		0
USP PN	FALSE	3			0		0		0
USP C2	FALSE	3			0		0		0
Course	FALSE	3			0		0		0
Course	FALSE	3			0		0		0
Course	FALSE	3			0		0		0
<b>Sophomore Spring</b>						0		0	0
USP H	FALSE	3				0		0	0
Course	FALSE	3				0		0	0
Course	FALSE	3				0		0	0
Course	FALSE	3				0		0	0
Course	FALSE	3				0		0	0
		30	0	0	0	0	0	0	0

<b>Junior Fall</b>									
Course	FALSE	3					0		0
Course	FALSE	3					0		0
Course	FALSE	3					0		0
Course	FALSE	3					0		0
Course	FALSE	3					0		0
<b>Junior Spring</b>								0	0
Course	FALSE	3						0	0
Course	FALSE	3						0	0
Course	FALSE	3						0	0
Course	FALSE	3						0	0
Course	FALSE	3						0	0
		30	0	0	0	0	0	0	0

<b>Senior Fall</b>									0
--------------------	--	--	--	--	--	--	--	--	---

Course	FALSE	3								0
Course	FALSE	3								0
Course	FALSE	3								0
Course	FALSE	3								0
Course	FALSE	3								0
<b>Senior Spring</b>										0
USP C3	FALSE	3								0
Course	FALSE	3								0
Course	FALSE	3								0
Course	FALSE	3								0
		27	0	0	0	0	0	0	0	0
Total Hours		117	0	0	0	0	0	0	0	0

Teaching load	fall	spring								
faculty line 1	9	6	0	0	0	0	0	0	0	0
faculty line 2	9	6	0	0	0	0	0	0	0	0
faculty line 3	9	6	0	0	0	0	0	0	0	0
faculty line 4	9	6	0	0	0	0	0	0	0	0

		0.43				
Compensation	Salary	Benefits	1	2	3	4
faculty line 1		\$0	0	\$0	\$0	\$0
faculty line 2		\$0	0	\$0	\$0	\$0
faculty line 3		\$0	0	\$0	\$0	\$0
faculty line 4		\$0	0	\$0	\$0	\$0
			0	\$0	\$0	\$0

For more specific salary and benefit data please contact the Budget Office at 766-9028



# UNIVERSITY OF WYOMING

## Title IV (Federal Student Aid) Program Eligibility Determination (For programs that seek to be eligible for Title IV financial aid awards to students)

Certain non-degree seeking programs are eligible for Title IV financial aid. In order for these programs to gain and maintain Title IV financial aid eligibility, federal regulations must be followed to report information about the program to the Department of Education.

Answers to the following questions will determine if the program is considered eligible (circle one) –

1. **Yes** Does the coursework lead to a certificate awarded by the institution?
  - a. If YES, continue below to question 2.
  - b. If NO, stop. This program is not considered to be Title IV eligible.
  
2. **No** Is the program an embedded certificate in which ALL certificate recipients are enrolled in a degree program and students are awarded the certificate for completing hours as part of and not exceeding those required for the degree plan? **(Example: A student needs 120 hours to graduate with the degree. The student takes 120 hours and within those hours chooses required electives that satisfy the certificate requirements. After completing 120 hours the student is awarded the degree and certificate. No additional hours are needed for the certificate.)**
  - a. If YES, stop. This is not a stand-alone program. Title IV aid would be offered based on the degree program as long as the degree program is Title IV eligible (most degree programs at UW are Title IV eligible).
  - b. If NO, continue to question 3. Certificate is considered a stand-alone program in which hours required for the certificate are in excess of those required for the degree plan. This program must be approved in order for students to be eligible for Title IV financial aid. **(Example: A student needs 120 hours to graduate with the degree. In order to earn a certificate, the student must take an additional 6 hours, bringing the total hours taken to 126. Since the student is taking hours in excess of those required for the degree, the certificate is stand-alone.)**
  
3. **No** Do any of the recognized occupations for which this certificate prepares students require a state or federal certification or licensure?
  - a. IF YES, continue to question 4
  - b. IF NO, please complete the remainder of the Program Worksheet (excluding question 4 below). This program COULD be considered for Title IV financial aid eligibility.
  
4. **Yes** Have you updated your website to include the required disclosures as described in [34 CFR 668.43](#)? **Generally, institutions must provide a list of all States for which the institution has determined that: its curriculum meets; curriculum does not meet; and has not made a determination that curriculum meets the State educational requirements for licensure or certification.**
  - a. IF YES, please complete the remainder of the Program worksheet. This program COULD be considered for Title IV financial aid eligibility.
  - b. If NO, stop here and contact the University Compliance & Review Specialist to discuss what information is needed and where it must be posted. Return to this worksheet once you have completed the necessary steps.

## Program Worksheet

Please answer the following questions about the program. The information ensures the University of Wyoming remains compliant with federal regulations to ensure that this program and other degree programs remain eligible for Title IV financial aid.

Title of the program	Organizational Leadership Certificate Health Leadership Certificate Agribusiness Leadership Certificate (All three are identical credit hours)
Total tuition and required fees for the entire program, assuming normal time to completion	\$3,672
Total estimated costs of books and supplies for the entire program	\$300
If the student will be required to live on campus, total costs to the student for on-campus room and board for the entire program, assuming normal time to completion	n/a
Total fees or expenses that students will have in addition to those already entered for tuition and required fees, books and supplies, and room and board (for example: optional equipment, parking permits, etc.)	\$2,000 - laptop/technology
Normal time to complete the program that will be published in the catalog and other publications. Enter the amount as <b>weeks of instruction</b> and include only whole numbers. This information is required by the Department of Education.	32 Weeks
List the website that contains information on the program.	Program: Organizational Leadership, B.A.S. - University of Wyoming - Acalog ACMST <sup>™</sup> (uwyo.edu) Welcome to UW at Casper (uwyo.edu)
List name, email, and phone number for the point of contact to make updates to the website listed above.	Jessica Steward, jstewar5@uwyo.edu (307) 268-2147
List name, email, and phone number for the point of contact to update print material and advertisements for this program.	Jessica Steward, jstewar5@uwyo.edu (307) 268-2147

1. **No** If applicable, has this program been programmatically approved by federal/state accrediting agencies as required for graduates to be eligible for employment? (i.e., Dental certificates are accredited by the Commission on Dental Accreditation)
  - a. If YES, please attach accreditation documentation to this form.
  - b. If NO, please explain.

[This certificate is not part of an accrediting agency.](#)

2. **Term or Module** Is the program **term based** or module based? (circle one)
  - a. **Please choose** If module, is there more than a 2 week break between modules? (select one)

### Certification Statement

By signing below, I certify that the information reported here is complete and accurate. I understand that information provided on this form will be reviewed to determine the program's Title IV eligibility for financial aid and additional documentation may be requested.



\_\_\_\_\_  
Signature of Dept. Head

December 21, 2023

\_\_\_\_\_  
Date

Please attach the following documentation with this completed worksheet.

1. A copy of the Feasibility Study Template
2. A copy of the program of study.
3. A copy of the program certificate approval by the Faculty Senate and Provost's Office.
4. A copy of the certificate approval documentation for the program (if applicable).
5. If applicable, a copy of any required programmatic accreditation in order for graduates of program to be eligible for occupation.
6. If applicable, a copy of any federal or state licensure or certification requirements for occupations for which this program prepares students.
7. Send completed/signed form to the Director of Scholarships & Financial Aid.

**ACADEMIC AND STUDENT AFFAIRS**  
**COMMITTEE MEETING MATERIALS**

**AGENDA ITEM TITLE: Request for Authorization: BA in European Languages, Literatures, and Film Studies** (Barrett, Turpen)

- OPEN SESSION
- CLOSED 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:

UW's Department of Modern and Classical Languages submits this Request for Authorization to launch a new degree offering called "Bachelor of Arts in European Languages, Literatures, and Film Studies." The anticipated curriculum builds upon existing UW language minors and established humanities coursework in French, German, and Spanish, and will forge true interdisciplinary sharing and cross-listing of existing upper-level coursework from other departments. This B.A. uses existing resources much more effectively and provides meaningful opportunities for student learning. UW students will become informed international citizens, who develop effective multi-lingual and cultural communication expertise and problem-solving skills. The proposed degree has completed the review process and we seek approval of the Request for Authorization.

PRIOR RELATED COMMITTEE DISCUSSIONS/ACTIONS:

The Board approved the Notice of Intent during the November 2023 meeting.

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 Request for Authorization.

ACTION REQUIRED AT THIS COMMITTEE MEETING:

Consideration for approval of the Request for Authorization for the Bachelor of Arts in European Languages, Literature, and Film Studies

PROPOSED MOTION:

"I move to approve the Request for Authorization for the Bachelor of Arts in European Languages, Literatures, and Film Studies."



## **Feasibility Study for BA European Languages, Literature, and Film Studies**

### **Executive Summary**

**Degree or Certificate Title:** BA European Languages, Literature, and Film Studies

**Level of Degree or Certificate:** Undergraduate

**Delivery Mode(s):** In person, on-campus classes with optional On-line, Study Abroad and Community Engaged Experiential Learning

**Estimated Startup Cost of Degree:** No start-up cost, faculty and coursework already in place

**Anticipated Launch Date:** Fall 2024

**Description:** The BA European Languages, Literature and Film Studies curriculum builds upon existing UW language minors and established humanities coursework in French, German, and Spanish. It will forge true interdisciplinary sharing and cross-listing of existing upper-level coursework from other departments. This B.A. uses existing resources much more effectively and provides meaningful opportunities for student learning. UW students will become informed international citizens, who develop effective multi-lingual and cultural communication expertise and problem-solving skills.

Language forms the foundation for subsequent learning. At UW, we understand that we form more meaningful and respectful relationships with our partners in the global economy and world affairs when we dialogue with them in their own languages. The core of the major builds upon a solid foundation of at least one European language (French, German, or Spanish) and develops linguistic and cross-cultural competencies across disciplines. Students expand beyond their base language and learn about the complexities and interconnectedness of European cultures. To critically investigate the idea of Europe, which is neither single nor unified, an open, pluralistic, multi- and interdisciplinary approach will be accomplished through courses that explore a wide range of fields including language, literature, film, philosophy, linguistics, history, politics, ethics, popular culture, humanities, and the performing and visual arts. Additionally, Education Abroad will be encouraged for all tracks.

### **Table of Contents**

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

Learning Outcomes

Curriculum Map and Program Structure

--See Attachment for Curriculum Map

--Overview Program Structure and of Requirements

--4 year Plans for tracks in Program Structure

Course Descriptions

Assessment Plan

Degree Program Evaluation

New Resources Required= No new resources required, uses existing faculty and coursework.

--Faculty Impact Statement

Substantive Change Determination

Executive Summary of Demand Statistics (SEE Attachment for Gray's Data report)

### **Feasibility Study Required Contents:**

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

- **The degree's objectives** build upon a strong base of foundational language skills in French, German and/or Spanish and offers a wide-range of interdisciplinary European content in language/linguistics, literature, and film studies.
- **Its fit with the unit's current offerings** is the key to the proposed BA's success because it uses existing faculty expertise and coursework in languages, literature and film studies in a more efficient and interdisciplinary way, and also encourages students to draw upon campus-wide European-related offerings in art, English, history, music, political science, theater and dance. Rather than competing with other courses on campus, this BA encourages an interdisciplinary confluence of existing coursework and resources, working hand-in-hand with Education Abroad and other departments that offer European culture, film, and humanities courses.
- **The rationale for the program, and niche/gap the degree or certificate will fill.** Currently UW offers no Film Studies major or minor degrees and has no Film Studies department. As the Gray's data and report show, "this program could grow to be a niche opportunity for UW given the language and area study skills embedded within Film Studies." It will appeal to students because it combines many skills, building on a strong foundation of language and incorporating literary and film studies that embrace many area studies and expose them to study abroad opportunities throughout Europe. Employers seek students with strong multilingual communicative skills in reading, writing, and speaking and with international cultural understanding and experience. Graduate schools welcome well-rounded students whose undergraduate degrees prepare them for a variety of subjects--our bilingual and multilingual graduates can pursue advanced degrees in language, literature and film/cinema/media studies and digital humanities, and can qualify for a wide range of job opportunities in European and international business, science/technology, medicine, tourism, and other settings.
- **The degree will support UW's Strategic Plan, A&S's strategic plan, and the unit's strategic plan** since it offers strong and varied ways to enhance student success by developing a broad set of practical and academic skills; prepares students for

community, national and international engagement; exposes them to diverse viewpoints; and enables them to connect Wyoming with a wide range of global commerce in various settings.

**Learning Outcomes.** Describe and outline the learning outcomes of the degree, focusing on the core competencies you expect graduates to exhibit and accumulate as they complete the degree or certificate.

**As they move through the series of language courses, students will be able to:**

- Reach progressively higher levels of understanding of the language and cultural components of the countries of study, with increased levels of proficiency in the target language(s) related to the subject matter.
- Demonstrate an increasingly advanced level of language proficiency in all areas of Speaking, Reading, Writing, Listening, Viewing and Communication. American Council of Teachers of Foreign Language (ACTFL) target levels for graduates will be Intermediate High proficiency in written and oral communication in one or more European languages.
- Use and apply their language skills to scholarly and theoretical research situations and be able to transfer these skills to practical situations requiring specific language expertise (business, legal, medical, tourism, etc).

**As they move through the series of literature and film courses, students will be able to:**

- Demonstrate ability to interrogate, critically analyze, and discuss European literary and film works in terms of genre, structure, theme, content and style, and compare and relate them to works written in other languages.
- Demonstrate understanding and critical thinking by evaluating literary and film products in light of historical and contemporary political, social, and cultural contexts.
- Demonstrate an increasingly advanced level of language proficiency in all areas of Speaking, Reading, Writing, Listening and Practical Communication.
- Demonstrate deep understanding of European culture, history, and humanities, including in a global context
- Demonstrate intercultural competence, including knowledge and appreciation of the human condition in different cultures in relation to each other and of cultural diversity and/or cultural evolution over time.

**Curriculum Map and Program Structure.** For undergraduate degrees: Map out the four-year plan for the expected course sequence, including USP courses, college requirements, and degree requirements. Be sure to notate which courses are existing and which are new. Describe whether each course will be available in Laramie, Casper, other sites, and/or online.

## **OVERVIEW of Requirements for BA in European Languages, Literature and Film Studies (121 credits)**

### **USP Core Courses that all Majors Take = 30 Credits**

This degree requires that [The University Studies Program 2015](#) requirements are met before graduation. (30 credits) Some of the courses required for this major fulfill USP requirements, but not all. Students should check their degree evaluations and consult with their assigned academic advisor to discuss their specific course plan.

- [C1 - Communication 1](#) Credits: 3
- [C2 - Communication 2](#) Credits: 3 **FREN 3050, HIST 2280/INST 2280, or SPAN 3050 or SPAN 3030**
- [C3 - Communication 3](#) Credits: 3 **FREN 4200, GERM 4200, or SPAN 4200=cross-listed Eng or bilingual**
- [Q- - Quantitative Reasoning](#) Credits: 3
- [PN- - Physical and Natural World \(1\)](#) Credits: 3
- [PN- - Physical and Natural World \(2\)](#) Credits: 3
- [H- - Human Culture \(1\)](#) Credits: 3
- [H- - Human Culture \(2\)](#) Credits: 3
- [V- - U.S. & WY Constitution](#) Credits: 3
- [FYS or USP Elective- - Any 3-credit hour of FYS or 3-credit hours of USP electives](#) Credits: 3

### **Required Interdisciplinary Coursework that all Majors Take = 12 Credits.** Taught in English with bilingual option taught in English and the target language

HIST 2280 or INST 2280 (crosslisted) Intro to European Studies OR HIST 4990 European Topics (3 credits)  
LANG 1000 Intro to Film Studies (3 credits)  
LANG 4300 Fundamentals of Linguistics for Non-Linguists (3 credits)  
LANG 4800 Advanced Instruction in Film Studies (3 credits)

### **Required Language Courses for Tracks**

#### **For FRENCH TRACK-- 30 Credits of French Coursework (plus USP Com 2 and Com 3 listed above)**

FREN 1010 – First Year French I (4 credits)  
FREN 1020 – First Year French II (4 credits)  
FREN 2030 – Second Year French I (4 credits)  
FREN 2040 – Second Year French II ( 3 credits)  
FREN 2140 – Intro to Reading (3 credits)  
FREN 3005—French Phonetics and Pronunciation (3 credits)  
FREN 3060—Third Year French II (3 credits)  
FREN 3110—French Civilization (3 credits)  
FREN 4110—Survey of French Literature II (3 credits)

#### **For GERMAN TRACK: 30 credits of German Coursework, 3 courses of which are in residency**

GERM 1010—First Year German I (4 credits)  
GERM 1020—First Year German II (4 credits)  
GERM 2030—Second Year German I (4 credits)  
GERM 2040—Second Year German II (4 credits)  
Plus 9 credits of 3000+level German Electives  
Plus 5 credits of German Electives (could incl: GERM conversation, LANG 2000 GERM for Specific Purposes, LANG 4800 WLD or SPARK Internship. Up to 16 credits can be earned in Study Abroad in place of required coursework.)

**For SPANISH TRACK: 31 credit hours of Spanish Coursework (plus USP Com 2 and Com 3 listed above)**

SPAN 1010 – First Year Spanish I (4 credits)  
SPAN 1020 –First Year Spanish II (4 credits)  
SPAN 2030 – Second Year Spanish I (4 credits)  
SPAN 2040 - Second Year Spanish II (4 credits)  
SPAN 2140 – Introduction to Reading (3 credits)  
SPAN 3060—Third Year Spanish II (3 credits)  
SPAN 3140 – Introduction to Literature (3 credits)  
SPAN 3300 – Introduction to Hispanic Linguistics (3 credits)  
SPAN 4180—Advanced Cultural Studies in Hispanic Literature and Media (3 credits)

**Recommended Elective Courses=** Interdisciplinary European coursework taught in English or target language, with bilingual option

CLAS 4990 Gladiators & Cinema (3 credits)  
CLAS 4230 Greek Tragedy (3 credits)  
FREN 3110 French Civilization (3 credits)  
FREN 4080 One Hundred Years of French Film (3 credits)  
FREN 4100 Survey of French Literature I (3 credits)  
GERM 1101 FYS-German-American Culture (3 credits)  
GERM 3050—Third Year German (3 credits)  
GERM 3060—Intro to German Literature (3 credits)  
GERM 4070—Fourth Year German I (3 credits)  
GERM 4080—Fourth Year German II (3 credits)  
GERM 4285—20/21<sup>st</sup> Century German Film (3 credits)  
HIST 4310 World War II in Europe (3 credits)  
HIST 4990 Nazi Germany and the Holocaust (3 credits)  
HIST 4990 Europe after 1945 (3 credits)  
HIST 4990 Weimar Germany: Hope and Tragedy (3 credits)  
INST 2200 or POLS 2200 (crosslisted) Politics of Europe (3 credits)  
INST 4215 European Union (3 credits)  
INST 4315 Memories of Holocaust in Europe (3 credits)  
LANG 2000 Intro to Languages for Specific Purposes (3 credits)  
LANG 3000 Language for Specific Purposes—Variable Topics (3 credits)  
LANG 4800 World Language Day (up to 3 credits)  
LANG 4800 Día de los muertos (up to 3 credits)  
LANG 4800 European folk tales (3 credits)  
LANG 4800 Masterpieces of European Literature in Translation (3 credits)  
LANG 4800 Advanced Study in German Conversation (up to 5 credits)  
LANG or SPAN 1101 FYS-The Linguistics of Food (3 credits)  
SPAN 3100 - Survey of Spanish Literature I (3 credits)  
SPAN 3200 Spanish Culture and Civilization (3 credits)  
THEA 1000 Intro to Theatre, Film and Television (3 credits)

**Plus General Electives to total 121 credits.**

**SEE next page for Specific 4-year plans for French, German and Spanish tracks**

**FOUR YEAR PLAN: BA in European Languages, Literature and Film Studies—FRENCH TRACK.** This sample degree plan is a guide for planning in consultation with your academic advisor. Actual course sequence may vary by student. A ▲ symbol identifies courses that must be taken and passed during the suggested semester in order for a student to stay on track toward completing the degree program within four years. There are multiple entry points into the major depending upon previous language experience. Students should consult Modern and Classical Languages about appropriate placement and credit-by-exam options. Courses available on UW campus in Laramie. Notes indicate optional online offerings, but may not be available all semesters.

Sequence	Course Prefix+ Number	Course Title	Credits	Minimum Grade	Notes
<b>FRESHMAN FALL SEMESTER</b>					
		USP First-Year Seminar or USP Elective	3	C	Recommended: LANG 1101
		USP Quantitative Reasoning	3		Q
ENG 1010		College Composition and Rhetoric	3	C	C1: sub: ESL 1210 or HP 1020
▲ FREN 1010		First Year French I	4	C	On-line Optional

***Credit hours subtotal: 13***

### FRESHMAN SPRING SEMESTER

		USP Human Culture	3		H
		USP Physical & Natural World	3		PN
		A&S Core Diversity in the US	3		ASD
▲ FREN 1020		First Year French II	4	C	On-line Optional
LANG 1000		Intro to Film Studies	3		H

***Credit hours subtotal: 16***

### SOPHOMORE FALL SEMESTER

		USP Physical & Natural World	3		PN
		USP US & Wyoming Constitutions	3		V
		A&S Core Global Awareness	3		ASG. Rec: POLS 1250/INST 1250 IntComGov
▲ FREN 2030		Second Year French I	4	C	On-line Optional
HIST/INST 2280 or HIST 4990		Intro European Studies or Topics	3		Com 2

***Credit hours subtotal: 16***

### SOPHOMORE SPRING SEMESTER

▲ FREN 2040		Second Year French II	3	C	On-line Optional
▲ FREN 2140		Intro to Reading	3	C	On-line Optional
LANG 4800		Advanced Instruction in European Film	3	C	On-line Optional
		Electives	6		Rec: Euro Lang, Lit Film electives
LANG 4800		World Language Day	1		

***Credit hours subtotal: 16***

## JUNIOR FALL SEMESTER

▲ FREN 3050	Third-Year French I	3		Com 2
▲ FREN 3005	Fren Phonetics and Pronunciation	3		
FREN 3110	Contemporary French Civ	3	C	Taught in English, bilingual opt
	Upper Division Electives	6		Rec: Euro Lang, Lit Film electives
<b><i>Credit hours subtotal:</i></b>		<b><u>15</u></b>		

## JUNIOR SPRING SEMESTER

▲ FREN 3060	Third-Year French II	3	C	
FREN 4110	Survey of French Lit II	3		
	Upper Division Electives	9		Rec: LANG 2000 for Specific Purposes
<b><i>Credit hours subtotal:</i></b>		<b><u>15</u></b>		

## SENIOR FALL SEMESTER

LANG 4300	Fundamentals of Linguistics for Non-Linguists	3	C	CAP submitted
FREN 4200 or GERM 4200 or				
SPAN 4200	Intro to Research	3	C	Com 3
	Upper Division Electives	9		Rec:CLAS/ENG/THEA 4230GrkTr
<b><i>Credit hours subtotal:</i></b>		<b><u>15</u></b>		

## SENIOR SPRING SEMESTER

	Upper Division Electives	15		Rec: FREN 4100; Lang, Lit, Film electives
<b><i>Credit hours subtotal:</i></b>		<b><u>15</u></b>		
<b><u>TOTAL CREDIT HOURS</u></b>		<b><u>121</u></b>		

This sample degree plan is a guide for course work in the major. • Course sequencing may need to be altered if ACT or Math Placement scores require a student to take pre-college courses before taking required math or English courses. • Not all courses are offered every semester and some electives may have prerequisites. Students should review course descriptions in the University Catalog and consult with their academic advisor to plan accordingly.

Students must have a minimum cumulative GPA of 2.0 to graduate. • Students must complete 42 hours of upper division (3000-level or above) coursework, 30 of which must be from the University of Wyoming. • Courses must be taken for a letter grade unless offered only for S/U. • University Studies Program (USP) Human Culture (H) and Physical & Natural World (PN) courses must be taken outside of the major subject, but can be cross-listed with the major.

College of Arts and Sciences requirements: Students must take two "core" courses in addition to UW's University Studies Program requirements: Diversity in the United States (ASD) and Global Awareness (ASG). • No more than 60 hours in the major subject may be used toward the 120 credit hours required for graduation. • At least 30 hours in the major subject must be completed with a grade of C or better (the major may require more) A study abroad experience in Europe is highly recommended and students should consider taking Modern and Classical Languages' faculty-led Study Abroad courses offered in summer semesters. Consult with an academic advisor about which programs and courses are offered.

## FOUR YEAR PLAN: BA in European Languages, Literature and Film Studies—GERMAN TRACK

This sample degree plan is a guide for planning in consultation with your academic advisor. Actual course sequence may vary by student. A ▲ symbol identifies courses that must be taken and passed during the suggested semester in order for a student to stay on track toward completing the degree program within four years. There are multiple entry points into the major depending upon previous language experience. Students should consult Modern and Classical Languages about appropriate placement and credit-by-exam options. Courses available on UW campus in Laramie. Notes indicate optional online offerings, but may not be available all semesters.

Sequence	Course Prefix+ Number	Course Title	Credits	Minimum Grade	Notes
<b>FRESHMAN FALL SEMESTER</b>					
		USP First-Year Seminar or USP Elective	3	C	Recommended GERM 1101
		USP Quantitative Reasoning	3		Q
ENG 1010		College Composition and Rhetoric	3	C	C1: sub: ESL 1210 or HP 1020
▲ GERM 1010		First Year GERM I	4	C	On-line Optional
<b><i>Credit hours subtotal:</i></b>			<b><u>13</u></b>		
<b>FRESHMAN SPRING SEMESTER</b>					
		USP Human Culture	3		H
		USP Physical & Natural World	3		PN
		A&S Core Diversity in the US	3		ASD
▲ GERM 1020		First Year GERM II	4	C	On-line Optional
LANG 1000		Intro to Film Studies	3		H
<b><i>Credit hours subtotal:</i></b>			<b><u>16</u></b>		
<b>SOPHOMORE FALL SEMESTER</b>					
		USP Physical & Natural World	3		PN
		USP US & Wyoming Constitutions	3		V
		A&S Core Global Awareness	3		ASG. Rec: POLS 1250/INST 1250 IntComGov
▲ GERM 2030		Second Year GERM I	4	C	On-line Optional
HIST/INST 2280 or HIST 4990		Intro European Studies or Topics	3		Com 2
<b><i>Credit hours subtotal:</i></b>			<b><u>16</u></b>		
<b>SOPHOMORE SPRING SEMESTER</b>					
▲ GERM 2040		Second Year GERM II	4	C	
LANG 4800		Advanced Instruction in European Film	3		On-line Optional
		Electives	9		Rec: Euro Lang, Lit Film electives
<b><i>Credit hours subtotal:</i></b>			<b><u>16</u></b>		



## JUNIOR FALL SEMESTER

Upper Division German Electives	3
Upper Division Electives	12
<b><i>Credit hours subtotal:</i></b>	<b><u>15</u></b>

## JUNIOR SPRING SEMESTER

Upper Division German Electives	3
Upper Division Electives	12
<b><i>Credit hours subtotal:</i></b>	<b><u>15</u></b>

## SENIOR FALL SEMESTER

LANG 4300	Fundamentals of Linguistics for Non-Linguists	3	C	CAP submitted
GERM 4200, or FREN 4200,				
Or SPAN 4200	Intro to Research	3	C	Com 3
	Upper Division German Electives	3		
	Upper Division Electives	6		Rec: CLAS/ENG/THEA 4230GrkTr
	<b><i>Credit hours subtotal:</i></b>	<b><u>15</u></b>		

## SENIOR SPRING SEMESTER

Upper Division German Electives	3	Rec: GERM 4080
Upper Division Electives	12	Rec EuroLang, Lit, Film electives
<b><i>Credit hours subtotal:</i></b>	<b><u>15</u></b>	
<b><u>TOTAL CREDIT HOURS</u></b>	<b><u>121</u></b>	

This sample degree plan is a guide for course work in the major. • Course sequencing may need to be altered if ACT or Math Placement scores require a student to take pre-college courses before taking required math or English courses. • Not all courses are offered every semester and some electives may have prerequisites. Students should review course descriptions in the University Catalog and consult with their academic advisor to plan accordingly.

Students must have a minimum cumulative GPA of 2.0 to graduate. • Students must complete 42 hours of upper division (3000-level or above) coursework, 30 of which must be from the University of Wyoming. • Courses must be taken for a letter grade unless offered only for S/U. • University Studies Program (USP) Human Culture (H) and Physical & Natural World (PN) courses must be taken outside of the major subject, but can be cross-listed with the major.

College of Arts and Sciences requirements: Students must take two "core" courses in addition to UW's University Studies Program requirements: Diversity in the United States (ASD) and Global Awareness (ASG). • No more than 60 hours in the major subject may be used toward the 120 credit hours required for graduation. • At least 30 hours in the major subject must be completed with a grade of C or better (the major may require more)

A study abroad experience in Europe is highly recommended and students should consider taking Modern and Classical Languages' faculty-led Study Abroad courses offered in summer semesters. Consult with an academic advisor about which programs and courses are offered. German track requires 30 credits in German, 3 courses of which are in residency. Up to 16 credits can be earned in Study Abroad in place of required coursework.

## FOUR YEAR PLAN: BA in European Languages, Literature and Film Studies—SPANISH TRACK

This sample degree plan is a guide for planning in consultation with your academic advisor. Actual course sequence may vary by student. A ▲ symbol identifies courses that must be taken and passed during the suggested semester in order for a student to stay on track toward completing the degree program within four years. There are multiple entry points into the major depending upon previous language experience. Students should consult Modern and Classical Languages about appropriate placement and credit-by-exam options. Courses available on UW campus in Laramie. Notes indicate optional online offerings, but may not be available all semesters.

Sequence	Course Prefix+ Number	Course Title	Credits	Minimum Grade	Notes
<b>FRESHMAN FALL SEMESTER</b>					
		USP First-Year Seminar or USP Elective	3	C	Recommend: SPAN 1101
		USP Quantitative Reasoning	3		Q
ENG 1010		College Composition and Rhetoric	3	C	C1: sub: ESL 1210 or HP 1020
▲ SPAN 1010		First Year Spanish I	4	C	On-line Optional

***Credit hours subtotal:***     **13**

### FRESHMAN SPRING SEMESTER

		USP Human Culture	3		H
		USP Physical & Natural World	3		PN
		A&S Core Diversity in the US	3		ASD
▲ SPAN 1020		First Year Spanish II	4	C	On-line Optional
LANG 1000		Intro to Film Studies	3		H

***Credit hours subtotal:***     **16**

### SOPHOMORE FALL SEMESTER

		USP Physical & Natural World	3		PN
		USP US & Wyoming Constitutions	3		V
		A&S Core Global Awareness	3		ASG. Rec: POLS 1250/INST 1250 IntComGov
▲ SPAN 2030		Second Year Spanish I	4	C	On-line Optional
HIST/INST 2280 or HIST 4990		Intro European Studies or Topics	3		Com 2

***Credit hours subtotal:***     **16**

### SOPHOMORE SPRING SEMESTER

▲ SPAN 2040		Second Year Spanish II	4	C	On-line Optional
▲ SPAN 2140		Intro to Reading	3	C	On-line Optional
LANG 4800		Advanced Instruction in European Film	3		On-line Optional
		Electives	6		Rec: Euro Lang, Lit Film electives

***Credit hours subtotal:***     **16**

## JUNIOR FALL SEMESTER

▲ SPAN 3050 or SPAN 3030	Third-Year SPAN I, or Span for Heritage	3	C	Com 2
▲ SPAN 3300	Introduction to Spanish Linguistics	3	C	
SPAN 4180	Adv Cultural Studies in Hispanic Lit/Media	3	C	Taught in English, bilingual opt
	Upper Division Electives	6		Rec: Euro Lang, Lit Film electives
<b><i>Credit hours subtotal:</i></b>		<b><u>15</u></b>		

## JUNIOR SPRING SEMESTER

▲ SPAN 3060	Third-Year Spanish II	3	C	
▲ SPAN 3140	Intro to Span lit.	3	C	
	Upper Division Electives	9		Rec: LANG 2000 Spec Purposes
<b><i>Credit hours subtotal:</i></b>		<b><u>15</u></b>		

## SENIOR FALL SEMESTER

LANG 4300	Fundamentals of Linguistics for Non-Linguists	3	C	CAP submitted
SPAN 4200	Intro to Research	3	C	Com 3
	Upper Division Electives	9		Rec:CLAS/ENG/THEA 4230GrkTr
<b><i>Credit hours subtotal:</i></b>		<b><u>15</u></b>		

## SENIOR SPRING SEMESTER

	Upper Division Electives	15		Rec: Lang, Lit, Film electives
<b><i>Credit hours subtotal:</i></b>		<b><u>15</u></b>		
<b><u>TOTAL CREDIT HOURS</u></b>		<b><u>121</u></b>		

This sample degree plan is a guide for course work in the major. • Course sequencing may need to be altered if ACT or Math Placement scores require a student to take pre-college courses before taking required math or English courses. • Not all courses are offered every semester, some electives may have prerequisites. Students should review course descriptions in the University Catalog and consult with their academic advisor to plan accordingly. Students must have a minimum cumulative GPA of 2.0 to graduate •Students must complete 42 hours of upper division (3000-level or above) coursework, 30 of which must be from the University of Wyoming. • Courses must be taken for a letter grade unless offered only for S/U. •University Studies Program (USP) Human Culture (H) and Physical & Natural World (PN) courses must be taken outside of the major subject, but can be cross-listed with the major. College of Arts and Sciences requirements: Students must take two "core" courses in addition to UW's University Studies Program requirements: Diversity in the United States (ASD) and Global Awareness (ASG). • No more than 60 hours in the major subject may be used toward the 120 credit hours required for graduation. •At least 30 hours in the major subject must be completed with a grade of C or better (the major may require more).Study abroad in Europe is highly recommended and students should consider taking Modern and Classical Languages' faculty-led Study Abroad courses offered in summer semesters. Consult with an academic advisor about which programs and courses are offered.

**Course Descriptions.** Provide short course descriptions for new courses, including possible modes of delivery.

Built upon a strong base of language skills in French, German and/or Spanish, this degree's upper level (3000/4000) interdisciplinary campus-wide coursework will be delivered in English, or bilingually in English and the target language. For example, our existing course called "100 Years of French Film" can show films in French with English subtitles. Students who study French can view them in French, while English-speaking students can read the subtitles and view translated and/or dubbed versions. In-class discussions will be in English, while teacher-graded materials like homework and essays can be in English or French, according to students' differentiated needs.

MCL has recently designed several new courses which are appropriate both for our existing language majors and minors and which will fit nicely into the new degree program, including:

**LANG 4300/5300 (dual listed): "Fundamentals of Linguistics for Non-Linguists."** An introduction to fundamentals of linguistic study, including phonology, morphology, semantics, pragmatics, and syntax, looking also to computational, socio-cultural and teaching applications. This class will also appeal to students in English, Communication Disorders, Anthropology, and Computer Science since it will be based in English with comparison to other languages. CAP has been submitted.

**LANG 2000 Intro to Languages for Specific Purposes + 3000 Language for Specific Purposes—Variable Topics.** Language for Specific Purposes is an emerging subdiscipline within the discipline of Languages that emerges from the global changes that affect all professions (Sánchez-López, 2010), twenty-first-century globalization, and internationalization. These courses equip students to be more competitive and to succeed in 21<sup>st</sup> century global economy in different fields of study within the U.S. and abroad. LANG 2000 and LANG 3000 will provide students with the necessary skills to communicate information and knowledge from a specific field that requires a foreign/secondary language within the U.S. and abroad.

Language for Specific Purposes courses assume that students have previous general knowledge of the target language and need to acquire language tools that support them to move forward in their professional field, e.g., business and tourism, engineering, healthcare, and law. They combine well with other majors and/or degrees offered at the University of Wyoming: health professions, law, business, and tourism. The course conforms to the World Readiness Standards for Learning Languages: communication, comparisons, cultures, connections and communities; and aims to increase students' competency across all these dimensions. CAP has been submitted.

**Required Film Courses: LANG 1000 Introduction to Film Studies and LANG 4800 Advanced Instruction in Film Studies.** Since film studies will be a centerpiece of the new

major, we will be attracting new students by offering the Intro to Film Studies early in their program during the Freshman Spring semester. This will also be a great recruitment tool during “Saddle-Up” to entice them to consider our major. Intro to Film Studies will include basic technical vocabulary and techniques for watching and evaluating films, with a broad introduction to European film, both about Europe and by European filmmakers and film genres (short subjects, documentary, drama, science fiction, etc). Advanced Instruction in Film Studies augments students’ critical abilities and applies them to a wider variety of films with particular emphasis on *auteur*, theme-studies, and in-depth comparative studies of European films. Both courses will be taught in English with optional differentiated assignments for students in their target language of study. Besides in-person classes, we also anticipate delivering this course in Study Abroad settings and online formats.

**Possible Modes of Delivery** is one of the greatest strengths of the proposed major, as Jayne Pearce’s Grays Data report (attached) demonstrates on page 17:

- i) Specifically online completions in Foreign Language, Literature, and Linguistics nationally increased by 61.363% from 2019-2021. There are no regional online programs. *Signifying an emerging and strong program opportunity for the University of Wyoming*
- ii) Specifically online completions in Film Studies nationally increased from 0 in 2019 to 22 in 2021. There are no regional online programs. *Signifying an emerging and strong program opportunity for the University of Wyoming*

The Department of Modern and Classical Languages is currently proposing the BA in European Languages, Literature and Film Studies for full on-campus delivery in keeping with current UW Board of Trustees and Administration policy, and we have the personnel and expertise to deliver all aspects of the major on-campus. Additionally, and looking into the future, we also have stockpiled 32 new online course designs that are poised and ready for full online delivery. These were designed by MCL faculty over the past four years with professional guidance by Wiley Learning Systems and funded by federal CARES funding. When budgetary and distance education policies are revised to support the online delivery of this major, we will be ready.

**Assessment Plan.** Describe how the learning outcomes outlined above will be met through the proposed curriculum. How will student work be evaluated, and at which points, in the context of the overall assessment of learning outcomes?

Learning Outcomes are met in individual courses by oral and written exams, oral presentations, and written work and essays. Student proficiencies are measured when they enter language courses, as explained below in “Degree Program Evaluation,” and continue to be measured throughout the progressive language coursework, with increasing levels of proficiency expected and confirmed. Content areas of linguistics,

literature and film studies are also measured by oral and written exams, oral presentations and written work and essays in individual courses. Assessment for language proficiency and for continuity of content depends upon a progression of language skills and content knowledge from course-to-course and level-to-level. Thus, individual coursework is connected to the overall scaffolding of the degree program, as described in the following “degree program evaluation” section.

**Degree Program Evaluation.** Explain how the program will be evaluated. Will you use exit surveys of graduates, employer surveys, mid- or end-of-program feedback through focus groups or surveys, etc.? Remember that by policy, all new degree will be evaluated within 5 years of startup, so this will help you in gathering artifacts upon which that evaluation can be based.

The BA in European Languages, Literature, and Film Studies already has various assessments in place for the language and literature proficiencies. Incoming students can prove proficiency and earn UW credit by providing scores from Advanced Placement (AP), International Baccalaureate (IB), College Level Placement (CLEP) exams, or from taking UW’s Credit by Exam (CBE) based on Brigham Young University’s FLATS ratings for Foreign Language Studies. Many Wyoming high schools use the STAMP test to grant their “Seal of Biliteracy,” which corresponds to our lower division coursework. These proficiencies measure first and second year levels (1010, 1020, 2030). Students with previous language training who enter the new major will demonstrate these proficiencies by submitting any of these test results to the UW Registrar’s office, and will be able to earn credit as well as to be placed in the appropriate level of course work.

Upper level proficiencies are measured by American Council of Teachers of Foreign Language (ACTFL) determinations. American Council of Teachers of Foreign Language (ACTFL) target levels for graduates will be Intermediate High proficiency in written and oral communication. Our language teaching students also take the national Oral Proficiency Index (OPI) and Writing Proficiency Index (WPI) and must demonstrate ratings of Advanced Low before entering student teaching.

The Film Studies content of this major will need to develop specific assessments for the content area. We recommend mid- and end-of-program assessments given after the sophomore and senior years. Since we will be including interdisciplinary coursework from other departments, we also anticipate gleaning feedback from faculty and student surveys throughout the students’ four year programs so that curricular changes can be implemented in response to data collected.

**Substantive Change Determination.** Higher Learning Commission (HLC), UW’s regional accrediting agency, must approve all substantive changes to UW’s offering. HLC considers substantive change as the addition of a program (degree or certificate/credential level) not previously included in the institution’s accreditation, usually judged to be a program that is a

significant departure from normal offerings, the addition of a program with 50%+ new coursework required, or the addition or change to an existing program which will be delivered 50%+ through alternative (hybrid, online) delivery. Substantive change may also be defined as a new program which does not meet the above guidelines, but which requires a significant amount of financial investment to be made. Please contact the HLC Accreditation Liaison Officer (currently Steve Barrett, [steveb@uwyo.edu](mailto:steveb@uwyo.edu)) to make this determination.

The Department of Modern and Classical Languages does not feel that this proposed new major falls within the definition of “Substantive Change.” It is adding a degree level program that was not previously included in the institution’s accreditation, but it is not a significant departure from normal offerings. In fact, it incorporates normal offerings that were all previously included in UW’s last HLC accreditation. It is not adding or requiring 50%+ new coursework, and it is not changing to 50%+ alternative delivery. As well, it does not require a significant amount of financial investment to be made. We will leave the final determination to HCL Accreditation Liason Officer Steve Barrett.

**New Resources Required.** Describe new resources required, including:

- Faculty and instructional staffing—no new hiring anticipated
- Program administration and staff support—no new hiring anticipated
- Technology—no new technology anticipated
- Library and digital resources—Currently, Coe library has marvelous literature and film collections and a dedicated theater-style classroom for film viewing. In fact, most of their literature and film-related technology and resources are under-utilized. This new degree will mine the existing, underaccessed treasures that are already available at Coe and through myriad digital humanities sites and worldwide electronic databases.
- Marketing—we intend to use existing marketing resources, and have begun working with A&S’s new marketing strategist, Matt McGee, and our professional advisor, Ken Hilton, to make them aware of this proposed major so that when it is approved we can begin enrolling new students in it.
- Support—The department of Modern and Classical Languages has received very meaningful support from A&S Dean Scott Turpen, Associate Dean Susan Aronstein, and Provost Kevin Carman. Since we expect to “sunset” the current French and German BAs, but retain French and German courses to fulfill the minor and to meet foreign language requirements, they have encouraged and guided us in preparing the Notice of Intent, which has been approved through all levels. This new degree will capitalize on the existing courses and minors in French, German and Spanish and will forge a promising new interdisciplinary direction for our faculty and students, especially those in humanities, arts and social sciences. Likewise, our colleagues in the departments of History, International Studies, and Theater, whose coursework is listed as requirements

and electives on the 4-year plans above, have agreed to make their classes, including faculty-led study abroad, available to our students.

### **Faculty Impact Statement**

Faculty Workload. Current German faculty will have the same workload. Following the retirement of FTRC Mark Person in German (at this time, it is clear we will not be able to replace him with a full time faculty member), we have only one full-time faculty member in German, Becki Steele, who has a 3/2 courseload based on a 3-credit class = 15 credits per year. She will continue to deliver the courses needed for our basic German beginning series and for the German minor, and has an innovative plan for “stacking” courses of multiple levels, especially conversation courses, to maximize efficiency and increase class size. Occasionally, she will give the elective course, "European Folk Tales," that can alternate with Khama Basili Tolo, who also teaches European Folk Tales. These classes will be taught in English, so no matter whether a student has a base of German, French, Spanish, or English, they can read, discuss, and write about the tales in English, and if they wish, they can also work in their target language for bilingual reinforcement. We are not asking for any new full-time faculty in French or German to be hired for this major. In fact, we are focusing on their expertise in delivering a solid base of the target language to their minors. The upper-division courses of the new European major will be delivered by currently existing faculty in MCL, campus wide and study abroad.

Likewise, Current faculty in French will have the same workload. Associate Professor Khama Basilli Tolo teaches 18 credits per year, Associate Professor Ekaterina Alexandrova teaches 15 credits per year and FTRC Benedicte Sohier teaches 21 credits per year. Their teaching will be focused on the delivery of French basic and minor coursework and upper division courses taught bilingually. For French, note that our beginning online courses are always full, Sohier's focus will be on that level. Tolo will teach the intermediate courses at 2000-3000 levels, and Alexandrova will deliver the upper level French minor and European courses, particularly the "100 years of French Film," and other film coursework.

To answer the question a question posed by Academic Affairs, "Will there be any room in overall workload that will allow some faculty to have an increase in research/creative activities?" The answer is no. All French and German faculty will continue to have the same job descriptions. Associate Professors Steele and Alexandrova have a 25% research component, Tolo and FTRC Sohier have 12.5 % professional development.

### **Executive Summary of Demand Statistics\***

#### **SEE ATTACHMENT authored by Jayne Pearce using GRAY ASSOCIATES data: EuropeanLangLitFilm(2)**

The Attachment “EuropeanLangLitFilm” describes and outlines:

- Market area and primary target markets/



- Educational market and student demand statistics, including peer comparisons of the size of enrollment, completions, and size trajectory (growth, decline) of comparator programs.
- Employment trends and projections given core competencies of the degree or certificate.
- Graduate salary trends and other post-completion trends.

*\*available from Gray Associates data subscription*

### **Alignment with Strategic plan 2023+**

The proposed new major, called *BA in European Languages, Literature, and Film Studies*, will be aligned with the “Forward for Wyoming 2023+” Strategic Plan for the University of Wyoming since it will

- Generate Enrollments
- Increase Global Engagement
- Recruit and Retain Under-served Students
- Prepare Students for a changing and increasingly multicultural and digital world as follows:

**Generate Enrollments:** Our proposed new major will strategically grow enrollment since it offers more flexibility and a wider range of attractive courses. Instead of having to take solely language courses in German, French or Spanish, students will also have the opportunity to take upper division coursework delivered in either a bilingual format or in English about topics related to European languages, literatures, cultures, and film studies. For example, they could take a class on migration and globalization in contemporary France, but it would be in English. This will allow us to open many of our courses to students outside our department instead of only to students who have reached certain language proficiency levels. Once our upper division courses are available to a wider audience, our classes will be fuller; with more classmates, students will have a more positive, collaborative, and communicative experiences in class. Our plan offers many USP courses so that we can draw students from across campus who are seeking to fulfill their requirements and inspire them early in their undergraduate career to pursue an additional major in languages.

**Increase Opportunities for Global Engagement:** As part of the proposed major, we will offer a faculty-led study abroad program that visits not just one country, but three (for example, Spain, France, and Germany). Currently, it is difficult to recruit enough students to participate in study abroad in just French or German, however, if we combine languages in one trip, we will be able to recruit more students, increase opportunities for student collaboration, and invite students to engage in regional dialogues and deepen their understanding of multiple languages and cultures.

**Recruit and Retain students of underserved backgrounds,** including those who speak Spanish or French at home. We already know that the United States has more Spanish speakers than

any other country except for Mexico (more than Spain, Argentina, and Colombia). Africa is home to more French speakers than any other continent. Many of our international students from the Americas or Africa will want to add our major because it allows them to deepen their understanding of their home background language or culture.

**Prepare students for life and adaptation to a changing and increasingly multicultural and digital world.** Our courses prepare students to engage in meaningful dialogue on topics of citizenship, borders, history, migration and movement, human rights and social justice, equity and inclusion, education, multilingualism, among many other topics, inviting them to explore these issues through a multicultural and multilingual lens. Students will be familiarized with not only how we, as residents of the state of Wyoming, interpret issues of globalization, but how other countries grapple with them as well, ultimately inspiring a more global perspective. For our digital world, we have 32 asynchronous online courses that we designed in 2020 and 2021 through the Wiley Project available. These language courses prepare students for the digital world by inviting them to engage in learning through multiple modalities. They also make it possible for us to increase enrollment by opening up our programs to students off campus.

Respectfully Submitted,

Joy Landeira 

Department Head, Modern and Classical Languages

# UNIVERSITY OF WYOMING

## **Office of Academic Affairs**

1000 E. University Avenue  
Dept. 3302, 312 Old Main  
Laramie, WY 82071  
307.766.4286 • fax: 307.766.2606

May 7, 2024

Board of Trustees:

This letter serves as a Letter of Commitment for the Bachelor of Arts in European Languages, Literatures, and Film Studies.

## **Needs**

The BA European Languages, Literature and Film Studies curriculum builds upon existing UW language minors and established humanities coursework in French, German, and Spanish. It will forge true interdisciplinary sharing and cross-listing of existing upper-level coursework from other departments. This B.A. uses existing resources much more effectively and provides meaningful opportunities for student learning. UW students will become informed international citizens, who develop effective multi-lingual and cultural communication expertise and problem-solving skills.

## **Requirements**

The core of the major builds upon a solid foundation of at least one European language (French, German, or Spanish) and develops linguistic and cross-cultural competencies across disciplines. Students expand beyond their base language and learn about the complexities and interconnectedness of European cultures. To critically investigate the idea of Europe, which is neither single nor unified, an open, pluralistic, multi- and interdisciplinary approach will be accomplished through courses that explore a wide range of fields including language, literature, film, philosophy, linguistics, history, politics, ethics, popular culture, humanities, and the performing and visual arts. Additionally, Education Abroad will be encouraged for all tracks.

## **Resources**

The degree's fit with the unit's current offerings is the key to the proposed BA's success because it uses existing faculty expertise and coursework in languages, literature and film studies in a more efficient and interdisciplinary way, and also encourages students to draw upon campus-wide European-related offerings in art, English, history, music, political science, theater and dance. Rather than competing with other courses on campus, this BA encourages an interdisciplinary confluence of existing coursework and

resources, working hand-in-hand with Education Abroad and other departments that offer European culture, film, and humanities courses.

**Timeline**

The present implementation timeline is designed to enable students to enroll in this degree program in the Fall 2024.

**Campus Review**

I affirm that the university community, including the Executive Team, Deans and Directors, Faculty Senate, Staff Senate and ASUW, have been provided the opportunity to review and present feedback on the proposed program.

Best,



Kevin Carman  
Provost and Executive Vice President

TO Dr. Joy Landeira, Department Head of Modern & Classical Language  
FROM Jayne Pearce  
DATE 20 November 2023  
SUBJECT Bachelor of European Language, Literature, and Film Studies

**Request from Dr. Joy Landeira:**

*Executive Summary of Demand Statistics\**

*Describe and outline:*

1. *Market area and primary target markets.*
2. *Educational market and student demand statistics, including peer comparisons of the size of enrollment, completions, and size trajectory (growth, decline) of comparator programs.*
3. *Employment trends and projections given core competencies of the degree or certificate.*
4. *Graduate salary trends and other post-completion trends.*

*\*available from Gray Associates data subscription*

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**Caveats:**

- Gray Associates database uses approximately twelve different data sources to determine results. Slightly lagging data from the United States Department of Education, United States Department of Labor, and United States Federal Statistical System as well as current data from Google, job/employment market (Indeed, Monster, public state job postings, etc...), and various web pages and proprietary partnership resources to determine higher education institutional marketing costs, international student interest, completions, program employment and student demand, etc... There are approximately 14,000 different CIP (Classification of Instructional Programs) Codes and Gray will determine results for each code, within different markets (National, Wyoming...), and at the various award levels (undergraduate certificate, bachelor, post-baccalaureate certificate, master, post-master certificate, and doctoral). To my knowledge it is still a one of a kind (sole source) product that Online & Continuing Education subscribes to and if you would like access and training just let me know. All data in this report is from Gray Associates unless otherwise noted.
- Higher education institutions do make mistakes when reporting to the United States Department of Education just as people falsely alter their income, occupation, and other data collection attributes when answering the American Community Survey or US Census...
- Programs reported as online adhere to the below definition. According to the United States Department of Education, IPEDS (Integrated Postsecondary Education System):
  - Distance education (DE) is education that uses one or more types of technology to deliver instruction to students who are separated from the instructor and to support regular and substantive interaction between the students and the instructor synchronously or asynchronously. The following types of technology may be used for distance instruction: a) Internet; b) Satellite or wireless communication; and c) Audio and video conferencing. A Distance Education program for which all the required coursework for program completion can be completed **entirely** via Distance Education courses. <https://nces.ed.gov/ipeds/use-the-data/distance-education-in-ipeds>

- The pandemic likely influenced program completion numbers. This analysis focuses on 3 years 2019, 2020 and 2021 program completions, 2022 program completions will be ready in December 2023-January 2024. A five percent decrease in completion numbers from previous years is reasonable (my assumption-some may disagree), notable would be completion increases or completions remaining constant.
  - International student enrollment & completions numbers are influenced by political factors, plus the pandemic.
- 

***Best practice to attract the adult online learner:***

- 100% asynchronously delivered
  - 7-8 week courses
  - Carousel course rotation (courses offered to meet student demand as they step in and out or attempt to move quickly through the program)
  - Interactive and engaging courses built with the assistance of professional instructional designers to Quality Matters standards
  - Targeted marketing (Office of Online & Continuing is currently developing a marketing strategy, has one professional marketing staff member and will begin target marketing on some programs starting November 2023 for Spring 2024 enrollment)
  - Specific Program Recruitment specialist-expected start date November 2023, Recruitment Specialist expected late 2024/early 2025
  - Market tuition rates per program
    - In most cases the adult online learner asks themselves: Will this degree allow me to earn more money? Increase my employment opportunities? Get a promotion with my current employer?
    - The adult learner willingly pays more in tuition for convenience (100% asynchronously delivered-anytime anywhere education).
- 

***Dual Enrollment***

- The Office of Online & Continuing Education in the near future will be promoting dual enrollment. Data suggests that dual enrollment provides an opportunity to introduce Wyoming high school students to the University of Wyoming with the hope to grow interest, a sense of belonging and enrollments. Certainly, there are opportunities in providing and promoting online foreign language courses as well as a 'to be developed' YouTube video or YouTube tv, or YouTube film course that may spark interest in the new major for potential new students. Perhaps a workshop/hand-on type course during the summer that allows for Wyoming high school students to attend on campus and earn college credit.
- 

***Classification of Instructional Program (CIP) definitions used to define:***

National Center for Education Statistics (NCES), Classification of Instructional Programs (CIP) Code Definitions, <https://nces.ed.gov/ipeds/cipcode/browse.aspx?y=55>

## **THREE SPECIFIC AREAS OF ANALYSIS**

### **Area Studies in Europe 05.01**

#### **European Studies/Civilization 05.0106**

A program that focuses on the history, society, politics, culture, and economics of one or more of the peoples of the European Continent, including the study of European migration patterns and colonial empires.

#### **Latin American Studies 05.0107**

A program that focuses on the history, society, politics, culture, and economics of one or more of the Hispanic peoples of the North and South American Continents outside Canada and the United States, including the study of the Pre-Columbian period and the flow of immigrants from other societies.

#### **Western European Studies 05.0114**

A program that focuses on the history, society, politics, culture, and economics of one or more of the peoples of historical Western Europe, defined as including Britain, Ireland, France, the Low Countries, the Iberian Peninsula, Italy, the Western Mediterranean, and related island groups and borderlands.

**French Studies 05.0124** A program that focuses on the history, society, politics, culture, and economics of France, other Francophone countries inside and outside Europe, and the French colonial experience and the associated French minorities around the world.

**German Studies 05.0125** A program that focuses on the history, society, politics, culture, and economics of Germany, the neighboring countries of Austria and Switzerland, the German minorities in neighboring European countries, and the historical areas of German influence across Europe and overseas.

**Spanish and Iberian Studies 05.0130** A program that focuses on the history, society, politics, culture, and economics of the peoples of the Iberian Peninsula and related island groups and border regions from earliest times to the present, with particular emphasis on the development of Spain and Portugal but including other historical and current cultures.

**Area Studies, Other 05.0199** Any instructional program in specifically defined area studies not listed above.

### **Foreign Languages, Literature, and Linguistics in Europe 16**

**Foreign Languages and Literatures, General 16.0101** A general program that focuses on one or more modern foreign languages that is not specific as to the name of the language(s) studied; that is otherwise undifferentiated; or that introduces students to language studies at the basic/elementary level.

**Linguistics 16.0102** A program that focuses on language, language development, and relationships among languages and language groups from a humanistic and/or scientific perspective. Includes instruction in subjects such as psycholinguistics, behavioral linguistics, language acquisition, sociolinguistics, mathematical and computational linguistics, grammatical theory and theoretical linguistics, philosophical linguistics, philology and historical linguistics, comparative linguistics, phonetics, phonemics, dialectology, semantics, functional grammar and linguistics, language typology, lexicography, morphology and syntax, orthography, stylistics, structuralism, rhetoric, and applications to artificial intelligence.

**Comparative Literature 16.0104** A program that focuses on two or more literary traditions in the original languages or in translation. Includes instruction in comparative linguistics; applicable foreign languages;

English/French language and literature; literary criticism; and applications to genre, period, national, and textual studies as well as literary forms such as poetry, prose, and drama.

**Applied Linguistics 16.0105** A program that focuses on language-related concerns in the everyday world, including language education, acquisition of first and additional languages, discourse analysis, language assessment, literacy, and language policy and planning. Includes instruction in linguistic theory; language teaching and learning; discourse analysis; language and cognition; and language, culture, and identity.

**German Language, Literature, and Linguistics, General 16.0500** A general program that focuses on one or more of the Germanic languages of Western, Central, and Northern Europe. Includes instruction in philology; linguistics; dialects and pidgins; literature; and applications to business, science/technology, and other settings.

**German Language and Literature 16.0501** A program that focuses on the German language and related dialects. Includes instruction in philology; dialects; and applications to business, science/technology, and other settings.

**German Language, Literature, and Linguistics, Other 16.0599** Any instructional program in Germanic languages, literatures, and linguistics not listed above.

**Romance Languages, Literature, and Linguistics, General 16.0900** A general program that focuses on one or more of the Romance languages of Western, Central, and Southern Europe. Includes instruction in philology; linguistics; dialects and pidgins; literature; and applications to business, science/technology, and other settings.

**French Language and Literature 16.0901** A program that focuses on the French language and related dialects and creoles. Includes instruction in philology; Metropolitan French; Canadian French; African and Caribbean Creoles; dialects; and applications in business, science/technology, and other settings.

**Spanish Language and Literature 16.0905** A program that focuses on the Spanish language and related dialects. Includes instruction in philology; Modern Castilian; Latin American and regional Spanish dialects; and applications in business, science/technology, and other settings.

**Hispanic & Latin American Language, Literature, Linguistics, General 16.0908** A program that focuses on the languages and literatures of the Spanish- and Portuguese-speaking areas of the world, including the Iberian, Latin American, and Lusophone worlds. Includes instruction in Spanish and Portuguese language and linguistics; regional and Latin American dialects; and Spanish, Portuguese, Spanish American, Luso-Brazilian, and Chicano literature.

**Romance Language, Literature, Linguistics, Other 16.0999** Any instructional program in Romance languages, literatures, and linguistics not listed above.

**Classics, Classical Language, Literature, and Linguistics, General 16.1200** A general program that focuses on the literary culture of the ancient Graeco-Roman world and the Greek and Latin languages and literatures and their development prior to the fall of the Roman Empire.

**Latin Language & Literature 16.1203** A program that focuses on the Latin language and literature from its origins through its decline and its current ecclesiastical usage, as a secular and/or theological subject. Includes instruction in philology, related Italic dialects, Late Roman and Medieval Latin, and modern Church Latin.

### Film Studies

**Film/Cinema/Media Studies 50.0601** A program in the visual arts that focuses on the study of the history, development, theory, and criticism of the film/media arts, as well as the basic principles of filmmaking and film production.



**1) MARKET AREA AND PRIMARY TARGET MARKET:**

- a) There is not a specific CIP Code for the proposed program in European Languages, Literature, and Film Studies therefore three (3) areas of analysis will be considered to capture the market and viability of the program, they are: a) Area Studies in Europe; b) Foreign Languages, Literature, and Linguistics in Europe; and c) Film Studies. See above for the specific 6-digit CIP Code definitions within each area of analysis.
- b) The market area considered is Wyoming, the regional surrounding states (CO, NE, SD, ND; MT, ID, and UT), and the nation.
- c) Below you will find program completion numbers for Wyoming, the surrounding states, and the nation including webpage links to curriculum, program descriptions and a brief discussion of the programs offered in the nation with the highest completions.
- d) **Analysis in the next section (bottom of page 16) of this report.**

**Area Studies in Europe**

<b>National Bachelor Completions</b>									
<b>AREA STUDIES IN EUROPE 05.01</b>									
National Completions (05.0106; 05.0107; 05.0114; 05.0124; 05.0125; 05.0130; 05.0199)	2019 Online	2019 Onground	2019 Total	2020 Online	2020 Onground	2020 Total	2021 Online	2021 Onground	2021 Total
<b>National TOTAL</b>	7	1,465	1,472	8	1,424	1,432	8	1,279	1,287
05.0199 University of North Carolina, Chapel Hill	0	158	158	0	171	171	0	155	155
05.0199 University of Washington, Seattle Campus	0	148	148	0	130	130	0	103	103
05.0199 University of Missouri, Columbia	0	79	79	0	76	76	0	70	70
05.0199 Virginia Commonwealth University	0	63	63	0	57	57	0	60	60
05.0199 University of South Carolina, Columbia	0	20	20	0	32	32	0	45	45

<b>AREA STUDIES IN EUROPE 05.01 - webpage links to area studies programs and if they have a film studies program</b> (as noted previously in this report it is very difficult to determine which programs from an undergraduate master program list are used to meet the 'other' category of CIP Code definitions)									
05.0199 University of North Carolina, Chapel Hill	Program Title: Contemporary European Studies (an academic combined program, using the 'other' category definition); <a href="https://europe.unc.edu/euro/">https://europe.unc.edu/euro/</a>								
05.0199 University of Washington, Seattle Campus	Program Title: Comparative History (an academic combined program using the 'other' category definition); <a href="https://chid.washington.edu/ba-comparative-history-ideas">https://chid.washington.edu/ba-comparative-history-ideas</a> Plus, the University of Washington has a cinema media studies program <a href="https://cinema.washington.edu/ba-cinema-media-studies">https://cinema.washington.edu/ba-cinema-media-studies</a>								
05.0199 University of Missouri, Columbia	Speculation is that the University of Missouri has combined various 'area study' programs and reported them as one in the 'other' category; <a href="https://majors.missouri.edu/international-studies-latin-american-studies-ba/">https://majors.missouri.edu/international-studies-latin-american-studies-ba/</a> ; They also have a film studies program <a href="https://majors.missouri.edu/film-studies-ba/">https://majors.missouri.edu/film-studies-ba/</a>								
05.0199 Virginia Commonwealth University	Speculation is that Virginia Commonwealth University has combined various 'area study' programs and reported them as one in the 'other' category; <a href="https://worldstudies.vcu.edu/academics/degrees/">https://worldstudies.vcu.edu/academics/degrees/</a> AND <a href="https://worldstudies.vcu.edu/academics/degrees/ba-in-foreign-language/">https://worldstudies.vcu.edu/academics/degrees/ba-in-foreign-language/</a> AND <a href="https://ids.vcu.edu/">https://ids.vcu.edu/</a>								
05.0199 University of South Carolina, Columbia	Speculation is that the University of South Carolina has combined various 'area study' programs and reported them as one in the 'other' category; <a href="https://sc.edu/study/majors">https://sc.edu/study/majors</a> ; Note-they also offer a film & media studies bachelor; <a href="https://sc.edu/degrees/film-and-media-studies-ba.php">https://sc.edu/degrees/film-and-media-studies-ba.php</a>								
<b>Regional Bachelor Completions</b>									
<b>AREA STUDIES IN EUROPE 05.01</b> (The University of Utah, BYU, Utah State University, and University of Northern Colorado appear to mirror national programs that have combined various 'area studies' into the 'other' category.)									
Regional Completions	2019 Online	2019 Ongoing	2019 Total	2020 Online	2020 Ongoing	2020 Total	2021 Online	2021 Ongoing	2021 Total
CO - Colorado College, French Studies, 05.0124	0	3	3	0	2	2	0	3	3
CO - University of Northern Colorado, <b>European Studies</b> , 05.0106	0	0	0	0	0	0	0	1	1

ID - University of Idaho, Latin American Studies, 05.0107	0	5	5	0	2	2	0	4	4
MT	0	0	0	0	0	0	0	0	0
ND	0	0	0	0	0	0	0	0	0
NE - University of Nebraska, Omaha, Latin American Studies, 05.0107	0	4	4	0	4	4	0	5	5
NE - University of Nebraska, Lincoln, Latin American Studies, 05.0107	0	2	2	0	1	1	0	1	1
SD	0	0	0	0	0	0	0	0	0
UT - BYU, Latin American Studies, 05.0107	0	36	36	0	28	28	0	25	25
UT - Utah State University, <b>Area Studies</b> , 05.0199	0	25	25	0	37	37	0	22	22
UT - BYU, <b>European Studies</b> , 05.0106	0	0	0	0	3	3	0	6	6
UT - University of Utah, Latin American Studies, 05.0107	0	6	6	0	8	8	0	6	6
UT - Westminster College, Latin American Studies, 05.0107	0	0	0	0	2	2	0	2	2
UT - University of Utah, <b>Area Studies</b> , 05.0199	0	1	1	0	0	0	0	0	0
WY	0	0	0	0	0	0	0	0	0
<b>Regional TOTAL</b>	<b>0</b>	<b>82</b>	<b>82</b>	<b>0</b>	<b>87</b>	<b>87</b>	<b>0</b>	<b>75</b>	<b>75</b>

### Foreign Language, Literature, and Linguistics in Europe

<b>National Bachelor Completions</b>									
<b>FOREIGN LANGUAGES, LITERATURE, AND LINGUISTICS 16</b> <i>(note: BYU has the 6th largest completions in the nation in 2021)</i>									
National Completions (16.0101; 16.0102; 16.0104; 16.0105; 16.0500; 15.0501; 16.0599; 16.0900; 15.0901; 16.0905; 16.0908; 16.0999; 16.1200; 16.1203)	2019 Online	2019 Onground	2019 Total	2020 Online	2020 Onground	2020 Total	2021 Online	2021 Onground	2021 Total
<b>National TOTAL</b>	132	19,553	19,685	139	19,536	19,675	213	18,240	18,453
16.0905 Spanish Language & Literature, University of Wisconsin, Madison	0	155	155	0	145	145	0	150	150
16.0904 <b>Comparative Literature</b> , University of California, Santa Cruz	0	145	145	0	159	159	0	146	146
16.0905 Spanish Language & Literature, University of Michigan, Ann Arbor	0	114	114	0	103	103	0	118	118
16.0905 Spanish Language & Literature, University of California, Davis	0	118	118	0	114	114	0	113	113

16.0905 Spanish Language & Literature, University of New Mexico, Main Campus	0	84	84	0	92	92	0	104	104
16.0905 Spanish Language & Literature, <b>BYU</b>	0	86	86	0	119	119	0	96	96

**FOREIGN LANGUAGE, LITERATURE, AND LINGUISTICS IN EUROPE 05.01 - webpage links to foreign language, literature, and linguistics programs** (*The University of California, Santa Cruz combines various languages, literature, and linguistics into a Comparative Literature program, one of the top five programs in the nation that is not Spanish Language, Literature, and Linguistics*)

16.0904 Comparative Literature, University of California, Santa Cruz	<a href="https://admissions.ucsc.edu/programs/language-studies">https://admissions.ucsc.edu/programs/language-studies</a>								
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**Regional Bachelor Completions**

**FOREIGN LANGUAGES, LITERATURE, AND LINGUISTICS 16** (*Top five (5) programs in regional states except Wyoming*)

Regional Completions	2019 Online	2019 Onground	2019 Total	2020 Online	2020 Onground	2020 Total	2021 Online	2021 Onground	2021 Total
<b>CO TOTAL Completions (Top 5 CO programs below)</b>	<b>0</b>	<b>333</b>	<b>333</b>	<b>0</b>	<b>301</b>	<b>301</b>	<b>0</b>	<b>286</b>	<b>286</b>
CO - University of Colorado, Boulder, Spanish Language & Literature, 16.0905	0	39	39	0	42	42	0	52	52
CO - Colorado State University, Fort Collins, Foreign Language & Literature, 16.0101	0	48	48	0	58	58	0	42	42

CO - University of Colorado, Boulder, Linguistics 16.0102	0	32	32	0	28	28	0	36	36
CO - University of Denver, Spanish Language & Literature 16.0905	0	34	34	0	29	29	0	33	33
CO - Metropolitan State University of Denver, Foreign Language & Literature, 16.0101	0	46	46	0	22	22	0	17	17
<b>ID TOTAL Completions (Top 5 ID programs below)</b>	<b>0</b>	<b>113</b>	<b>113</b>	<b>0</b>	<b>89</b>	<b>89</b>	<b>10</b>	<b>62</b>	<b>72</b>
ID - Idaho State University, Spanish Language & Literature, 16.0905	0	22	22	0	20	20	10	18	28
ID - Boise State University, Spanish Language & Literature, 16.0905	0	31	31	0	31	31	0	18	18
ID - University of Idaho, Spanish Language & Literature, 16.0905	0	33	33	0	16	16	0	15	15
ID - Boise State University, French Language & Literature, 16.0901	0	7	7	0	4	4	0	3	3
ID - University of Idaho, French Language & Literature, 16.0901	0	2	2	0	4	4	0	3	3

<b>MT TOTAL Completions (Top 5 MT programs below)</b>	<b>0</b>	<b>51</b>	<b>51</b>	<b>0</b>	<b>48</b>	<b>48</b>	<b>0</b>	<b>40</b>	<b>40</b>
MT - Montana State University, Foreign Language & Literature, 16.0101	0	22	22	0	20	20	0	21	21
MT - University of Montana, Spanish Language & Literature, 16.0905	0	12	12	0	10	10	0	4	4
MT - University of Montana, German Language & Literature, 16.0501	0	5	5	0	3	3	0	3	3
MT - Carroll College, French Language & Literature, 16.0901	0	2	2	0	5	5	0	3	3
MT - Carroll College, Spanish Language & Literature, 16.0905	0	3	3	0	2	2	0	3	3
<b>NE TOTAL Completions (Top 5 NE programs below)</b>	<b>0</b>	<b>134</b>	<b>134</b>	<b>0</b>	<b>152</b>	<b>152</b>	<b>0</b>	<b>108</b>	<b>108</b>
NE - University of Nebraska, Omaha, Foreign Language & Literature, 16.0101	0	24	24	0	34	34	0	24	24
NE - Creighton University, Spanish Language & Literature, 16.0905	0	12	12	0	14	14	0	18	18

NE - University of Nebraska, Lincoln, Spanish Language & Literature, 16.0905	0	33	33	0	43	43	0	16	16
NE - University of Nebraska, Lincoln, German Language & Literature, 16.0501	0	10	10	0	11	11	0	12	12
NE - Nebraska Wesleyan University, Foreign Language & Literature, 16.0101	0	9	9	0	7	7	0	9	9
<b>ND TOTAL Completions (Top 5 ND programs below)</b>	<b>0</b>	<b>41</b>	<b>41</b>	<b>0</b>	<b>32</b>	<b>32</b>	<b>0</b>	<b>38</b>	<b>38</b>
ND - University of North Dakota, Spanish Language & Literature, 16.0905	0	12	12	0	15	15	0	12	12
ND - University of North Dakota, French Language & Literature, 16.0901	0	7	7	0	4	4	0	7	7
ND - North Dakota State University, Main Campus, Spanish Language & Literature, 16.0905	0	9	9	0	5	5	0	7	7
ND - North Dakota State University, Main Campus, French Language & Literature, 16.0901	0	1	1	0	1	1	0	4	4



ND - University of North Dakota, Foreign Language & Literature, 16.0101	0	0	0	0	2	2	0	2	2
<b>SD TOTAL Completions (Top 5 SD programs below)</b>	<b>0</b>	<b>64</b>	<b>64</b>	<b>0</b>	<b>61</b>	<b>61</b>	<b>1</b>	<b>68</b>	<b>69</b>
SD - Augustana University, Spanish Language & Literature 16.0905	0	13	13	0	12	12	0	22	22
SD - South Dakota State University, Spanish Language & Literature 16.0905	0	27	27	0	19	19	0	19	19
SD - University of South Dakota, Spanish Language & Literature 16.0905	0	7	7	0	11	11	0	9	9
SD - Augustana University, French Language & Literature 16.0901	0	0	0	0	3	3	0	4	4
SD - Augustana University, German Language & Literature 16.0501	0	2	2	0	1	1	0	3	3
<b>UT TOTAL Completions (Top 5 UT programs below)</b>	<b>0</b>	<b>354</b>	<b>354</b>	<b>0</b>	<b>382</b>	<b>382</b>	<b>0</b>	<b>339</b>	<b>339</b>
UT - BYU, Spanish Language & Literature, 16.0905	0	86	86	0	119	119	0	96	96
UT - BYU, Linguistics, 16.0102	0	60	60	0	49	49	0	42	42

UT - Weber State University, Spanish Language & Literature, 16.0905	0	27	27	0	31	31	0	32	32
UT - BYU, French Language & Literature, 16.0901	0	24	24	0	13	13	0	23	23
UT - University of Utah, Spanish Language & Literature, 16.0905	0	28	28	0	22	22	0	22	22
<b>WY TOTAL Completions</b>	<b>0</b>	<b>35</b>	<b>35</b>	<b>0</b>	<b>23</b>	<b>23</b>	<b>0</b>	<b>19</b>	<b>19</b>
WY - University of Wyoming, Spanish Language & Literature, 16.0905	0	30	30	0	22	22	0	16	16
WY - University of Wyoming, French Language & Literature, 16.0901	0	1	1	0	1	1	0	3	3
WY - University of Wyoming, German Language & Literature, 16.0501	0	4	4	0	0	0	0	0	0
<b>Regional TOTAL</b>	<b>0</b>	<b>1,125</b>	<b>1,125</b>	<b>0</b>	<b>1,088</b>	<b>1,088</b>	<b>0</b>	<b>971</b>	<b>971</b>

### Film Studies

National Bachelor Completions									
FILM STUDIES 50.0601									
National Completions 50.0601	2019 Online	2019 Ongoing	2019 Total	2020 Online	2020 Ongoing	2020 Total	2021 Online	2021 Ongoing	2021 Total
<b>National TOTAL</b>	<b>0</b>	<b>4,113</b>	<b>4,113</b>	<b>0</b>	<b>4,279</b>	<b>4,279</b>	<b>22</b>	<b>4,209</b>	<b>4,231</b>
San Francisco State University, CA	0	201	201	0	218	218	0	238	238

Georgia State University, GA	0	189	189	0	217	217	0	235	235
University of California, Santa Barbara	0	154	154	0	159	159	0	182	182
University of California, Long Beach	0	162	162	0	114	114	0	178	178
University of California, Irvine	0	117	117	0	125	125	0	167	167

FILM STUDIES 50.0601 - webpage links to film studies programs	
San Francisco State University, CA	Program Title: Bachelor of Arts in Cinema; <a href="https://bulletin.sfsu.edu/colleges/liberal-creative-arts/cinema/ba-cinema/">https://bulletin.sfsu.edu/colleges/liberal-creative-arts/cinema/ba-cinema/</a> AND <a href="https://bulletin.sfsu.edu/colleges/liberal-creative-arts/cinema/ba-cinema/#degreerequirementstext">https://bulletin.sfsu.edu/colleges/liberal-creative-arts/cinema/ba-cinema/#degreerequirementstext</a>
Georgia State University, GA	Program Title: Film and Media, B.A.   Georgia State University (gsu.edu) AND <a href="https://catalogs.gsu.edu/preview_program.php?catoid=13&amp;poid=3268&amp;returnto=1428">https://catalogs.gsu.edu/preview_program.php?catoid=13&amp;poid=3268&amp;returnto=1428</a>
University of California, Santa Barbara	Program Title: Film & Media Studies; <a href="https://my.sa.ucsb.edu/catalog/Current/CollegesDepartments/ls-intro/flmst.aspx?DeptTab=Undergraduate">https://my.sa.ucsb.edu/catalog/Current/CollegesDepartments/ls-intro/flmst.aspx?DeptTab=Undergraduate</a>
University of California, Long Beach	Program title: Department of Film and Electronic Arts; Theory & Practice of Cinema or Narrative Production <a href="https://www.csulb.edu/department-of-film-electronic-arts/academic-programs">https://www.csulb.edu/department-of-film-electronic-arts/academic-programs</a>
University of California, Irvine	Program title: Film & Media Studies; <a href="https://catalogue.uci.edu/schoolofhumanities/departementofofilmandmediastudies/filmandmediastudies_ba/#requirementstext">https://catalogue.uci.edu/schoolofhumanities/departementofofilmandmediastudies/filmandmediastudies_ba/#requirementstext</a>

Regional Bachelor Completions									
FILM STUDIES 50.0601									
Regional Completions	2019 Online	2019 Ongoing	2019 Total	2020 Online	2020 Ongoing	2020 Total	2021 Online	2021 Ongoing	2021 Total
<b>CO Total Completions</b>	<b>0</b>	<b>91</b>	<b>91</b>	<b>0</b>	<b>89</b>	<b>89</b>	<b>0</b>	<b>114</b>	<b>114</b>

CO - University of Colorado, Boulder	0	78	78	0	73	73	0	101	101
CO - University of Denver	0	9	9	0	16	16	0	13	13
CO - Colorado College	0	4	4	0	0	0	0	0	0
<b>ID Total Completions</b>	<b>0</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>12</b>	<b>12</b>	<b>0</b>	<b>19</b>	<b>19</b>
ID - Boise State University	0	1	1	0	7	7	0	13	13
ID - University of Idaho	0	0	0	0	5	5	0	6	6
ID - Idaho State University	0	2	2	0	0	0	0	0	0
<b>Montana</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>North Dakota</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>NE - University of Nebraska, Lincoln Total Completions</b>	<b>0</b>	<b>6</b>	<b>6</b>	<b>0</b>	<b>17</b>	<b>17</b>	<b>0</b>	<b>13</b>	<b>13</b>
<b>South Dakota</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Utah Total Completions</b>	<b>0</b>	<b>184</b>	<b>184</b>	<b>0</b>	<b>179</b>	<b>179</b>	<b>0</b>	<b>167</b>	<b>167</b>
UT - University of Utah	0	139	139	0	137	137	0	123	123
UT - BYU	0	45	45	0	42	42	0	44	44
<b>Wyoming</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Regional TOTAL</b>	<b>0</b>	<b>284</b>	<b>284</b>	<b>0</b>	<b>297</b>	<b>297</b>	<b>0</b>	<b>313</b>	<b>313</b>

2) **EDUCATIONAL MARKET AND STUDENT DEMAND STATISTICS, INCLUDING PEER COMPARISONS OF THE SIZE OF ENROLLMENT, COMPLETIONS, AND SIZE TRAJECTORY (GROWTH, DECLINE) OF COMPARATOR PROGRAMS.**

3) Findings:

- i) Nationally, a medium size program (23,971 bachelor completions in 2021) when all three areas of analysis are combined.
- ii) Regionally, 1,359 bachelor completions in 2021 when all three areas of analysis are combined.
- iii) 5.669% of all completions occurred in this region (WY, CO, NE, SD, ND, MT, ID, and UT), 19 bachelor completions only in one area of analysis (language) occurred in Wyoming. The

University of Wyoming contributed 0.079% of the completions nationally and 1.398% regionally in this analysis in 2021.

- iv) All (on ground & online) Area Studies completions declined by 12.567% nationally and 8.536% regionally from 2019 to 2021.
- v) All (on ground & online) Language completions declined by 6.258% nationally and 13.688% regionally from 2019 to 2021
- vi) All (on ground & online) Film Studies completions increased by 2.868% nationally and 10.211% regionally from 2019 to 2021.
- vii) Specifically online completions in Area Studies nationally increased by 14.285% from 2019-2021. There are no regional online programs. *Signifying a moderate program opportunity for the University of Wyoming.*
- viii) Specifically online completions in Foreign Language, Literature, and Linguistics nationally increased by 61.363% from 2019-2021. There are no regional online programs. *Signifying an emerging and strong program opportunity for the University of Wyoming*
- ix) Specifically online completions in Film Studies nationally increased from 0 in 2019 to 22 in 2021. There are no regional online programs. *Signifying an emerging and strong program opportunity for the University of Wyoming*
- x) Program transfer opportunities are very limited based on associate award level completions in Film Studies 50.0601 – 188 completions nationally in 2021, only one of the CIP Codes analyzed in the Area Studies grouping 05.0199 – 52 completions nationally in 2021, and only one of the CIP Codes analyzed in the Foreign Language, Literature, and Linguistics grouping 16.0101 – 4 completions nationally in 2021
- xi) International recruitment opportunity. This is not a US Department of Homeland Security STEM approved program and the international page view indicator within the Gray Associates database is not significant. Alerting the UW international student recruitment office of this program is still strongly suggested. In fact, this program could grow to be a niche opportunity for the University of Wyoming given the language and area study skills embedded with film studies.
- xii) Statewide tourism, the western mystic, and popular western film/television programming also suggests that a program such as this could develop into a niche opportunity for the University of Wyoming. *[Joy: consider checking with the Wyoming Tourism office and recent/current legislation regarding filming (production activities) on state land, etc....to determine if there could be internships or other hands-on learning opportunities for students, perhaps at Wyoming Public TV in Riverton, WY or maybe Wyoming Public Media]*

#### 4) Overall findings

- a) **The market is medium size, there is regional and potentially statewide interest in a European Language, Literature, and Film Studies program. The completion numbers signify strong student demand. While on ground enrollments/students are important at the University of Wyoming, an online program has the best chance of high enrollment numbers (50+ completions annually). As noted above, there are very few online programs in a) area studies;**
- b) foreign language, literature, and linguistics; and c) film studies

**5) Employment trends and projections given core competencies of the degree or certificate.**

- a) BLS Three-year historic employment growth in area studies is strong.
- b) BLS Three-year historic employment growth in foreign language, literature, and linguistics and film studies is moderate.
- c) BLS Future job growth 10-year projections are very strong in all three areas of analysis: a) area studies; b) foreign language, literature, and linguistics, and c) film studies.
- d) For those currently working in the field data revealed that 15% in area studies have a bachelor degree, 33% in foreign language, literature, and linguistics have a bachelor degree, and 53% in film studies have a bachelor degree. Data also revealed that 32% in area studies have a master degree, 18% in foreign language, literature, and linguistics have a master degree, and 26% in film studies have a master degree all suggesting there may be an opportunity for a master award level program at the University of Wyoming in the future.

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**6) Graduate salary trends and other post-completion trends.**

- a) Below is BLS mean annual wage nationwide in 2021

<b>BLS Mean Wages (regional and national)</b>		
<b>Program</b>	<b>Regional Wage</b>	<b>National Wage</b>
Area Studies	\$76,810	\$89,420
Foreign Language, Literature, and Linguistics	\$55,281	\$53,127
Film Studies	\$59,240	\$63,142
<b>AVERAGE</b>	<b>\$63,777</b>	<b>\$68,563</b>

Program Curriculum Mapping for BA in European Languages, Literature and Film Studies  
University of Wyoming

**Basic Curriculum Map (“Overview Map”)**

*Place an “X” where the Program SLO occurs in each course.*

	FREN 1010, GERM 1010, SPAN 1010	FREN 1020, GERM 1020 SPAN 1020	FREN 2030, GERM 2030, SPAN 2030	FREN 2040, GERM 2040, SPAN 2040	
SLO 1 demonstrate proficiency in conversation and listening	X	X	X	X	
SLO 2 demonstrate reading comprehension	X	X	X	X	
SLO 3 produce grammatical, idiomatic compositions	X	X	X	X	
SLO 4 be able to name parts of the language and explain how they combine		X	X	X	
SLO 5 gain essential knowledge about the history, traditions, customs, and ways of thinking of at least one European culture		X	X	X	
SLO 6 understand connections between cultures and languages and how they shape each other				X	
SLO 7 demonstrate an understanding of works of literature read in the original language				X	
SLO 8 distinguish what are appropriate sources and will know how to find them					
SLO 9 be able to critically analyze and extract information relevant to a research project					
SLO 10 produce well-reasoned and clearly articulated papers on subjects appropriate to their field following the conventions of such field					
	FREN 2140, SPAN 2140	FREN 3050, GERM 3050, SPAN 3050 COM2	FREN 4100, GERM 3060 SPAN 3140	FREN 3005, SPAN 3300	
SLO 1 demonstrate proficiency in conversation and listening	X	X	X	X	
SLO 2 demonstrate reading comprehension	X	X	X		
SLO 3 produce grammatical, idiomatic compositions	X	X	X		
SLO 4 be able to name parts of the language and explain how they combine		X		X	
SLO 5 gain essential knowledge about the history, traditions, customs, and ways of thinking of at least one European culture	X	X	X		
SLO 6 understand connections between cultures and languages and how they shape each other				X	
SLO 7 demonstrate an understanding of works of literature read in the original language			X		

SLO 8 distinguish what are appropriate sources and will know how to find them		X	X	X	
SLO 9 be able to critically analyze and extract information relevant to a research project		X		X	
SLO 10 produce well-reasoned and clearly articulated papers on subjects appropriate to their field following the conventions of such field					
	FREN 3060, GERM 4070, SPAN 3060	FREN 3110, GERM 4285 SPAN 4180	FREN 4200, GERM 4200, SPAN 4200		
SLO 1 demonstrate proficiency in conversation and listening	X	X	X		
SLO 2 demonstrate reading comprehension	X	X	X		
SLO 3 produce grammatical, idiomatic compositions	X	X	X		
SLO 4 be able to name parts of the language and explain how they combine	X		X		
SLO 5 gain essential knowledge about the history, traditions, customs, and ways of thinking of at least one European culture		X	X		
SLO 6 understand connections between cultures and languages and how they shape each other	X	X			
SLO 7 demonstrate an understanding of works of literature read in the original language			X		
SLO 8 distinguish what are appropriate sources and will know how to find them			X		
SLO 9 be able to critically analyze and extract information relevant to a research project			X		
SLO 10 produce well-reasoned and clearly articulated papers on subjects appropriate to their field following the conventions of such field			X		

### Map of Learning Progression and Development (“Levels Map”)

	FREN 1010, GERM 1010, SPAN 1010	FREN 1020, GERM 1020 SPAN 1020	FREN 2030, GERM 2030, SPAN 2030	FREN 2040, GERM 2040, SPAN 2040
SLO 1 demonstrate proficiency in conversation and listening	I	I	D	D
SLO 2 demonstrate reading comprehension	I	I	D	D
SLO 3 produce grammatical, idiomatic compositions	I	I	D	D
SLO 4 be able to name parts of the language and explain how they combine		I	I	D
SLO 5 gain essential knowledge about the history, traditions, customs, and ways of thinking of at least one European culture		I	I	D
SLO 6 understand connections between cultures and languages and how they shape each other				I



SLO 7 demonstrate an understanding of works of literature read in the original language				I
SLO 8 distinguish what are appropriate sources and will know how to find them				
SLO 9 be able to critically analyze and extract information relevant to a research project				
SLO 10 produce well-reasoned and clearly articulated papers on subjects appropriate to their field following the conventions of such field				
	FREN 2140, SPAN 2140	FREN 3050, GERM 3050, SPAN 3050	FREN 4100, GERM 3060 SPAN 3140	FREN 3005, SPAN 3300
SLO 1 demonstrate proficiency in conversation and listening	D	D	D	D
SLO 2 demonstrate reading comprehension	D	D	D	D
SLO 3 produce grammatical, idiomatic compositions	D	D	D	
SLO 4 be able to name parts of the language and explain how they combine		D		D
SLO 5 gain essential knowledge about the history, traditions, customs, and ways of thinking of at least one European culture	D	D	D	
SLO 6 understand connections between cultures and languages and how they shape each other				D
SLO 7 demonstrate an understanding of works of literature read in the original language			D	
SLO 8 distinguish what are appropriate sources and will know how to find them		I	D	I
SLO 9 be able to critically analyze and extract information relevant to a research project		I		I
SLO 10 produce well-reasoned and clearly articulated papers on subjects appropriate to their field following the conventions of such field				
	FREN 3060, GERM 4070, SPAN 3060	FREN 3110, GERM 4285 SPAN 4180	FREN 4200, GERM 4200, SPAN 4200	
SLO 1 demonstrate proficiency in conversation and listening	M	M	M	
SLO 2 demonstrate reading comprehension	M	M	M	
SLO 3 produce grammatical, idiomatic compositions	M	M	M	
SLO 4 be able to name parts of the language and explain how they combine	D		D	
SLO 5 gain essential knowledge about the history, traditions, customs, and ways of thinking of at least one European culture		M	M	
SLO 6 understand connections between cultures and languages and how they shape each other	D	D		

SLO 7 demonstrate an understanding of works of literature read in the original language			M	
SLO 8 distinguish what are appropriate sources and will know how to find them			M	
SLO 9 be able to critically analyze and extract information relevant to a research project			M	
SLO 10 produce well-reasoned and clearly articulated papers on subjects appropriate to their field following the conventions of such field			M	

*I = Introduced; D = Developed (formative assessment); M = Mastered (summative assessment)*  
*I, D, and M are examples – however, programs can elect to use different verbs that are better suited for their program and students.*  
*In this example, the I, D, and M indicate what happens when a specific SLO occurs within a course.*

### Map of Assessment Measures (& Student Evidence/Artifacts)

	FREN 1010, GERM 1010, SPAN 1010	FREN 1020, GERM 1020 SPAN 1020	FREN 2030, GERM 2030, SPAN 2030	FREN 2040, GERM 2040, SPAN 2040
SLO 1 demonstrate proficiency in conversation and listening	Oral interview & Oral presentati on	Oral interview & Oral presentatio n	Oral intervie w & Oral presenta tion	Oral intervie w & Oral presenta tion
SLO 2 demonstrate reading comprehension	Discussion & Written exams	Discussion & Written exams	Discussio n & Written exams	Discussi on & Written exams
SLO 3 produce grammatical, idiomatic compositions	Short essays	Short essays	Short essays	Short essays
SLO 4 be able to name parts of the language and explain how they combine		Discussion	Discussio n	Discussi on
SLO 5 gain essential knowledge about the history, traditions, customs, and ways of thinking of at least one European culture	Oral presentati on	Oral presentatio n	Oral presenta tion	Oral presenta tion
SLO 6 understand connections between cultures and languages and how they shape each other	Oral presentati on	Oral presentatio n	Oral presenta tion	Oral presenta tion
SLO 7 demonstrate an understanding of works of literature read in the original language				Written exams
SLO 8 distinguish what are appropriate sources and will know how to find them				
SLO 9 be able to critically analyze and extract information relevant to a research project				
SLO 10 produce well-reasoned and clearly articulated papers on subjects appropriate to their field following the conventions of such field				

	FREN 2140, SPAN 2140	FREN 3050, GERM 3050, SPAN 3050	FREN 4100, GERM 3060 SPAN 3140	FREN 3005, SPAN 3300
SLO 1 demonstrate proficiency in conversation and listening	Discussion & Oral presentati on	Discussion & Oral presentatio n	Discussio n & Oral presenta tion	Discussi on & Oral presenta tion
SLO 2 demonstrate reading comprehension	Discussion & Written exams	Discussion & Written exams	Discussio n & Written exams	Discussi on & Written exams
SLO 3 produce grammatical, idiomatic compositions	Short essays	Short essays	Short essays	
SLO 4 be able to name parts of the language and explain how they combine		Discussion & Oral presentatio n		Discussi on & Oral presenta tion
SLO 5 gain essential knowledge about the history, traditions, customs, and ways of thinking of at least one European culture	Discussion & Oral presentati on	Discussion & Oral presentatio n	Discussio n & Oral presenta tion	
SLO 6 understand connections between cultures and languages and how they shape each other				Discussi on & Oral presenta tion
SLO 7 demonstrate an understanding of works of literature read in the original language			Discussio n & Oral presenta tion	
SLO 8 distinguish what are appropriate sources and will know how to find them		Discussion & Oral presentatio n	Discussio n & Oral presenta tion	Discussi on & Oral presenta tion
SLO 9 be able to critically analyze and extract information relevant to a research project		Written exams and essays		Written exams and essays
SLO 10 produce well-reasoned and clearly articulated papers on subjects appropriate to their field following the conventions of such field				
	FREN 3060, GERM 4070, SPAN 3060	FREN 3110, GERM 4285 SPAN 4180	FREN 4200, GERM 4200, SPAN 4200	
SLO 1 demonstrate proficiency in conversation and listening	Discussion & Oral presentati on	Discussion & Oral presentatio n	Discussio n & Oral presenta tion	
SLO 2 demonstrate reading comprehension	Discussion & Written exams	Discussion & Written exams	Discussio n & Written exams	
SLO 3 produce grammatical, idiomatic compositions	Written exams	Written exams and essays	Discussio n & Written exams	

SLO 4 be able to name parts of the language and explain how they combine	Discussion & Oral presentation		Discussion & Oral presentation	
SLO 5 gain essential knowledge about the history, traditions, customs, and ways of thinking of at least one European culture		Discussion & Oral presentation	Discussion & Oral presentation	
SLO 6 understand connections between cultures and languages and how they shape each other	Discussion & Oral presentation	Discussion & Oral presentation		
SLO 7 demonstrate an understanding of works of literature read in the original language			Discussion & Oral presentation & Written essay	
SLO 8 distinguish what are appropriate sources and will know how to find them			Annotated Bibliography on the research topic selected	
SLO 9 be able to critically analyze and extract information relevant to a research project			Literature Review on the research topic selected	
SLO 10 produce well-reasoned and clearly articulated papers on subjects appropriate to their field following the conventions of such field			Final research project that includes: intro/lit. rev., research	

**Academic Affairs and Student Affairs**  
**COMMITTEE MEETING MATERIALS**

**AGENDA ITEM TITLE:** Request for Authorization, MS in Quantum Information Science and Engineering, (Ahern, Wright, Allen, Shader, Tang)

- OPEN SESSION
- CLOSED 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 College of Engineering and Physical Sciences and the School of Computer Science propose a new Master of Science degree in Quantum Information Science and Engineering. This program will focus on the theoretical and practical aspects of quantum computing and quantum engineering. It is designed to give students a deep understanding of the fundamental principles of quantum mechanics and their applications in quantum information, quantum security, quantum communication and sensing, quantum computation, and quantum machine learning.

PRIOR RELATED COMMITTEE DISCUSSIONS/ACTIONS:

Notice of Intent approved by the Academic Affairs & Student Affairs Committee and the full Board, November 2023.

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 Request for Authorization for the M.S. in Quantum Information Science and Engineering.

PROPOSED MOTION:

“I move that the Request for Authorization for the M.S. in Quantum Information Science and Engineering be approved.”

# Feasibility Study for Quantum Information Science & Engineering (QISE) Master's degree program

## Executive Summary

**Degree Title:** Quantum Information Science & Engineering (QISE) Master's degree program

**Level of Degree or Certificate:** Masters

**Delivery Mode(s):** Hybrid

**Estimated Startup Cost of Degree:** None; existing resources will be utilized to start the program

**Anticipated Launch Date:** Fall 2024

**Description:**

The Quantum Information Science & Engineering (QISE) Master's degree program will be a postgraduate program that focuses on the theoretical and practical aspects of quantum computing and quantum information processing. It is designed to equip students with a deep understanding of the fundamental principles of quantum mechanics and their applications in information processing, cryptography, communication, and computation.

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7. New Resources Required
8. Substantive Change Determination
9. Executive Summary of Demand Statistics

### 1 A. Overview and Description of Degree

The Master of Science in QISE program consists of two years of coursework, thesis research, research projects, and practical applications of QISE. The program will offer both Plan A and Plan B degrees, comprising 30 required credits. The Plan A degree program will comprise 24 required coursework credits, two seminar credits, and four thesis research credits (XX5960). Students must complete an accepted research thesis for the Plan A degree program approved by the student's graduate committee. The Plan B degree program, a non-thesis option, will comprise 28 required coursework credits and two seminar credits. A student pursuing the Plan B degree program as part of the 28 required coursework credits can do an independent study project at the graduate level of a maximum of three credits. It's important to note that the specific structure and curriculum of this QISE Master's program may vary among students based on discipline-specific QISE and broader QISE advancements.

Coursework includes

- **Core Courses (12 credits):** The program begins with foundational courses that cover essential topics in QISE, such as Quantum-based courses in Mechanics, Computing, Information Theory, Algorithms and Applications, and Hardware and Technology.
- **Elective Courses (12 credits for Plan A and 16 credits for Plan B):** Students can choose from various elective courses based on their interests and career goals. These courses may include specialized topics like discipline-specific application, Depth Sequencing, quantum error correction, quantum machine learning, quantum simulations, or quantum cryptography.
- **Research Projects for Plan B Students.** Throughout the Plan B degree program, students are involved in research projects supervised by faculty members or industry experts. These projects provide hands-on experience in designing and implementing AI systems, conducting experiments, analyzing data, and addressing real-world AI challenges. Research projects often culminate in a final research paper.
- **Seminar Courses (2 credits):** Regular seminars and workshops will be organized to expose students to the latest research advancements, emerging trends, and challenges in QISE. Experts from academia, industry, and government will deliver talks and engage in discussions, allowing students to broaden their perspectives and stay updated with the evolving QISE landscape. The SoC, EECS, and Physics will host, co-host, or support tech talks, colloquia, or speaker series with discipline specific and broad QISE foci.

### B. Program Purpose

The purpose of a Quantum Information Science & Engineering academic program is to provide students with a comprehensive education in the field of quantum information science, with a focus on quantum computing, quantum communication, and quantum information theory. Overall, the purpose of a Quantum Information Science & Engineering academic program is to foster the growth of knowledge, skills, and innovation in the field, preparing students to make significant contributions to the development and application of quantum technologies in the future. The program aims to achieve the following purposes:

1. **Education and Training:** The program aims to educate and train students in QISE theoretical foundations, practical applications, and experimental aspects. Students gain a

deep understanding of quantum mechanics, quantum computing algorithms, quantum information theory, and quantum communication protocols.

2. **Knowledge Development:** The program seeks to advance knowledge in QISE by conducting cutting-edge research and scholarly activities. Faculty members and students contribute to developing new theories, algorithms, technologies, and applications within QISE.
3. **Skill Development:** The program aims to develop students' skills in critical thinking, problem-solving, mathematical modeling, and computational analysis. Students learn to apply these skills to solve complex problems in QISE, such as developing efficient quantum algorithms or designing quantum communication protocols.
4. **Innovation and Advancement:** By fostering a culture of innovation, the program aims to contribute to advancing quantum technologies. It encourages students and researchers to explore new ideas, propose novel approaches, and push the boundaries of what is currently possible in QISE.
5. **Interdisciplinary Collaboration:** QISE is an interdisciplinary field that draws upon concepts from physics, mathematics, electrical engineering, and computer science. The program promotes collaboration and interaction between students and researchers from diverse backgrounds, fostering a multidisciplinary approach to problem-solving and knowledge creation.
6. **Industry Relevance:** The program recognizes the growing importance of quantum technologies in various industries. It aims to equip students with the skills and knowledge required to contribute to developing and applying QISE in sectors such as computing, cryptography, telecommunications, materials science, finances, and pharmaceuticals.
7. **Ethical Considerations:** The program emphasizes the importance of ethical considerations in developing and using quantum technologies. Students are encouraged to consider the societal impact, privacy, security, and ethical implications of their research and applications.
8. **Career Preparation:** The program prepares students for careers in academia, research institutions, industry, and government agencies. Graduates are equipped with the necessary knowledge, skills, and research experience to pursue advanced research, development, and leadership roles in the rapidly evolving field of QISE.

### **C. Program Strategic Overlay**

The MS in QISE supports UW's Strategic Plan by

- Enhancing student success and preparing students for life and adaptation to a new quantum world.
- Providing a highly sought-after degree in a fast-growing workforce sector that will help grow both domestic and international enrollments.
- Raise UW's Scholarly capacity and profile nationally and internationally in QISE and its applications; and strengthen UW's relationships with external partners and stakeholders in the quantum technological and quantum computational sectors.



- Serve the State of Wyoming by providing Quantum Technology-savvy graduates for our businesses, agencies, and educational institutes.
- Grow educational opportunities for Wyoming around the transformational area of Quantum Technology.

The MS in QISE is a critical component of the EECS department's goal of developing a research program that is nationally and internationally competitive and relevant to Wyoming by focusing on a few specific areas that have significant anticipated funding growth and economically disruptive technologies. Those areas are (a) modern power grid data analysis and modeling, (b) Quantum machine learning, (c) Quantum security and Internet, and (d) Quantum financing.

The MS in QISE is also central to the aims of the School of Computing and Physics department to provide University of Wyoming students, faculty and staff, and Wyoming businesses and citizens with the quantum computational tools, skills, and approaches to drive transformation and innovation in the state.

## 2. Learning Outcomes

These learning outcomes aim to prepare graduates for various QISE-related career paths, including research, development, implementation, and strategic decision-making in organizations leveraging QISE technologies. The specific learning outcomes of the program may be altered based on the student's goals, faculty expertise, and the evolving needs of the QISE industry.

- **Understanding the Fundamentals of Quantum Mechanics:** Graduates will have a comprehensive understanding of the fundamental principles of quantum mechanics, including wave-particle duality, superposition, entanglement, and quantum measurement.
- **Proficiency in Quantum Computing:** Students will acquire a strong foundation in quantum computing, including knowledge of qubits, quantum gates, quantum circuits, and quantum algorithms. They will be able to design and analyze quantum algorithms for various applications.
- **Expertise in Quantum Information Theory:** Graduates will possess a deep understanding of quantum information theory, including concepts such as quantum entropy, quantum entanglement, quantum teleportation, quantum cryptography, and quantum communication protocols.
- **Proficiency in Quantum Hardware and Technology:** Students will learn about different types of quantum hardware platforms, their underlying technologies, and their associated challenges. They will be familiar with the advancements and limitations of current quantum technologies.
- **Ability to Conduct Research:** Graduates will have the skills to conduct independent research in quantum information science & engineering. They will be able to formulate research questions, design experiments or simulations, analyze data, and draw meaningful conclusions.
- **Communication and Presentation Skills:** Graduates will be adept at effectively communicating complex concepts and research findings related to quantum information

science & engineering. They will be able to present their work to both technical and non-technical audiences, including academic conferences, industry settings, or public outreach events.

- **Ethical and Responsible Conduct:** Students will gain an understanding of the ethical considerations associated with quantum technologies, including issues related to privacy, security, and the responsible use of quantum computing power. They will be able to critically evaluate the ethical implications of their work and make informed decisions.
- **Collaboration and Teamwork:** Graduates will develop strong collaborative skills and the ability to work effectively in interdisciplinary teams. They will be able to contribute to collaborative research projects, communicate ideas, and engage in productive scientific discussions.
- **Lifelong Learning:** Students will develop a continuous learning mindset and stay updated with the latest advancements in quantum information science & engineering. They will be prepared to adapt to the rapidly evolving field and contribute to its future growth and development.

### 3. Curriculum Map and Program Structure

This curriculum map provides a general overview of courses to include in the QISE Master's program. The sequencing and specific courses may differ based on specialization tracks or allow for content-specific course selection/substitution flexibility. Additionally, practical projects, internships, or industry collaborations may be integrated into courses to provide hands-on experience and real-world applications of QISE concepts. UW currently offers several courses this program would require, but this collaborative feature would distinguish students and opportunities in this program.

#### Year 1

Fall

- Quantum Mechanics for Non-Physicists\* – Being developed for a Minor in QISE, Physics Dept
- EE 5885 - Introduction to Quantum Computing, Offered in Fall 2021, Fall 2022, and Spring 2024.
- Elective\*

Spring

- Quantum Information Theory\*
- Quantum Algorithms and Applications\*
- Elective – EE5885 - Quantum Optimization and Machine Learning\* – To be offered in Fall 2024

#### Year 2

Fall

- Quantum Hardware and Technology\*
- Research Methods\*
- Elective\*

Spring

- EE 5960 Thesis Research: Credits: 4; Designed for students involved in research for their thesis project. It is also used for students whose coursework is complete and who are writing their thesis.

\* - **New Courses to be developed or under development**

#### 4. Course Descriptions

- Quantum Mechanics for Non-Physicists\*: This course provides a comprehensive understanding of the mathematical formalism and fundamental principles of quantum mechanics. It explores wave-particle duality, superposition, entanglement, and quantum measurement.
- EE5855 - Introduction to Quantum Computing: This course focuses on the principles and algorithms of quantum computing. It covers qubits, quantum gates, quantum circuits, quantum algorithms (e.g., Shor's algorithm, Grover's algorithm), quantum error correction, and quantum simulation.
- Quantum Information Theory\*: This course introduces students to the mathematical foundations of quantum information theory. It covers topics such as quantum entropy, quantum entanglement, quantum teleportation, quantum cryptography, and quantum communication protocols.
- Quantum Algorithms and Applications\*: This course delves deeper into the practical applications of quantum computing. It explores various quantum algorithms for database searching, optimization, machine learning, and chemistry simulations.
- Quantum Hardware and Technology\*: This course provides an overview of the different types of quantum hardware platforms, such as superconducting circuits, trapped ions, topological qubits, and photonic systems. It covers the challenges and advancements in building and scaling quantum computers.
- EE5885 - Quantum Optimization and Machine Learning\*: This course delivers topics on variational quantum circuits for optimization and quantum machine learning.

#### 5. Assessment Plan

The MS in QISE degree aims to prepare graduates for various roles in Quantum Computing and technology research, development, implementation, and strategic decision-making. The program focuses on eight key learning outcomes: foundational knowledge, technical skills, research capabilities, ethical considerations, communication, domain-specific applications, and a commitment to lifelong learning. Below, we detail assessment strategies for each of these learning outcomes.

- **Understanding of Quantum Mechanics Fundamentals:**  
Assessment Methods: Written examinations, assignments, and projects.  
Evaluation Criteria: Demonstration of knowledge in qubits, superposition, and entanglement.
- **Proficiency in Quantum Computing Techniques and Tools:**  
Assessment Methods: Practical coding assessments, project submissions, and hack-a-thons.  
Evaluation Criteria: Proficiency in Python programming language, usage of Quantum computing frameworks such as IBM Qiskit, Google CIRQ, etc.

- **Ability to Design and Implement Quantum Algorithms:**  
Assessment Methods: Project-based assessments, case studies, and presentations.  
Evaluation Criteria: Capability to analyze real-world cryptography problems, select appropriate Quantum algorithms, and implement solutions for performance and accuracy.
- **Research and Critical Thinking Skills:**  
Assessment Methods: Research proposals, literature reviews, and experimental design projects.  
Evaluation Criteria: Demonstrated ability to identify research problems, review relevant literature, design experiments, analyze data, and draw evidence-based conclusions.
- **Ethical and Responsible Practices:**  
Assessment Methods: Ethical case studies, project evaluations, and reflective essays.  
Evaluation Criteria: Understanding and application of ethical considerations in Quantum Computing, ability to identify privacy concerns and social implications, and making informed decisions for responsible Quantum Computing practices.
- **Communication and Collaboration:**  
Assessment Methods: Presentations, reports, and group projects.  
Evaluation Criteria: Effectiveness in communicating Quantum concepts to technical and non-technical stakeholders and ability to collaborate with professionals from diverse backgrounds.
- **Discipline-Specific Applications:**  
Assessment Methods: Domain-specific projects, case studies, and industry collaborations.  
Evaluation Criteria: Ability to understand domain-specific challenges, apply Quantum Computing techniques appropriately, and develop solutions tailored to specific disciplines such as finance, cryptography, chemistry, and medicine.
- **Lifelong Learning:**  
Assessment Methods: Continuous professional development plans, self-assessment, and reflective journals.  
Evaluation Criteria: Demonstrated commitment to staying updated with Quantum computing and technology advancements, adaptability to new technologies and techniques, and a proactive approach to professional growth beyond the program.

Successful completion of the program requires satisfactory performance across all learning outcomes, demonstrating a well-rounded preparation for diverse QISE-related career paths.

Regular feedback will be provided to students through assessments, and faculty will use this feedback to improve the program continuously. Additionally, periodic program reviews will be conducted to ensure alignment with industry needs and the evolving landscape of QISE.

## 6. Degree Program Evaluation

We will employ a combination of methods to evaluate the program's formative stages. We will create a comprehensive data set to help evaluate the degree program at the end of five years. The evaluation will value well-rounded assessment from different perspectives, hopefully leading to informed program enhancement and development decisions.

Program evaluation will be informed by the following.

- **Exit Surveys of Graduates:**  
This will include questions about the quality of instruction, curriculum relevance, resources provided, and their preparedness for real-world applications.
- **Employer Surveys:**

Questions will focus on the graduates' performance, ability to apply knowledge in practical scenarios, and the program's relevance to industry needs.

- **Annual Feedback through Focus Groups of our students**  
These discussions will identify areas for enhancement, address challenges, and gauge the ongoing effectiveness of the curriculum.
- **Alumni Tracking:**  
An alumni network will be established to track the career paths and achievements of graduates over the years to provide insights into the program's long-term impact.
- **Assessment of Learning Outcomes:**  
This data will gauge the program's academic rigor and effectiveness.
- **Industry Partnerships and Advisory Boards:**  
Regular feedback from these external stakeholders will guide adjustments to the program to keep it aligned with industry trends.
- **Review of Research Output:**  
The quality and impact of research output, publications, and contributions will be used to measure the program's academic strength.

## 7. New Resources Required

The need for new resources for this program's initialization is minimal. Sustainability and growth costs will need to be determined during program review periods. Self-sustaining funding will be encouraged. Strategic funding for other QISE initiatives that work with this program may be addressed in different venues.

- Faculty and instructional staffing  
EECS, Physics, and Math programs have faculty already teaching the core and suggested elective courses. **Currently, a total of ten faculty members exist across the EECS<sup>3</sup>, Physics<sup>6</sup>, and Mathematics<sup>1</sup> departments who can offer courses in QISE. EECS has a new faculty starting in Fall 2024 in the area of Quantum Security.** The SoC is planning to hire new faculty to help develop/teach other suggested elective course offerings.
- Program administration and staff support  
The SoC director and EECS department head have been working closely on related initiatives and this program development and will continue to do so to ensure program success. The SoC has a program coordinator and adequate staff support to ensure the appropriate scheduling of courses.
- Technology  
UW is currently one of the Arizona State University (ASU) Quantum Hub members through which access to the IBM Quantum Computers is available for faculty and students for education and research. Future technological needs will be determined along with content developments. Program administration will encourage using research funding sources to maintain program technology that supports success.

### Library and digital resources

See the above technology considerations that will be applied equally to needed resources here.

### Marketing

The SoC has a marketing coordinator to advocate for adequate resource use to promote, recruit, and maintain program enrollment. The SoC and EECS leads will work with Institutional Marketing to develop an appropriate and affordable marketing plan for all external resource needs.

## Support

Total projected additional revenues due to added course requirements, assuming a minimum of 10 students per year, is calculated below. We are not including indirect costs due to the wide variability in graduate student needs.

- Per resident student in the program at \$311/graduate credit X 30 credits = \$9,330
- Per non-resident students in the program at \$930/graduate credit \* 30 credits = \$27,900
- Estimate: 5 resident students and 5 non-residents each year = \$186,150 additional tuition

## 8. Substantive Change Determination

Higher Learning Commission (HLC), UW's regional accrediting agency, must approve all substantive changes to UW's offering. HLC considers substantive change as the addition of a program (degree or certificate/credential level) not previously included in the institution's accreditation, usually judged to be a program that is a significant departure from normal offerings, the addition of a program with 50%+ new coursework required, or the addition or change to an existing program which will be delivered 50%+ through alternative (hybrid, online) delivery. Substantive change may also be defined as a new program that does not meet the above guidelines but which requires a significant amount of financial investment to be made. Please contact the HLC Accreditation Liaison Officer (currently Steve Barrett, [steveb@uwyo.edu](mailto:steveb@uwyo.edu)) to make this determination.

## 9. Executive Summary of Demand Statistics\*

The Office of Online & Continuing Education generated a market analysis from Gray Associates' data (see the attached appendix) in August 2023. Below, we briefly summarize the demand, projected enrollment, equality evaluation, and graduate employability presented in the report.

- This is an emerging and growing field.
- The report concludes that an MS program focusing on QISE will provide students with a new pathway into computing careers and will be attractive to graduates from regional schools and international students.
- Student demand for this program is strong nationally. The University of Colorado in Boulder and the University of New Mexico are the only regional or semi-regional higher education institutions that have entered this arena. This presents an opportunity for the University of Wyoming.

Pro forma budget

	Fiscal Year			
	1	2	3	4
<b>Revenue</b>				
Enrollment in program in given Fiscal Year	10	20	20	20
NEW Resident enrollment (# of new students entering the program each year)	5	5	5	5
NEW Non Resident Enrollment (# of new students entering the program each year)	5	5	5	5
<b>Total Resident credit hours generated</b>	<b>75</b>	<b>150</b>	<b>150</b>	<b>150</b>
<b>Total Non Resident credit hours generated</b>	<b>75</b>	<b>150</b>	<b>150</b>	<b>150</b>
Per Credit Tuition (with 4% annual growth)				
Resident (Posted Tuition Rate)	\$336	\$350	\$364	\$378
Nonresident (Posted Tuition Rate)	\$1,006	\$1,046	\$1,088	\$1,132
Prior Year's Non Resident Discount Rate (updated annually by the budget office)	30%	30%	30%	30%
Estimated Actual Non Resident Per Credit Tuition	\$704	\$732	\$762	\$792
Total Resident Tuition in NEW Program	\$25,200	\$52,416	\$54,513	\$56,693
Total Non Resident Tuition in NEW Program	\$52,815	\$109,855	\$114,249	\$118,819
<b>Total Tuition from NEW Enrollment</b>	<b>\$78,015</b>	<b>\$162,271</b>	<b>\$168,762</b>	<b>\$175,513</b>
<b>Fees</b>				
Mandatory Fee (Per Full Time Student)	\$827.96	\$827.96	\$827.96	\$827.96
Mandatory Fee Revenue	\$6,900	\$13,800	\$13,800	\$13,800
<b>Total New Revenue Generated</b>	<b>\$85,743</b>	<b>\$176,899</b>	<b>\$183,390</b>	<b>\$190,140</b>
<b>New Program Expense Assumptions</b>				
Compensation and benefits				
Faculty	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
Other administrative staff				
Graduate Assistants				

Supplies				
Travel				
Marketing	\$0	\$0	\$0	\$0
Capital expense	0	0	0	0
<b>Projected Financial Results for New Program</b>	<b>FY1</b>	<b>FY2</b>	<b>FY3</b>	<b>FY4</b>
Total Expenses	\$0	\$0	\$0	\$0
Total New Revenues Remaining with Program	\$85,743	\$176,899	\$183,390	\$190,140
<b>New Program's Total Surplus or Deficit</b>	<b>\$85,743</b>	<b>\$176,899</b>	<b>\$183,390</b>	<b>\$190,140</b>
<b>Operating margin (surplus or deficit / revenues)</b>	<b>1.00</b>	<b>1.00</b>	<b>1.00</b>	<b>1.00</b>



TO School of Computing, Judy Ann Yates  
FROM Jayne Pearce  
DATE 18 September 2023  
SUBJECT Master of Science, Quantum Computing

**Request from School of Computing:**

*Executive Summary of Demand Statistics\**

*Describe and outline:*

1. *Market area and primary target markets.*
2. *Educational market and student demand statistics, including peer comparisons of the size of enrollment, completions, and size trajectory (growth, decline) of comparator programs.*
3. *Employment trends and projections given core competencies of the degree or certificate.*
4. *Graduate salary trends and other post-completion trends.*

*\*available from Gray Associates data subscription*

**Caveats:**

- Gray Associates database uses approximately twelve different data sources to determine results. Slightly lagging data from the United States Department of Education, United States Department of Labor, and United States Federal Statistical System as well as current data from Google, job/employment market (Indeed, Monster, public state job postings, etc...), and various web pages and proprietary partnership resources to determine higher education institutional marketing costs, international student interest, completions, program interest, etc... There are approximately 14,000 different CIP (Classification of Instructional Programs) Codes and Gray will determine results for each code, within different markets (National, Wyoming...), and at the various award levels (undergraduate certificate, bachelor, post-baccalaureate certificate, master, post-master certificate, and doctoral). To my knowledge it is still a one of a kind (sole source) product that Online & Continuing Education subscribes to and if you would like access and training just let me know. All data in this report is from Gray Associates unless otherwise noted.
- Higher education institutions do make mistakes when reporting to the United States Department of Education just as people falsely alter their income, occupation, and other data collection attributes when answering the American Community Survey or US Census.
- Programs reported as online adhere to the below definition. According to the United States Department of Education, IPEDS (Integrated Postsecondary Education System):
  - Distance education (DE) is education that uses one or more types of technology to deliver instruction to students who are separated from the instructor and to support regular and substantive interaction between the students and the instructor synchronously or asynchronously. The following types of technology may be used for distance instruction: a) Internet; b) Satellite or wireless communication; and c) Audio and video conferencing. A Distance Education program for which all the required coursework for program completion can be completed entirely via Distance Education courses. <https://nces.ed.gov/ipeds/use-the-data/distance-education-in-ipeds>

**Currently the Office of Online & Continuing Education is advocating for:**

- Changes to the program approval process. Such as: An Accelerated New Program Proposal-a new program that does not require new resources and 50% (or some percentage) of the courses are already offered at the University for academic credit.
- Promotion and increases in Dual Enrollment courses and or programs. Dual enrollment are college courses taught by college instructors; these courses are taught on campus, at statewide locations or through distance learning technology (*web-conferencing-e.g. Zoom*). The University of Wyoming can offer dual enrollment courses only, per state statute.
- Adjusting the current tuition and fee structure and split to advocate for more dollars flowing to departments that offer online programs
- Transitioning degree completion bachelor programs to complete bachelor programs
- Hiring professional staff members to guide and increase instructional design, marketing, and recruitment of online programs.
  
- **Best Practice to attract the adult learner**
  - 100% asynchronously delivered
  - 7-8 week courses
  - Carousel course rotation (courses offered to meet student demand as they step in and out or attempt to move quickly)
  - Interactive and engaging courses (note: instructional design professionals coming soon)
  - Targeted marketing (Office of Online & Continuing currently developing marketing strategy, currently has one professional marketing staff member and will be hiring a second soon)
  - Specific Program Recruitment-new staff position about to be posted
  - Market tuition rates per program
    - In most cases the adult learner asks themselves: Will this degree allow me to earn more money? Increase my employment opportunities? Get a promotion with my current employer? etc..
    - The adult learner willingly pay more in tuition for convenience (100% asynchronously delivered-anytime anywhere education).

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**Definitions:**

**Quantum Computing**

- A. **Quantum computers** are computers that consist of quantum bits, or “qubits,” that play a similar role to the bits in today's digital computers. The laws of quantum mechanics allow qubits to encode exponentially more information than bits. By manipulating information stored in these qubits, scientists can quickly produce high-quality solutions to difficult problems. This means quantum computing may revolutionize our ability to solve problems that are hard to address with even the largest supercomputers. Scientists have demonstrated these quantum speedups in several applications, including database searches. The race is now on to find others.  
<https://www.energy.gov/science/doe-explainsquantum-computing>
- B. **Quantum computing** is a process that uses the laws of quantum mechanics to solve problems too large or complex for traditional computers. Quantum computers rely on qubits to run and

solve multidimensional quantum algorithms. <https://builtin.com/hardware/quantum-computing>.

National Center for Education Statistics (NCES), Classification of Instructional Programs (CIP) Code Definitions, <https://nces.ed.gov/ipeds/cipcode/browse.aspx?y=55>

There is not a CIP code definition for **Quantum Computing**, the below 4 CIP Codes will be used to determine market analysis.

**Computer Science 11.0701**

A program that focuses on **computer** theory, computing problems and solutions, and the design of **computer** systems and user interfaces from a scientific perspective. Includes instruction in the principles of computational **science**, **computer** development and programming, and applications to a variety of end-use situations.

**Computer Engineering 14.0901**

A program that generally prepares individuals to apply mathematical and scientific principles to the design, development and operational evaluation of computer hardware and software systems and related equipment and facilities; and the analysis of specific problems of computer application to various tasks.

**Physics 40.0801**

A general program that focuses on the scientific study of matter and energy, and the formulation and testing of the laws governing the behavior of the matter-energy continuum. Includes instruction in classical and modern physics, electricity and magnetism, thermodynamics, mechanics, wave properties, nuclear processes, relativity and **quantum** theory, quantitative methods, and laboratory methods.

**Mathematics 27.0101**

A general program that focuses on the analysis of quantities, magnitudes, forms, and their relationships, using symbolic logic and language. Includes instruction in algebra, calculus, functional analysis, geometry, number theory, logic, topology and other mathematical specializations.

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**1) Market area and primary target market.**

- a) Bachelor award level market analysis for this report will focus on completion numbers in computer science 11.0701, computer engineering 14.0901, physics 40.0801, and mathematics 27.0101. This is not a finite arena as Applied Mathematics, Computational Mathematics and other CIP codes could have been included.
- b) Wyoming residents:
  - i) In 2018 26 Wyoming residents attained a bachelor's degree in a computer related field online from an institution other than UW.
  - ii) In 2019 34 Wyoming residents attained a bachelor's degree in a computer related field online from an institution other than UW.
  - iii) In 2020 42 Wyoming residents attained a bachelor's degree in a computer related field online from an institution other than UW.
- c) Regional bachelor award market (4-year + universities in Colorado, Nebraska, South Dakota, North Dakota, Montana, Idaho, and Utah)

- i) In 2021 there were regionally 5,424 undergraduate completions in computer science, computer engineering, physics and mathematics and therefore potential enrollments in a master of Quantum Computing.
- ii) Below are 3-years of completions by regional higher education institution undergraduates in computer science, computer engineering, physics and mathematics. Potential enrollment/market for Master of Science in Quantum Computing

<b>Bachelor Completions</b>	<b>2019 Online</b>	<b>2019 Onground</b>	<b>2019 Total</b>	<b>2020 Online</b>	<b>2020 Onground</b>	<b>2020 Total</b>	<b>2021 Online</b>	<b>2021 Onground</b>	<b>2021 Total</b>
<b>11.0701 Computer Science</b>									
Colorado	156	802	958	185	967	1,152	227	1,023	1,250
Nebraska	41	252	293	42	268	310	56	269	325
South Dakota	19	122	141	22	122	144	27	147	174
North Dakota	15	153	168	2	168	170	12	153	165
Montana	0	0	145	1	134	135	0	0	122
Idaho	121	208	329	114	281	395	85	265	350
Utah	16	772	788	135	784	919	459	764	1,223
<b>Regional Total</b>	<b>368</b>	<b>2,309</b>	<b>2,822</b>	<b>501</b>	<b>2,724</b>	<b>3,225</b>	<b>866</b>	<b>2,621</b>	<b>3,609</b>
<i>Utah's Western Governors University</i>	16	0	16	135	0	135	459	0	459
<b>14.0901 Computer Engineering</b>									
Colorado	4	106	110	4	59	63	2	50	52
Nebraska	0	0	43	0	0	40	0	0	43
South Dakota	0	0	15	0	0	15	0	0	8
North Dakota	0	0	25	0	0	33	0	0	35
Montana	0	0	20	0	0	24	0	0	21
Idaho	0	0	19	0	0	29	0	0	44
Utah	0	0	108	0	0	131	0	0	113
<b>Regional Total</b>	<b>4</b>	<b>106</b>	<b>340</b>	<b>4</b>	<b>59</b>	<b>335</b>	<b>2</b>	<b>50</b>	<b>316</b>
<b>40.0801 Physics</b>									
Colorado	0	162	162	0	198	198	0	203	203
Nebraska	0	44	44	0	40	40	0	49	49
South Dakota	0	10	10	0	14	14	0	14	14
North Dakota	0	14	14	0	7	7	0	15	15
Montana	0	22	22	0	23	23	0	28	28
Idaho	0	49	49	0	54	54	0	47	47
Utah	0	100	100	0	88	88	0	108	108
<b>Regional Total</b>	<b>0</b>	<b>401</b>	<b>401</b>	<b>0</b>	<b>424</b>	<b>424</b>	<b>0</b>	<b>464</b>	<b>464</b>
<b>27.0101 Mathematics</b>									

Colorado	0	418	418	0	422	422	0	454	454
Nebraska	6	161	167	6	188	194	14	175	189
South Dakota	0	54	54	0	49	49	0	64	64
North Dakota	1	51	52	4	50	54	7	48	55
Montana	0	74	74	0	68	68	6	48	54
Idaho	0	60	60	0	54	54	5	41	46
Utah	0	168	168	0	161	161	0	173	173
<b>Regional Total</b>	<b>7</b>	<b>986</b>	<b>993</b>	<b>10</b>	<b>992</b>	<b>1,002</b>	<b>32</b>	<b>1,003</b>	<b>1,035</b>

d) National bachelor award market for all programs within the 2-digit CIP Code 11 Computer and Information Sciences and Support Services:

Bachelor Completions	2019 Online	2019 Ongoing	2019 Total	2020 Online	2020 Ongoing	2020 Total	2021 Online	2021 Ongoing	2021 Total
All 2-digit CIP Codes 11 Computer and Information Sciences and Support Services	14,646	78,038	92,684	15,895	85,856	101,751	18,556	91,280	109,836

e) The Office of Online & Continuing Education and the School of Computing could establish a marketing and recruitment plan in a 'geo' specific areas. We would be happy to discuss

f) Tuition discussion:

- (1) With the assistance of the School of Computing a market tuition analysis could be performed. Best practice for online tuition setting is to evaluate the market and determine a flat or the same rate for residents and non-residents. This program may also require specific technology or material costs that may need to accompany the required budget of a new program proposal.

2) **Educational market and student demand statistics, including peer comparisons of the size of enrollment, completions, and size trajectory (growth, decline) of comparator programs.**

a) Below is a list of higher education institutions that have a related academic program, institute/center, grant funds, and interest in quantum computing. This is not a complete list (accomplished via google searches)

Institution	Program Title, Center Title, and or Research Area	State
Massachusetts	No specific program; Institutes/Schools & Research Areas; Many science/STEM fields with exposure to Quantum Computing at MIT	MA

Institute of Technology	Research Area: Quantum Information Science; <a href="https://physics.mit.edu/research-areas/quantum-information-science/">https://physics.mit.edu/research-areas/quantum-information-science/</a>	
	Research Area: Quantum Gravity and Field Theory; <a href="https://physics.mit.edu/research-areas/quantum-gravity-and-field-theory/">https://physics.mit.edu/research-areas/quantum-gravity-and-field-theory/</a>	
	Quantum Engineering/Quantum Computing; <a href="https://cqe.mit.edu/">https://cqe.mit.edu/</a>	
	MIT xPro-noncredit Four (4) courses: <a href="https://learn-xpro.mit.edu/quantum-computing">https://learn-xpro.mit.edu/quantum-computing</a>	
University of California, Berkeley	MS Multidisciplinary Quantum Information Science ( <i>was not able to find program on UC Berkeley webpage, embedded into various programs</i> )	CA
	Berkeley Quantum Information and Computation Center; <a href="http://bqic.berkeley.edu/">http://bqic.berkeley.edu/</a>	
	Berkeley Quantum Industry Day; <a href="https://simons.berkeley.edu/events/quantum-industry-day-2022">https://simons.berkeley.edu/events/quantum-industry-day-2022</a>	
	Quantum Science; <a href="https://physics.berkeley.edu/quantum-science">https://physics.berkeley.edu/quantum-science</a>	
University of California, Santa Barbara	MS & PhD Materials Engineering, Quantum Mechanics ( <i>closest possible program</i> )	CA
	<a href="https://news.ucsb.edu/2023/021185/uc-santa-barbara-quantum-scientists-conduct-nsf-funded-research-pursue-quantum-scale">https://news.ucsb.edu/2023/021185/uc-santa-barbara-quantum-scientists-conduct-nsf-funded-research-pursue-quantum-scale</a>	
University of Chicago	Engineering: MS Computational Modeling of Materials ( <i>closest possible program</i> )	IL
	Engineering: PhD Quantum Science & Engineering	
	Chicago Quantum Exchange (CQE)	
	Quantum Information Science and Engineering Network (QISE-NET) <a href="https://qisenet.uchicago.edu/">https://qisenet.uchicago.edu/</a>	
University of Maryland, College Park	Quantum Physics; Quantum Information Degree with Computer Science and Linear Algebra	MA
	Quantum Computing; Post-Baccalaureate Level Certificate; <a href="https://academiccatalog.umd.edu/graduate/programs/quantum-computing-Z157/">https://academiccatalog.umd.edu/graduate/programs/quantum-computing-Z157/</a> ; 4 courses 12 credits; <a href="https://academiccatalog.umd.edu/graduate/programs/quantum-computing-Z157/quantum-computing-pbc/">https://academiccatalog.umd.edu/graduate/programs/quantum-computing-Z157/quantum-computing-pbc/</a>	
University of Massachusetts, Boston Campus	Appears to be part of Physics Department; Undergraduate Quantum Information Certificate; <a href="https://www.umb.edu/science-mathematics/academics/physics/quantum-information-certificate/">https://www.umb.edu/science-mathematics/academics/physics/quantum-information-certificate/</a> Four (4) Classes: 1) Fundamentals of Quantum Physics, 2) Quantum Computation, 3) Physics and Information, and 4) Quantum Science Applications	MA

University of Southern California	MS Quantum Information Science; Department of Computer and Electrical Engineering <a href="https://viterbigradadmission.usc.edu/programs/masters/msprograms/electrical-computer-engineering/ms-in-quantum-information-science/">https://viterbigradadmission.usc.edu/programs/masters/msprograms/electrical-computer-engineering/ms-in-quantum-information-science/</a>	CA
California Institute of Technology (CALTECH)	CALTECH offers a graduate minor option in all their graduate degrees: <a href="https://iqim.caltech.edu/quantum-science-and-engineering-minor/">https://iqim.caltech.edu/quantum-science-and-engineering-minor/</a>	CA
	Institute-Quantum Information and Matter: <a href="https://iqim.caltech.edu/people/">https://iqim.caltech.edu/people/</a>	
	Physics, Mathematics, Astronomy, and Engineering and Applied Science programs: <a href="https://iqim.caltech.edu/people/graduate-students/">https://iqim.caltech.edu/people/graduate-students/</a>	
University of Pittsburgh	BS Physics & Quantum Computing; Physics & Computer Science <a href="https://www.academics.pitt.edu/programs/physics-quantum-computing">https://www.academics.pitt.edu/programs/physics-quantum-computing</a>	PA
	Undergraduate Certificate, Quantum Computing & Quantum Information <a href="https://www.academics.pitt.edu/programs/quantum-computing-quantum-information">https://www.academics.pitt.edu/programs/quantum-computing-quantum-information</a>	
University of Illinois, Urbana Champaign	No program, but <u>courses</u> and embedded information at the undergraduate and graduate level. See below Note-part of undergraduate Physics program	IL
	<p><u>PHYS 370</u> Introduction to Quantum Information and Computing credit: 3 Hours. Introduction to quantum information and computing for sophomores, juniors and seniors from any major. Self-contained description of quantum states and qubits, operators, measurements, tensor products, density matrices, quantum gates and circuits, and quantum computing/simulation algorithms. One of the key points of departure from classical physics, quantum entanglement, is threaded throughout all these topics including a dedicated discussion of Bell's theorem. Students will apply these basic aspects of quantum mechanics to program online quantum computers (e.g., IBM cloud) to gain insight into canonical algorithms such as Deutsch-Jozsa, Shor, and/or Grover as well as standard protocols such as teleportation and entanglement swapping. Prerequisite: PHYS 214.</p>	
	The Beckman Institute houses a variety of interdisciplinary opportunities related to quantum computing. <a href="https://beckman.illinois.edu/">https://beckman.illinois.edu/</a>	

Boston University	BA in Physics and Computer Science with a required <u>course</u> in Quantum Computing: <a href="https://www.bu.edu/academics/cas/programs/physics/ba-in-physics-computer-science/">https://www.bu.edu/academics/cas/programs/physics/ba-in-physics-computer-science/</a> Course: <a href="https://www.bu.edu/academics/cas/courses/cas-py-536/">https://www.bu.edu/academics/cas/courses/cas-py-536/</a>	MA
	Graduate Engineering <u>course</u> titled: Quantum Engineering and Technology <a href="https://www.bu.edu/academics/eng/courses/eng-ec-585/">https://www.bu.edu/academics/eng/courses/eng-ec-585/</a>	
Duke University	Duke Quantum Center <a href="https://quantum.duke.edu/">https://quantum.duke.edu/</a>	NC
	Master of Science or a Master of Engineering-areas of research include Quantum Computing, two (2) tracks software and hardware: <a href="https://ece.duke.edu/masters/study/quantum-computing">https://ece.duke.edu/masters/study/quantum-computing</a>	
Stanford University	Q FARM (Fundamentals, Architectures, and Machine Learning) <a href="https://qis.slac.stanford.edu/">https://qis.slac.stanford.edu/</a>	CA
	Noncredit Online EdX; Quantum Mechanics for Scientists and Engineers; <a href="https://online.stanford.edu/courses/soe-yeeqmse01-quantum-mechanics-scientists-and-engineers">https://online.stanford.edu/courses/soe-yeeqmse01-quantum-mechanics-scientists-and-engineers</a>	
	Stanford Law; Towards Responsible Quantum Technology; <a href="https://cyber.harvard.edu/publication/2023/towards-responsible-quantum-technology">https://cyber.harvard.edu/publication/2023/towards-responsible-quantum-technology</a>	
	There does not appear to be a program titled Quantum Computing but many of the programs in the Engineering College are related.	
Harvard University	PhD Quantum Science & Engineering; Computer Science, Applied Physics, Electrical Engineering, Physics <a href="https://quantum.harvard.edu/graduate-studies">https://quantum.harvard.edu/graduate-studies</a>	MA
	Harvard Quantum Initiative <a href="https://quantum.harvard.edu/">https://quantum.harvard.edu/</a>	
Carnegie Mellon University	PhD Physics appears to include a limited study in Quantum Computing <a href="https://www.cmu.edu/physics/graduate-program/index.html">https://www.cmu.edu/physics/graduate-program/index.html</a>	PA
	Software Engineering Institute; Cybersecurity of Quantum computing: A New Frontier; <a href="https://insights.sei.cmu.edu/blog/cybersecurity-of-quantum-computing-a-new-frontier/">https://insights.sei.cmu.edu/blog/cybersecurity-of-quantum-computing-a-new-frontier/</a>	
University of Colorado, Boulder	Quantum Engineering undergraduate minor: Includes one class in quantum computing. <a href="https://www.colorado.edu/engineering/academics/guide-degrees-certificates/minors/quantum-engineering-minor">https://www.colorado.edu/engineering/academics/guide-degrees-certificates/minors/quantum-engineering-minor</a>	CO



	<p>There does not appear to be a program titled Quantum Computing but it does appear to be embedded within Computer Science and many of the engineering programs</p> <p>Quantum Physics, Quantum Computing, and Laser Systems</p>	
University of New Mexico	<p>Center for Quantum Information and Control; <a href="http://cquic.unm.edu/">http://cquic.unm.edu/</a></p> <p>I could not find an academic program but many courses; <a href="http://cquic.unm.edu/courses/index.html">http://cquic.unm.edu/courses/index.html</a></p>	NM
Capital Technology University; Maryland USA Campus	<p>PhD in Quantum Computing; Offered Online; <a href="https://www.captechu.edu/degrees-and-programs/doctoral-degrees/quantum-computing-phd">https://www.captechu.edu/degrees-and-programs/doctoral-degrees/quantum-computing-phd</a></p> <p>Master of Research in Quantum Computing; Offered Online; <a href="https://www.captechu.edu/degrees-and-programs/masters-degrees/quantum-computing-mres">https://www.captechu.edu/degrees-and-programs/masters-degrees/quantum-computing-mres</a></p>	MA
University of Wisconsin, Madison	<p>Physics Dept, MS in Physics-Quantum Computing <a href="https://guide.wisc.edu/graduate/physics/physics-ms/physics-quantum-computing-ms/">https://guide.wisc.edu/graduate/physics/physics-ms/physics-quantum-computing-ms/</a></p> <p>Quantum Computing; and Quantum Technologies appears to be embedded into MS &amp; PhD programs in Electrical and Computer Engineering &amp; Material Science and Engineering</p>	WI
Purdue University	<p>Physics BS courses related to Quantum Computing; <a href="https://catalog.purdue.edu/preview_program.php?catoid=16&amp;poid=25212&amp;_ga=2.50729569.951936221.1694106768-59750801.1694106768">https://catalog.purdue.edu/preview_program.php?catoid=16&amp;poid=25212&amp;_ga=2.50729569.951936221.1694106768-59750801.1694106768</a></p> <p>Embedded in graduate computer science, computer engineering, physics, mechanical engineering, etc.</p>	IN
Columbia University	No program, but courses and embedded information at the undergraduate and graduate level.	NY
Georgia Institute of Technology	No program, but courses and embedded information at the undergraduate and graduate level.	GA
Yale University	No program but embedded into various areas: Yale Quantum Institute; <a href="https://quantuminstitute.yale.edu/programs-events/csyqi-quantum-computing-colloquium-series">https://quantuminstitute.yale.edu/programs-events/csyqi-quantum-computing-colloquium-series</a>	CT

Below is a list of potential students at the above institutions that may or may not have had exposure to Quantum Computing at some level (courses, part of related BS/MS program, center or institute, research opportunity, etc.). Below are completion numbers in combined fields in Physics, Mathematics, Engineering (computer, software, hardware, materials...) and the Computational Sciences at each higher education institution.

Institution	2019 Total Completions	2020 Total Completions	2021 Total Completions
Massachusetts Institute of Technology	1,191	1,087	1,118
University of California, Berkeley	1,092	1,161	1,199
University of California, Santa Barbara	278	272	263
University of Chicago	403	462	626
University of Maryland, College Park	994	993	943
University of Massachusetts, Boston Campus	89	90	93
University of Southern California	2,499	2,751	2,742
California Institute of Technology (CALTECH)	244	187	223
University of Pittsburgh	769	823	993
University of Illinois, Urbana Champaign	1,522	1,771	1,842
Boston University	1,105	1,215	1,089
Duke University	605	703	677
Stanford University	1,438	1,459	1,399
Harvard University	546	794	796
Carnegie Mellon University	2,346	2,533	2,428
University of Colorado, Boulder	691	824	763
University of New Mexico	255	252	209

Capital Technology University; Maryland USA Campus	93	77	97
University of Wisconsin, Madison	951	846	933
Purdue University	343	318	345
Columbia University	1,744	2,168	2,327
Georgia Institute of Technology	2,792	3,427	3,804
Yale University	378	306	265
<b>Exposure to Quantum Computing</b>	<b>22,368</b>	<b>24,519</b>	<b>25,174</b>

b) Findings:

- i) Given there is not a CIP Code match determining completion numbers, growth, enrollment potential is difficult.
- ii) This is an emerging and growing field.
- iii) As noted above, the University of Colorado in Boulder and the University of New Mexico are the only regional or semi regional higher education institutions that have entered this arena. This presents an opportunity for the University of Wyoming.

**3) Employment trends and projections given core competencies of the degree or certificate.**

**a) Below is information for Computer Science, Computer Engineering, Physics, and Mathematics**

- i) BLS One-year historic employment growth for all of the above is strong, increasing.
  - ii) BLS Three-year historic employment growth for all of the above is strong, increasing.
  - iii) BLS Future job growth projections is **very** strong.
- b) The employment market is not saturated. There are many opportunities for employment in this field.

**4) Graduate salary trends and other post-completion trends.**

a) Below is BLS mean annual wage nation wide

Computer Science	\$75,230.00
Computer Engineering	\$92,460.00
Physics	\$112,511.00
Mathematics	\$78,818.00
Average	\$89,754.75

**Resolution in Support of the M.S. in Quantum Information Science & Engineering (QISE)**

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**WHEREAS**, the Department of Electrical Engineering & Computer Science, the Department of Physics and Astronomy and the School of Computing have proposed the addition of a graduate M.S. in Quantum Information Science & Engineering (QISE), as outlined in the accompanying proposal documents; and

**WHEREAS**, the Faculty Senate's Graduate Council (GC) has reviewed the proposal; and

**WHEREAS**, the GC voted to approve the proposed program contingent on the implementation of the following changes:

1. Clarifying the hybrid delivery mode for Plan A and Plan B, and provide additional language, possibly as part of the assessment/evaluation steps, to ensure students' competency in basic research methodology skills. The Council heard that the MS in QISE does not plan to offer a hybrid research/Plan A degree, but MS Plan A in AI may be delivered online.
2. Clarifying the research credits (5960) as it relates to Plan A and Plan B - thesis-based and coursework-only, respectively; and

**WHEREAS**, the Department of Electrical Engineering & Computer Science subsequently addressed the GC's concerns in the accompanying proposal documents;

**THEREFORE, BE IT RESOLVED** by the Faculty Senate of the University of Wyoming that it supports the recommendation of the GC to approve the graduate M.S. in Quantum Information Science & Engineering (QISE), as outlined in the accompanying proposal documents.



Treva Sprout-Ahrenholtz

Secretary, Faculty Senate

8 April, 2024

**Academic Affairs and Student Affairs**  
**COMMITTEE MEETING MATERIALS**

**AGENDA ITEM TITLE:** Request for Authorization, MS in Artificial Intelligence, (Ahern, Wright, Allen, Shader)

- OPEN SESSION
- CLOSED 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 College of Engineering and Physical Sciences and the School of Computing are proposing a new Master of Science in Artificial Intelligence (AI). This program will be focus on advanced study and research in the field of AI including Explainable AI. It is designed to equip students with the necessary knowledge, skills, and expertise to understand, develop, and apply AI technologies in various disciplines.

**PRIOR RELATED COMMITTEE DISCUSSIONS/ACTIONS:**

Notice of Intent approved by the Academic Affairs & Student Affairs Committee and the full Board, November 2023.

**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 Request for Authorization for the M.S. in Artificial Intelligence.

**PROPOSED MOTION:**

“I move that the Request for Authorization for the M.S. in Artificial Intelligence be approved.”

## Feasibility Study for Artificial Intelligence (AI) Master's degree program

### Executive Summary

**Degree Title:** Artificial Intelligence (AI) Master's degree program

**Level of Degree or Certificate:** Masters

**Delivery Mode(s):** Hybrid

**Estimated Startup Cost of Degree:** None; existing resources will be utilized to start the program

**Anticipated Launch Date:** Fall 2024

**Description:** The Artificial Intelligence (AI) Master's degree program is a postgraduate program that focuses on advanced study and research in AI. It is designed to equip students with the necessary knowledge, skills, and expertise to understand, develop, and apply AI technologies in various domains.

### Table of Contents

1. A. Overview and Description of Degree
- B. Purpose
- C. Strategic Plan Overlay
2. Learning Outcomes
3. Curriculum Map and Program Structure
4. Course Descriptions
5. Assessment Plan
6. Degree Program Evaluation
7. New Resources Required
8. Substantive Change Determination
9. Executive Summary of Demand Statistics

## 1 A. Overview and Description of Degree

The Master of Science in Artificial Intelligence program comprises two years of coursework, thesis research, research projects, and practical applications of Artificial Intelligence (AI). The program will offer both Plan A and Plan B degrees, comprising 30 required credits. The Plan A degree program will comprise 24 required coursework credits, two seminar credits, and four thesis research credits (XX5960). Students must complete an accepted research thesis for the Plan A degree program approved by the student's graduate committee. The Plan B degree program, a non-thesis option, will comprise 28 required coursework credits and two seminar credits. A student pursuing the Plan B degree program as part of the 28 required coursework credits can do an independent study project at the graduate level of a maximum of three credits. In the future, based on the enrollment demand, both Plan A and Plan B degree programs could be delivered online. It is important to note that the specific structure and curriculum of this AI Master's program may vary among students based on discipline-specific AI and broader AI advancements. Coursework includes

- **Core Courses (12 credits).** The program begins with foundational courses covering essential AI topics, such as machine learning, computer vision, and data mining. These courses provide a solid understanding of AI's fundamental principles and algorithms. UW already offers several courses that will be used here, including
  - COSC 4550/5550 Introduction to Artificial Intelligence;
  - COSC 4555/5555 Machine Learning;
  - COSC 4557/5557 Practical Machine Learning, and
  - COSC 4570/STAT 4240/5240 Data Mining.

- **Elective Courses (12 credits for Plan A and 16 credits for Plan B).** Students can choose from various elective courses based on their interests and career goals. These courses may include specialized topics like deep learning, natural language processing, reinforcement learning, neural networks, robotics, AI ethics, AI in healthcare, AI for business, and intelligent agents. Electives allow students to deepen their knowledge in specific areas of AI that align with their research or professional interests. UW already offers several courses that will be used here, including

- PHIL 5440 Topics in the Philosophy of Mind; and
  - COSC 5560 Modern Robots and Softbots.

The goal of this program will be to allow for discipline-specific specialization through course offerings and other program requirements. Specific specialization tracks or concentrations may be established, such as AI for healthcare, AI for robotics, AI for cybersecurity, or AI for natural language processing. These 'tracks' would be noted on the final degree.

- **Research Projects for Plan B Students:** Throughout the Plan B degree program, students are involved in research projects supervised by faculty members or industry experts. These projects provide hands-on experience designing and implementing AI systems, conducting experiments, analyzing data, and addressing real-world AI challenges. Research projects often culminate in a final research paper.
- **Seminars (2 credits).** Regular seminars and workshops will be organized to expose students to the latest research advancements, emerging trends, and challenges in AI. Experts from academia, industry, and government will deliver talks and engage in discussions, allowing students to broaden their perspectives and stay updated with the evolving AI landscape. The SoC and EECS will host, co-host, or support tech talks, colloquia, or speaker series with discipline-specific and broad AI foci.

## **B. Program Purpose**

The Artificial Intelligence (AI) Master's degree program is a postgraduate program that focuses on advanced study and research in AI. It is designed to equip students with the necessary knowledge, skills, and expertise to understand, develop, and apply AI technologies in various domains.

The demand for AI professionals has been steadily increasing in recent years. AI technologies are being adopted by various industries, including healthcare, finance, retail, manufacturing, and transportation, requiring skilled AI practitioners. The growth of AI is expected to continue in the coming years, leading to an increasing number of job openings. AI technologies such as deep learning, natural language processing, and computer vision continually advance, creating new possibilities for AI applications and driving the need for skilled professionals. The program is designed to help meet workforce demands as well as position graduates into promising careers in important, evolving areas of the future economy, including

- **Academic and Research Opportunities.** Universities and research institutions are actively involved in AI research and development. Other academic institutions offer AI-related courses, programs, and research opportunities to train the next generation of AI professionals and advance the field through cutting-edge research. AI professionals must have a strong foundation in mathematics, statistics, programming, and machine learning. Proficiency in programming languages such as Python and R, knowledge of machine learning algorithms, and experience with AI frameworks and tools (e.g., TensorFlow, PyTorch) are highly valued.
- **Industry Opportunities.** AI is being applied across various industries and sectors. For example, AI is used in healthcare for medical imaging analysis, drug discovery, personalized medicine, and healthcare chatbots. In finance, AI is employed for fraud detection, algorithmic trading, and risk assessment. In e-commerce, AI is used for personalized recommendations and customer service chatbots.

## **C. Program Strategic Overlay**

The MS in AI supports UW's Strategic Plan by

- Enhancing student success and preparing students for life and adaptation to a changing and increasingly digital world.
- Providing a highly sought-after degree in a fast-growing workforce sector that will help grow both domestic and international enrollments.
- Raise UW's Scholarly capacity and profile nationally and internationally in Artificial Intelligence and its applications; and strengthen UW's relationships with external partners and stakeholders in the technological and computational sectors.
- Serve the State of Wyoming by providing AI-savvy graduates for our businesses, agencies, and educational institutes.
- Grow educational opportunities for Wyoming around the transformational area of Artificial Intelligence.

The MS in AI is a critical component of the EECS department's goal of developing research program that is nationally and internationally competitive and relevant to the Wyoming by focusing on a few specific areas that have significant anticipated funding growth and economically disruptive technologies. Those areas are (a) modern power grid data analysis and modeling, (b) artificial intelligence/machine learning/QISE, (c) visual and interactive computing and (d) cybersecurity and the internet-of-things.



Similarly, the MS in AI is central to the School of Computing's aims to provide University of Wyoming students, faculty and staff, and Wyoming businesses and citizens with the computational tools, skills and approaches to drive transformation and innovation in the state. The School of Computing will champion broader efforts to make the University of Wyoming more digital, inclusive, interdisciplinary, and entrepreneurial through computing partnerships across Wyoming.

## 2. Learning Outcomes

These learning outcomes aim to prepare graduates for various AI-related career paths, including research, development, implementation, and strategic decision-making in organizations leveraging AI technologies. The specific learning outcomes of the program may be altered based on the student's goals, faculty expertise, and the evolving needs of the AI industry.

- **Understanding of AI Fundamentals.** Graduates should have a solid understanding of AI's foundational concepts, principles, and algorithms. This includes knowledge of machine learning, deep learning, natural language processing, computer vision, robotics, and statistical methods.
- **Proficiency in AI Techniques and Tools.** Students should gain hands-on experience with various AI techniques and tools. This includes practical knowledge of programming languages commonly used in AI, such as Python or R, and experience with AI frameworks and libraries like TensorFlow, PyTorch, or scikit-learn.
- **Ability to Design and Implement AI Systems.** Graduates should be capable of designing and implementing AI systems to solve real-world problems. This includes analyzing data, selecting appropriate AI algorithms, training and evaluating AI models, and optimizing AI solutions for performance and accuracy.
- **Research and Critical Thinking Skills.** Students should develop research skills and a critical mindset necessary for conducting independent research in AI. This includes identifying research problems, reviewing relevant literature, designing experiments, analyzing data, and drawing conclusions based on evidence.
- **Ethical and Responsible AI Practices.** Graduates should know ethical considerations in AI development, deployment, and usage. They should be able to identify potential biases, privacy concerns, and social implications associated with AI systems and make informed decisions to ensure responsible AI practices. In addition to elective courses on ethics, topics addressing ethics and responsible AI practices will be embedded in several relevant core and elective courses.
- **Communication and Collaboration.** Graduates should be able to effectively communicate AI concepts and results to both technical and non-technical stakeholders. They should also be able to collaborate with professionals from diverse backgrounds to solve complex AI problems.
- **Discipline-Specific Applications.** Depending on the student's focus or specialization, graduates may gain expertise in applying AI techniques to specific disciplines. For example, healthcare, finance, cybersecurity, or natural language processing. They should be able to understand domain-specific challenges and develop AI solutions tailored to those domains.
- **Lifelong Learning.** As AI is a rapidly evolving field, graduates should have a mindset of continuous learning. They should be equipped with the skills and knowledge to stay updated with AI advancements, adapt to new technologies and techniques, and continue their professional growth beyond the program.

### 3. Curriculum Map and Program Structure

This curriculum map provides a general overview of courses to include in the AI Master's program. The sequencing and specific courses may differ based on specialization tracks or allowing for flexibility in content specific course selection/substitution. Additionally, practical projects, internships, or industry collaborations may be integrated into courses to provide hands-on experience and real-world applications of AI concepts. UW already offers a substantial number of courses this program would require, but this collaborative feature would distinguish students and opportunities in this program.

#### Year 1, Fall

- i) **COSC 4550/5550 Introduction to Artificial Intelligence.** Credits: 3; A computational study of intelligent behavior. The focus is on intelligent agents, such as software agents or robots. Covers how agents' sense, reason, and act within their environment. Includes problem-solving, search, knowledge representation, planning, game playing, learning, and neural and belief networks.

**OR**

**COMP 5300 Basic Computing II.** Credits: 3; The overarching goal is that students understand how to use basic computational and digital tools and approaches to solve problems across scientific, social, and human domains. This course will allow students to explore or embed their desired contextual disciplines into the foundational concepts of the School of Computing. (This is not an established UW course yet; it is proposed for development in the SoC post-baccalaureate graduate certificate program).

- **COSC 4555/5555 Machine Learning.** Credits: 3; To program machines to learn and improve their performance on their own, based on experience and/or data. The first part covers machine learning techniques. The second part covers applications.

**OR**

**COSC 4557/5557 Practical Machine Learning.** Credits: 3; The class addresses the challenge of designing well-performing Machine Learning (ML) pipelines, including their hyperparameters, architectures of deep Neural Networks, and pre-processing. Future ML developers will learn how to use and design automated approaches for determining such ML pipelines efficiently.

- **STAT 4270/5270 Applied Bayesian Statistics.** Credits: 3; This course introduces Bayesian data analysis in an applied context. We will learn about Bayesian statistics primarily in a regression model context, taken broadly. A conceptual understanding of popular Markov Chain Monte Carlo algorithms will be provided.

**OR**

**STAT 5380 Bayesian Data Analysis.** Credits: 3; Bayesian statistical methods for analyzing various kinds of data. Topics include basic Bayesian ideas and model formulation (priors, posteriors, likelihoods), single- and multiple-parameter models, hierarchical models, generalized linear models, multivariate models, survival models and an introduction to computation methods.

#### Year 1, Spring

- **STAT 4240/5240 Data Mining.** Credits: 3; An introduction to statistical learning and data mining using techniques that have proven useful in recognizing patterns and making predictions. These techniques include both parametric and nonparametric models. Tools for computing and evaluating these techniques will also be studied.
- **Natural Language Processing (NLP).** Credits: 3; Text preprocessing and tokenization, language modeling and syntactic analysis, named entity recognition and sentiment analysis, machine translation and question answering.

**OR**

**COSC 5220 Languages and Automata.** Credits: 3; The study of regular, context-free, and context-sensitive languages and their relations to finite-state, pushdown and linear-bounded automata. Context-free language recognition. The halting problem and decidability results.

- **COSC 5540 Computer Vision.** Credits: 3; Provides students with an understanding of applying computer methodologies to process two-dimensional and three-dimensional images. Primary areas of investigation are image preprocessing, knowledge representation, pattern recognition and motion understanding.

#### Year 2, Fall

- **Deep Learning.** 3 credits. Topics include neural networks and their architectures, convolutional neural networks (CNNs) for computer vision, recurrent neural networks (RNNs) for sequential data, and deep reinforcement learning

**OR**

**EE 5410 Neural and Fuzzy Systems.** Credits: 3; Theory of feed forward and recurrent neural networks. Supervised and unsupervised learning theories. Fuzzy logic and systems. Associative memories. Matching and self-organizing networks. Application of neural and fuzzy systems.

**OR**

**EE 5440 Geometric/Deep Computer Vision.** Credits: 3; Geometric methods including exponential coordinates for describing rigid motion, quaternions, pinhole models of cameras, and models of stereo cameras. Reconstruction of a 3D scene. Deep learning methods using convolutional and other neural networks will be used for computer vision. CNN architectures, classification, optimization, detection, identification, segmentation, GANs, and transformers are covered.

- **COSC 5552 Advanced Topics in AI.** Credits: 3; Advanced topics in AI are presented and discussed via research paper review.

**OR**

**COMP 5350 Advanced Computing II.** Credits: 3; Students will learn how to use the digital tools available in their fields of study as well as understand the theory of how digital approaches and computational methods will change their fields in the future. This course allows for the depth of knowledge within any discipline to be computationally driven towards competency and fluency. (This is not an established UW course yet; it is proposed for development in the SoC post baccalaureate graduate certificate program)

- **Other graduate electives with focus on AI or application of AI**

**OR**

**COSC. Seminars and Workshops.** 2 Credits.

#### Year 2, Spring

- **COSC/EE 5960 Thesis Research:** Credits: 4; Designed for students involved in research for their thesis. Also used for students whose coursework is complete and are writing their thesis.

- **Other graduate electives with a focus on AI or the application of AI**

**OR**

**COSC. Seminars and Workshops.** 2 Credits.

#### 4. Course Descriptions

See above.

#### 5. Assessment Plan

The MS in AI degree aims to prepare graduates for various roles in AI research, development, implementation, and strategic decision-making. The program focuses on eight key learning outcomes: foundational knowledge, technical skills, research capabilities, ethical considerations, communication, domain-specific applications, and a commitment to lifelong learning. Below, we detail assessment strategies for each of these learning outcomes.

- **Understanding of AI Fundamentals:**  
Assessment Methods: Written examinations, assignments, and projects.  
Evaluation Criteria: Demonstration of knowledge in machine learning, deep learning, natural language processing, computer vision, robotics, and statistical methods through accurate application and explanation.
- **Proficiency in AI Techniques and Tools:**  
Assessment Methods: Practical coding assessments, project submissions, and hack-a-thons.  
Evaluation Criteria: Proficiency in programming languages (Python or R), usage of AI frameworks (TensorFlow, PyTorch, or scikit-learn), and successful implementation of AI techniques.
- **Ability to Design and Implement AI Systems:**  
Assessment Methods: Project-based assessments, case studies, and presentations.  
Evaluation Criteria: Capability to analyze real-world problems, select appropriate AI algorithms, train and evaluate models, and optimize solutions for performance and accuracy.
- **Research and Critical Thinking Skills:**  
Assessment Methods: Research proposals, literature reviews, and experimental design projects.  
Evaluation Criteria: Demonstrated ability to identify research problems, review relevant literature, design experiments, analyze data, and draw evidence-based conclusions.
- **Ethical and Responsible AI Practices:**  
Assessment Methods: Ethical case studies, project evaluations, and reflective essays.  
Evaluation Criteria: Understanding and application of ethical considerations in AI, ability to identify biases, privacy concerns, and social implications, and making informed decisions for responsible AI practices.
- **Communication and Collaboration:**  
Assessment Methods: Presentations, reports, and group projects.  
Evaluation Criteria: Effectiveness in communicating AI concepts to both technical and non-technical stakeholders, and ability to collaborate with professionals from diverse backgrounds.
- **Discipline-Specific Applications:**  
Assessment Methods: Domain-specific projects, case studies, and industry collaborations.  
Evaluation Criteria: Ability to understand domain-specific challenges, apply AI techniques appropriately, and develop solutions tailored to specific disciplines such as healthcare, finance, cybersecurity, or natural language processing.
- **Lifelong Learning:**  
Assessment Methods: Continuous professional development plans, self-assessment, and reflective journals.  
Evaluation Criteria: Demonstrated commitment to staying updated with the latest advancements in AI, adaptability to new technologies and techniques, and a proactive approach to professional growth beyond the program.

Successful completion of the program requires satisfactory performance across all learning outcomes, demonstrating a well-rounded preparation for diverse AI-related career paths

Regular feedback will be provided to students through assessments, and faculty will use this feedback to improve the program continuously. Additionally, periodic program reviews will be conducted to ensure alignment with industry needs and the evolving landscape of AI.

## 6. Degree Program Evaluation

We will employ several methods to evaluate the program's formative stages. We will create a comprehensive data set to help evaluate the degree program at the end of five years. The evaluation will value well-rounded assessment from different perspectives, hopefully leading to informed decisions for program enhancement and development.

Program evaluation will be informed by the following.

- **Exit Surveys of Graduates:**  
This will include questions about the quality of instruction, curriculum relevance, resources provided, and their preparedness for real-world applications.
- **Employer Surveys:**  
Questions will focus on the graduates' performance, their ability to apply knowledge in practical scenarios, and the program's relevance to industry needs.
- **Annual Feedback through Focus Groups of our students**  
These discussions will identify areas for enhancement, address challenges, and gauge the ongoing effectiveness of the curriculum.
- **Alumni Tracking:**  
An alumni network will be established to track the career paths and achievements of graduates over the years to provide insights into the long-term impact of the program.
- **Assessment of Learning Outcomes:**  
This data will be used to gauge the program's academic rigor and effectiveness.
- **Industry Partnerships and Advisory Boards:**  
Regular feedback from these external stakeholders will guide adjustments to the program to keep it aligned with industry trends.
- **Review of Research Output:**  
The quality and impact of research output, publications, and contributions will be used to measure the program's academic strength.

## 7. New Resources Required

The need for new resources for this program's initialization is minimal. Sustainability and growth costs will need to be determined during program review periods. Self-sustaining funding will be encouraged. Strategic funding for other AI initiatives that would work in conjunction with this program may be addressed in different venues.

- Faculty and instructional staffing  
EECS and Math programs have faculty already teaching the core and suggested elective courses. **Currently, EECS has eight faculty members who offer courses in Artificial Intelligence.** SoC has their five new faculty hires to teach the COMP courses and help develop/teach other suggested elective course offerings.
- Program administration and staff support  
The SoC director and EECS department head have been working closely on related initiatives as well as this program development and will continue to do so to ensure program success. The SoC

has a program coordinator and adequate staff support to ensure the appropriate scheduling of courses.

- Technology

UW is currently equipped with the technology needed to successfully implement this program. Future technological needs will be determined along with content developments. Program administration will encourage using research funding sources to maintain program technology that supports success.

Library and digital resources

See the above technology considerations that will be applied equally to needed resources here.

Marketing

The SoC has a marketing coordinator to advocate for adequate resource use to promote, recruit, and maintain program enrollment. The SoC and EECS leads will work with Institutional Marketing to develop an appropriate and affordable marketing plan for all external resource needs.

Support

Total projected additional revenues due to added course requirements, assuming a minimum of 10 students per year, is calculated below. We are not including indirect costs due to the wide variability in graduate student needs.

- Per resident student in the program at \$311/graduate credit X 30 credits = \$9,330
- Per non-resident students in the program at \$930/graduate credit \* 30 credits = \$27,900
- Estimate: 5 resident students and 5 non-residents each year = \$186,150 additional tuition

## 8. Substantive Change Determination

Higher Learning Commission (HLC), UW's regional accrediting agency, must approve all substantive changes to UW's offering. HLC considers substantive change as the addition of a program (degree or certificate/credential level) not previously included in the institution's accreditation, usually judged to be a program that is a significant departure from normal offerings, the addition of a program with 50%+ new coursework required, or the addition or change to an existing program which will be delivered 50%+ through alternative (hybrid, online) delivery. Substantive change may also be defined as a new program that does not meet the above guidelines but requires a significant amount of financial investment. Please contact the HLC Accreditation Liaison Officer (currently Steve Barrett, [steveb@uwyo.edu](mailto:steveb@uwyo.edu)) to make this determination.

## 9. Executive Summary of Demand Statistics\*

The Office of Online & Continuing Education generated a market analysis from Gray Associates' data (see the attached appendix) in August 2023. Below, we briefly summarize the demand, projected enrollment, equality evaluation, and graduate employability presented in the report.

- The report concludes that an MS program focusing on AI will provide students with a new pathway into computing careers and will be attractive both for graduates from regional schools and international students.
- Nationwide graduate level completion numbers in AI from 2019 to 2021 increased by 54.107% from 2019 to 2021. This is significant.
- Student demand for this program is strong nationally. Completions in this region are strictly (100%) at the master level, while in the national market, 6% of the completions are at the bachelor level, 10% at the post-baccalaureate certificate, 78% at the master, and 6% at the PhD award level.
- There is strong 1-year and 3-year historic employment growth. Bureau of Labor Statistics is also suggesting strong 10-year future employment growth in this area.

Below is Bureau of Labor Statistics mean annual wage nationwide for AI laborers.

Artificial Intelligence	\$83,266.00
Computer Science	\$75,230.00
Computer Engineering	\$92,460.00
Electrical Engineering	\$95,660.00
Average	\$86,654.00

Pro forma budget

	Fiscal Year			
	1	2	3	4
<b>Revenue</b>				
Enrollment in program in given Fiscal Year	10	20	20	20
NEW Resident enrollment (# of new students entering the program each year)	5	5	5	5
NEW Non Resident Enrollment (# of new students entering the program each year)	5	5	5	5
<b>Total Resident credit hours generated</b>	<b>75</b>	<b>150</b>	<b>150</b>	<b>150</b>
<b>Total Non Resident credit hours generated</b>	<b>75</b>	<b>150</b>	<b>150</b>	<b>150</b>
Per Credit Tuition (with 4% annual growth)				
Resident (Posted Tuition Rate)	\$336	\$350	\$364	\$378
Nonresident (Posted Tuition Rate)	\$1,006	\$1,046	\$1,088	\$1,132
Prior Year's Non Resident Discount Rate (updated annually by the budget office)	30%	30%	30%	30%
Estimated Actual Non Resident Per Credit Tuition	\$704	\$732	\$762	\$792
Total Resident Tuition in NEW Program	\$25,200	\$52,416	\$54,513	\$56,693
Total Non Resident Tuition in NEW Program	\$52,815	\$109,855	\$114,249	\$118,819
<b>Total Tuition from NEW Enrollment</b>	<b>\$78,015</b>	<b>\$162,271</b>	<b>\$168,762</b>	<b>\$175,513</b>
<b>Fees</b>				
Mandatory Fee (Per Full Time Student)	\$827.96	\$827.96	\$827.96	\$827.96
Mandatory Fee Revenue	\$6,900	\$13,800	\$13,800	\$13,800
<b>Total New Revenue Generated</b>	<b>\$85,743</b>	<b>\$176,899</b>	<b>\$183,390</b>	<b>\$190,140</b>
<b>New Program Expense Assumptions</b>				
Compensation and benefits				
Faculty	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
Other administrative staff				
Graduate Assistants				



Supplies				
Travel				
Marketing	\$0	\$0	\$0	\$0
Capital expense	0	0	0	0
<b>Projected Financial Results for New Program</b>	<b>FY1</b>	<b>FY2</b>	<b>FY3</b>	<b>FY4</b>
Total Expenses	\$0	\$0	\$0	\$0
Total New Revenues Remaining with Program	\$85,743	\$176,899	\$183,390	\$190,140
<b>New Program's Total Surplus or Deficit</b>	<b>\$85,743</b>	<b>\$176,899</b>	<b>\$183,390</b>	<b>\$190,140</b>
<b>Operating margin (surplus or deficit / revenues)</b>	<b>1.00</b>	<b>1.00</b>	<b>1.00</b>	<b>1.00</b>

TO School of Computing, Judy Ann Yates  
FROM Jayne Pearce  
DATE 25 August 2023  
SUBJECT Master of Science, Artificial Intelligence

**Request from School of Computing:**

*Executive Summary of Demand Statistics\**

*Describe and outline:*

1. *Market area and primary target markets.*
2. *Educational market and student demand statistics, including peer comparisons of the size of enrollment, completions, and size trajectory (growth, decline) of comparator programs.*
3. *Employment trends and projections given core competencies of the degree or certificate.*
4. *Graduate salary trends and other post-completion trends.*

*\*available from Gray Associates data subscription*

**Caveats:**

- Gray Associates database uses approximately twelve different data sources to determine results. Slightly lagging data from the United States Department of Education, United States Department of Labor, and United States Federal Statistical System as well as current data from Google, job/employment market (Indeed, Monster, public state job postings, etc...), and various web pages and proprietary partnership resources to determine higher education institutional marketing costs, international student interest, completions etc... There are approximately 14,000 different CIP (Classification of Instructional Programs) Codes and Gray will determine results for each code, within different markets, and at the various award levels (undergraduate certificate, bachelor, post-baccalaureate certificate, master, post-master certificate, and doctoral). To my knowledge it is still a one of a kind (sole source) product that Online & Continuing Education subscribes to and if you would like access and training just let me know. All data in this report is from Gray Associates unless otherwise noted.
- The pandemic likely influenced program completion numbers. This analysis focuses on 3 years 2019, 2020 and 2021 program completions, 2022 program completions will be ready in the fall of 2023. A five percent decrease in completion numbers from previous years is reasonable (my assumption-some may disagree), notable would be completion increases or completions remaining constant. International student enrollment & completions numbers are influenced by political factors, plus the pandemic.
- Programs reported as Online should be adhering to the below definition. According to the United States Department of Education, IPEDS (Integrated Postsecondary Education System):
  - Distance education (DE) is education that uses one or more types of technology to deliver instruction to students who are separated from the instructor and to support regular and substantive interaction between the students and the instructor synchronously or asynchronously. The following types of technology may be used for distance instruction: a) Internet; b) Satellite or wireless communication; and c) Audio and video conferencing. A Distance Education program for which all the required

coursework for program completion can be completed entirely via Distance Education courses. <https://nces.ed.gov/ipeds/use-the-data/distance-education-in-ipeds>

- Higher education institutions do make mistakes when reporting to the United States Department of Education just as people falsely alter their income, occupation, and other data collection attributes when answering the American Community Survey or US Census.
- Currently Online & Continuing Education is advocating for:
  - Changes to the program approval process. Such as: An Accelerated New Program Proposal-a new program that does not require new resources and 50% (*or some percentage*) of the courses are already offered at the University for academic credit.
  - Promotion and increases in Dual Enrollment courses and or programs. Dual enrollment are college courses taught by college instructors; these courses are taught on campus, at statewide locations or through distance learning technology (*web-conferencing-e.g. Zoom*). The University of Wyoming can offer dual enrollment courses only, per state statute.
  - Adjusting the current tuition and fee structure and split to advocate for more dollars flowing to departments that offer online programs
  - Transitioning degree completion bachelor programs to complete bachelor programs
  - Hiring professional staff members to guide and increase instructional design capacity and marketing for online programs.
- FYI Best practice for online programs with strong enrollments to attract adult learners.
  - 100% asynchronously delivered
  - 7-8 week courses
  - Carousel course rotation (courses offered to meet student demand as they step in and out or attempt to move quickly)
  - Interactive and engaging courses (note: instructional design professionals coming soon)
  - Targeted marketing (Office of Online & Continuing currently developing marketing strategy, currently has one professional marketing staff member and will be hiring a second soon)
  - Market tuition rates per program
  - Program accreditation noted on webpage
  - If face to face meetings/activities are a desire of faculty, consider optional opportunities in various locations (with convenient transportation) for student engagement. The most important factor will be educational and dynamic speakers with a programmatic theme.
- Nationwide online student demographics/market
  - They are adult learner or not 18-25 years of age
  - They are working and typically have a full plate of additional responsibilities
  - In most cases they ask themselves: Will this degree allow me to earn more money? Increase my employment opportunities? Get a promotion with my current employer? etc..
  - They willingly pay more in tuition for convenience (100% asynchronously delivered-anytime anywhere education).

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**Definitions:**

National Center for Education Statistics (NCES), Classification of Instructional Programs (CIP) Code Definitions, <https://nces.ed.gov/ipeds/cipcode/browse.aspx?y=55>

### **Artificial Intelligence and Robotics 11.0102**

- A program that focuses on the symbolic inference, representation, and simulation by computers and software of human learning and reasoning processes and capabilities, and the computer modeling of human motor control and motion. Includes instruction in computing theory, cybernetics, human factors, natural language processing, and applicable aspects of engineering, technology, and specific end-use applications.

### **Interdisciplinary Opportunities:**

#### **Human Computer Interaction 30.3101**

- An interdisciplinary program that focuses on the study of the interaction between people and technology and how that technology impacts society, and combines disciplines within the fields of computing and information science (information systems, software engineering, **artificial intelligence** and design) and the behavior sciences (cognitive science, cognitive psychology, sociology, organizational psychology, and social psychology). Includes instruction in information technology, cognitive and behavioral sciences, and systems design.

#### **Linguistics 16.0102**

- A program that focuses on language, language development, and relationships among languages and language groups from a humanistic and/or scientific perspective. Includes instruction in subjects such as psycholinguistics, behavioral linguistics, language acquisition, sociolinguistics, mathematical and computational linguistics, grammatical theory and theoretical linguistics, philosophical linguistics, philology and historical linguistics, comparative linguistics, phonetics, phonemics, dialectology, semantics, functional grammar and linguistics, language typology, lexicography, morphology and syntax, orthography, stylistics, structuralism, rhetoric, and applications to **artificial intelligence**.

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## **1) Market area and primary target market.**

- a) Admissions to the Carnegie Mellon University (<https://www.ece.cmu.edu/academics/ms-ai.html>) and Boston University (<https://www.bu.edu/academics/grs/programs/computer-science/ms-in-artificial-intelligence/>) master in Artificial Intelligence program requires a bachelor in computer science, computer engineering, electrical engineering or a related discipline. Bachelor award level market analysis for this report will focus on completion numbers in computer science 11.0701, computer engineering 14.0901, electrical engineering 14.1001, broadly on all Computer and Information Sciences and Support Services programs 11, and Artificial Intelligence 11.0102.
- b) Wyoming residents:
  - i) In 2018 26 Wyoming residents attained a bachelor's degree in a computer related field online from an institution other than UW.
  - ii) In 2019 34 Wyoming residents attained a bachelor's degree in a computer related field online from an institution other than UW.
  - iii) In 2020 42 Wyoming residents attained a bachelor's degree in a computer related field online from an institution other than UW.
- c) Below are 3-years of completions by UW undergraduates-perhaps a few might be interested in a Master of Science in Artificial Intelligence

Bachelor Completions	2019 Online	2019 Ongoing	2019 Total	2020 Online	2020 Ongoing	2020 Total	2021 Online	2021 Ongoing	2021 Total
Computer Science 11.0701 at UW	0	0	41	0	0	44	0	0	46
Computer Engineering 14.0901 at UW	0	0	12	0	0	11	0	0	8
Electrical Engineering 14.1001 at UW	0	0	23	0	0	24	0	0	37
<b>Total UW Bachelor Completions</b>	<b>0</b>	<b>0</b>	<b>76</b>	<b>0</b>	<b>0</b>	<b>79</b>	<b>0</b>	<b>0</b>	<b>91</b>

- d) Regional bachelor award market (4-year + universities in Colorado, Nebraska, South Dakota, North Dakota, Montana, Idaho, and Utah)
- i) In 2021 there were regionally 4,766 graduates in computer science, computer engineering and electrical engineering and therefore potential enrollments in a master of Artificial Intelligence program based on the entry requirements of Carnegie Mellon University and Boston University.
  - ii) From 2019-2021 there was a 27.888% increase in Computer Science graduates regionally
  - iii) From 2019-2021 there was a 135.326% increase in online Computer Science graduates regionally
  - iv) From 2019-2021 there was a 198.113% increase in Computer Engineering graduates regionally
  - v) From 2019-2021 there was a 50% decrease in online Computer Engineering graduates regionally
  - vi) From 2019-2021 there was an 8.785% decrease in Electrical Engineering graduates regionally
  - vii) From 2019-2021 there was a 7.407% decrease in online Electrical Engineering graduates regionally
  - viii) Below are 3-years of completions by regional higher education institution undergraduates in computer science, computer engineering, and electrical engineering-perhaps a few might be interested in a Master of Science in Artificial Intelligence

Bachelor Completions	2019 Online	2019 Ongoing	2019 Total	2020 Online	2020 Ongoing	2020 Total	2021 Online	2021 Ongoing	2021 Total
<b>11.0701 Computer Science</b>									
Colorado	156	802	958	185	967	1,152	227	1,023	1,250
Nebraska	41	252	293	42	268	310	56	269	325
South Dakota	19	122	141	22	122	144	27	147	174

North Dakota	15	153	168	2	168	170	12	153	165
Montana	0	0	145	1	134	135	0	0	122
Idaho	121	208	329	114	281	395	85	265	350
Utah	16	772	788	135	784	919	459	764	1,223
<b>Regional Total</b>	<b>368</b>	<b>2,309</b>	<b>2,822</b>	<b>501</b>	<b>2,724</b>	<b>3,225</b>	<b>866</b>	<b>2,621</b>	<b>3,609</b>
<i>Utah's Western Governors University</i>	16	0	16	135	0	135	459	0	459
<b>14.0901 Computer Engineering</b>									
Colorado	4	106	110	4	59	63	2	50	52
Nebraska	0	0	43	0	0	40	0	0	43
South Dakota	0	0	15	0	0	15	0	0	8
North Dakota	0	0	25	0	0	33	0	0	35
Montana	0	0	20	0	0	24	0	0	21
Idaho	0	0	19	0	0	29	0	0	44
Utah	0	0	108	0	0	131	0	0	113
<b>Regional Total</b>	<b>4</b>	<b>106</b>	<b>340</b>	<b>4</b>	<b>59</b>	<b>335</b>	<b>2</b>	<b>50</b>	<b>316</b>
<b>14.1001 Electrical Engineering</b>									
Colorado	10	273	283	5	283	288	3	286	289
Nebraska	0	0	61	0	0	75	0	0	57
South Dakota	0	0	42	0	0	49	0	0	46
North Dakota	17	82	99	21	101	122	9	86	95
Montana	0	0	75	0	0	62	0	0	61
Idaho	0	0	188	0	0	164	13	110	123
Utah	0	0	174	0	0	173	0	0	170
<b>Regional Total</b>	<b>27</b>	<b>355</b>	<b>922</b>	<b>26</b>	<b>384</b>	<b>933</b>	<b>25</b>	<b>482</b>	<b>841</b>

e) National bachelor award market for all programs within the 2-digit CIP Code 11 Computer and Information Sciences and Support Services:

Bachelor Completions	2019 Online	2019 Ongoing	2019 Total	2020 Online	2020 Ongoing	2020 Total	2021 Online	2021 Ongoing	2021 Total
All 2-digit CIP Codes 11 Computer and Information Sciences and Support Services	14,646	78,038	92,684	15,895	85,856	101,751	18,556	91,280	109,836

- f) Bachelor of Artificial Intelligence programs. This is a very small program nationally, potentially an emerging program. In 2021 a bachelor in Artificial Intelligence was only offered at five higher education institutions. Even though the program size is small the data is suggesting very strong employment demand and growth potential. Strong 1-year and 3-year historic employment growth. BLS is also suggesting strong 10-year future employment growth. BLS mean wage is \$83,286 annually.

Bachelor Completions	2019 Online	2019 Ongoing	2019 Total	2020 Online	2020 Ongoing	2020 Total	2021 Online	2021 Ongoing	2021 Total
<b>11.0102 Artificial Intelligence</b>	<b>16</b>	<b>2</b>	<b>18</b>	<b>0</b>	<b>0</b>	<b>39</b>	<b>0</b>	<b>0</b>	<b>31</b>
Carnegie Mellon University, PA	0	0	0	0	0	2	0	0	16
Full Sail University, FL	16	2	18	0	0	34	0	0	11
Illinois Institute of Technology, IL	0	0	0	0	0	0	0	0	1
Indiana University, Bloomington, IN	0	0	0	0	0	2	0	0	1
SUNY College of Plattsburg, NY	0	0	0	0	0	1	0	0	2

- g) Artificial Intelligence and Robotics 11.0102 is on the Department of Homeland Security STEM Designated Degree List <https://www.ice.gov/sites/default/files/documents/stem-list.pdf>. International student recruitment possibilities.
- h) The Office of Online & Continuing Education and the School of Computing could establish a marketing and recruitment plan in a 'geo' specific areas. We would be happy to discuss
- i) Tuition discussion:
- (1) With the assistance of the School of Computing a market tuition analysis could be performed. Best practice for online tuition setting is to evaluate the market and determine a flat or the same rate for residents and non-residents. This program may also require specific technology or material costs that may need to accompany the required budget of a new program proposal.

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**2) Educational market and student demand statistics, including peer comparisons of the size of enrollment, completions, and size trajectory (growth, decline) of comparator programs.**

All national master award level Artificial Intelligence completion numbers below:

Master Completions	2019 Online	2019 Onground	2019 Total	2020 Online	2020 Onground	2020 Total	2021 Online	2021 Onground	2021 Total
<b>Artificial Intelligence 11.0102</b>	<b>0</b>	<b>261</b>	<b>261</b>	<b>1</b>	<b>296</b>	<b>297</b>	<b>20</b>	<b>377</b>	<b>397</b>
Carnegie Mellon University, PA	0	103	103	0	115	115	0	126	126
University of Pennsylvania	0	83	83	0	78	78	0	87	87
University of Washington, Seattle Campus	0	28	28	0	27	27	0	51	51
Boston University, MA	0	0	0	0	2	2	0	25	25
Northwestern University, IL	0	0	0	0	13	13	0	22	22
Brandeis University, MA	0	17	17	0	24	24	7	10	17
University of Georgia	0	11	11	0	9	9	0	15	15
Gannon University, PA	0	0	0	0	0	0	10	0	10
University of Southern California	0	9	9	0	11	11	0	7	7
University of Arizona	0	0	0	1	1	2	3	3	6
Illinois Institute of Technology	0	0	0	0	1	1	0	5	5
Syracuse University, NY	0	1	1	0	2	2	0	5	5
Florida Atlantic University	0	0	0	0	0	0	0	4	4



Indiana University, Bloomington	0	1	1	0	2	2	0	4	4
University of Cincinnati	0	0	0	0	2	2	0	3	3
University of Boulder, CO	0	3	3	0	5	5	0	2	2
Oklahoma Christian University	0	1	1	0	2	2	0	2	2
South Dakota School of Mines and Technology	0	0	0	0	0	0	0	2	2
Northeastern, MA	0	0	0	0	0	0	0	1	1
Saint Louis University	0	0	0	0	0	0	0	1	1
Long Island University	0	0	0	0	0	0	0	1	1
University of Rochester, NW	0	4	4	0	0	0	0	1	1
University of Pittsburgh, Pittsburgh Campus, PA	0	0	0	0	2	2	0	0	0

a) Findings:

- i) Nationally, a rather small program overall, with increasing student enrollments.
- ii) Even though the national completion numbers are small many graduate level computer science, computer engineering, electrical engineering, machine learning, robotics, and the many other computer related departments are sharing with their students the teachings, concepts, learning outcomes, and opportunities associated with and related to artificial intelligence. This number is impossible to quantify. Additionally, based on the number of higher education institutions noted above entering the market (including Gannon University and below) with a program suggests this is an emerging program. Completion numbers for 2022 and beyond will confirm if emerging.
- iii) Graduate level completion numbers from 2019 to 2021 increased by 54.107%. This is significant
- iv) Student demand for this program is strong nationally. Completions in this region are strictly (100%) at the master level, while in the national market 6% of the completions are at the

bachelor level, 10% at the post-baccalaureate certificate, 78% at the master, and 6% at the PhD award level.

- v) As noted above, the University of Colorado in Boulder and the South Dakota School of Mines and Technology are showing two completions in 2021. Webpage research (<https://www.sdsmt.edu/Academics/Departments/Electrical-Engineering-and-Computer-Science/Graduate-Education/Computer-Science-and-Engineering-MS/> and <https://www.colorado.edu/cs/research/artificial-intelligence>) suggests that the institutions have a strong interest in integrating artificial intelligence into curriculum but I was not able to locate the plan of study for a master in artificial intelligence. Perhaps because of the emerging nature of this program and the small number of completions it has yet to appear on the webpage as an academic program.
- vi) This is a US Department of Homeland Security STEM approve program and the international page views are very strong. Working with UW international student recruitment is strongly suggested.

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**3) Employment trends and projections given core competencies of the degree or certificate.**

- a) BLS One-year historic employment growth in artificial intelligence is strong, increasing.
- b) BLS Three-year historic employment growth in artificial intelligence is strong, increasing.
- c) BLS Future job growth projections is very strong.
- d) The employment market is not saturated. There are many opportunities for employment in the artificial intelligence field.

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**4) Graduate salary trends and other post-completion trends.**

- a) Below is BLS mean annual wage nation wide

Artificial Intelligence	\$83,266.00
Computer Science	\$75,230.00
Computer Engineering	\$92,460.00
Electrical Engineering	\$95,660.00
Average	\$86,654.00

**Resolution in Support of the M.S. in Artificial Intelligence (AI)**

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**WHEREAS**, the Department of Electrical Engineering & Computer Science and the School of Computing have proposed the addition of a graduate M.S. in Artificial Intelligence (AI), as outlined in the accompanying proposal documents; and

**WHEREAS**, the Faculty Senate's Graduate Council (GC) has reviewed the proposal; and

**WHEREAS**, the GC voted to approve the proposed program contingent on the implementation of the following changes:

1. Clarifying the hybrid delivery mode for Plan A and Plan B, and provide additional language, possibly as part of the assessment/evaluation steps, to ensure students' competency in basic research methodology skills. The Council heard that the MS in QISE does not plan to offer a hybrid research/Plan A degree, but MS Plan A in AI may be delivered online.
2. Clarifying the research credits (5960) as it relates to Plan A and Plan B - thesis-based and coursework-only, respectively.
3. Include language emphasizing that while Ethics is offered as an elective, it threads through the entire core program; and

**WHEREAS**, the Department of Electrical Engineering & Computer Science subsequently addressed the GC's concerns in the accompanying proposal documents;

**THEREFORE, BE IT RESOLVED** by the Faculty Senate of the University of Wyoming that it supports the recommendation of the GC to approve the graduate M.S. in Artificial Intelligence (AI), as outlined in the accompanying proposal documents.



Treva Sprout-Ahrenholtz

Secretary, Faculty Senate

8 April 2024

**Academic Affairs and Student Affairs**  
**COMMITTEE MEETING MATERIALS**

**AGENDA ITEM TITLE:** Request for Authorization, PhD in English, (Ahern, Turpen, Kinney)

- OPEN SESSION
- CLOSED 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 College of Arts & Sciences is proposing a new PhD in English with an emphasis on the Public Humanities. The English PhD will be an interdisciplinary program with close ties to the successful master's programs the department already has in place. The program will provide concentrations in English Language and Literature, Rhetoric, Composition, and Writing Studies (SIP 23.13), and Creative Writing (CIP 23.1302), but all tracks will engage in public humanities scholarly projects and programming. An English PhD program will add to the University's breadth of graduate offerings to include a doctoral degree in the humanities.

**PRIOR RELATED COMMITTEE DISCUSSIONS/ACTIONS:**

Notice of Intent approved by the Academic Affairs & Student Affairs Committee and the full Board, November 2023.

**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 Request for Authorization for the Ph.D. in English.

**PROPOSED MOTION:**

"I move that the Request for Authorization for the Ph.D. in English be approved."



UNIVERSITY  
OF WYOMING

Office of  
Academic Affairs

Office of Academic Affairs  
Dept. 3302 • 1000 E. University Avenue  
Laramie, WY 82071  
(307) 766-4286 • (307) 766-6476 • fax (307) 766-2606  
[www.uwyo.edu/acadaffairs](http://www.uwyo.edu/acadaffairs)

This form is to be used with all new degree/certificate proposals as outlined in the process on the Academic Affairs website at <https://www.uwyo.edu/acadaffairs/degrees>. Departments shall use this form to provide documentation of collaboration and support for any courses and/or resources that will be contributing to the new degree/certificate that are not within the home department.

Date:

Name of Proposal:

Department:

College:

The above-named degree/certificate proposal has been reviewed by the following departments/colleges and all appropriate courses and resources have been discussed prior to proposal submission:

\_\_\_\_\_  
Department Head

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Department Head

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Dean

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Dean

\_\_\_\_\_  
Signature

Submitted on: \_\_\_\_\_(date)

By: \_\_\_\_\_

# Feasibility Study for English Doctoral Degree in the Public Humanities (Ph.D. in English)

Assembled by

Kelly Kinney, Chair, Department of English

With contributions from Kent Drummond, Michael Edson, Julia Obert, Nancy Small, and Arielle Zibrak

## **Executive Summary**

The English Doctoral Degree in the Public Humanities will be an interdisciplinary program with close ties to the successful master's programs the department already has in place. For over a decade, English has been planning a PhD, and we are excited that the administration has committed itself to bringing this plan to fruition. Our vision is to develop a distinctive humanities doctorate focused on the public sphere: as the National Humanities Alliance notes, public humanities work seeks to extend the humanities beyond the ivory tower by engaging the public in conversations that inform contemporary debates, magnify community perspectives, preserve local cultures, and expand educational access.<sup>1</sup> Such programs are the cutting edge of humanities education, because in addition to focusing on community engagement and thereby strengthening humanities programming statewide, they have the added benefit of preparing graduates for jobs beyond the academy.

The National Endowment for the Humanities Division of Public Programs defines public humanities projects as those that “bring the ideas of the humanities to life for general audiences through public programming.”<sup>2</sup> This focus on public engagement signals a crucial and often unconsidered challenge of work within the academy. While housed at universities, the primary work of public humanities programs must be to engage those outside of campus—locally, state-wide, nationally, and globally. As this Feasibility Study establishes, there is a strong need for a humanities PhD at UW, with Gray Associates data, national endorsements, and the English Department's already established graduate programs suggesting that interest in the distinctive program we have to offer will be high. What's more, there is no other PhD program in the humanities on campus, which confirms there will be no duplication of existing programs. As we argue below, this public-facing PhD will disrupt traditions associated with outdated doctoral education elsewhere, be an engine for progress across campus and the state and serve as a national exemplar from its inception. The English Department is looking ethically and inventively to the future of doctoral education with the proposed English PhD in the Public Humanities, and we respectfully request the endorsement of the larger UW community.

**Degree or Certificate Title:** Ph.D. in English

**Level of Degree or Certificate:** PhD/Doctoral Degree

**Delivery Mode(s):** On-campus program with traditional residential delivery, though students may pursue appropriate UW English Department graduate-level coursework offered online.

**Estimated Startup Cost of Degree:** Beyond the four faculty hires already approved by the Academic Affairs, the ongoing annual cost after the initial four years of building the program will be **\$202,122.50**. Note that the total budget includes \$144,529.588 of already existing college level funds that will be saved after the elimination of two full-time temporary faculty.

**Anticipated Launch Date:** Fall 2024.

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<sup>1</sup> <https://nhalliance.org/>

<sup>2</sup> <https://www.neh.gov/grants/public/public-humanities-projects>

**Description:** We propose a doctoral degree that bridges the skills in research, rhetorical analysis, critical reading, and document design traditional to English studies with a deep investment in public advocacy and community engagement. As markets change, humanities PhDs with interdisciplinary skills and real-world experience in engaging the community will stand out for employers. Through applied courses and internship placements as well as public-facing research deliverables, students will master communicating complex ideas to non-specialists, building partnerships with community and heritage and tourism organizations, and developing programs to serve social and economic needs. Whether students are interested in advocacy, arts programming, and non-profit work; in editing, grant writing, and digital humanities; or in making complex research accessible to broad audiences, the English PhD will provide the skills and professional networks necessary for our graduates to realize their professional goals.

While housed administratively in the English Department, the PhD program welcomes participation by all interested and qualified faculty on campus, including those in Anthropology, History, Modern and Classical Languages, Philosophy and Religious Studies, and the School of Culture, Gender, and Social Justice, among others. The program will encourage interdisciplinary projects involving the Haub School, the MPA program, the American Heritage Center, and the School of Computing, as well those involving local non-profits, government agencies, and business leaders who will serve as mentors and informal co-teachers. Students will gain the traditional skills in teaching and research that an English PhD provides while also working in the community organizing projects, raising funds, and helping people to tell their stories and advocate for their needs. In sum, our goal is to produce public intellectuals who engage the wider community and can take leadership roles around the state and region.

#### *Rationale & Need – UW and Wyoming*

The development of UW’s first doctoral program in the humanities is crucial to achieving UW’s commitment to offering well-rounded educational options in an encompassing array of research disciplines and professional fields. Adding a PhD in the humanities will elevate UW’s research reputation, bolster recruitment, support grant funding, and position Wyoming to address pressing social and economic challenges—and, significantly, to do so with our land-grant mission and Wyoming values in mind. Because the program will graduate experts in areas such as digital humanities and curation, public programs that promote Wyoming history and culture, and non-profit leadership, among others, the degree will support UW and Wyoming in innumerable ways. Moreover, the degree will strengthen undergraduate education by providing doctoral graduate teaching assistants (GTAs) for our undergraduate USP COM sequence, helping to eliminate bottlenecked courses that master’s-level GTAs are unqualified to teach, while simultaneously reducing the costs related to hiring temporary instructors.

#### *Rationale & Need – National Market Trends*

Meeting the social and economic challenges of the future will demand the curiosity, creative intelligence, and communications expertise that form the bedrock of humanistic training. As the Association of American Colleges and Universities and a range of professional organizations note,<sup>3</sup> employers across sectors increasingly recognize humanities PhDs as experts in not just teaching, but in team-leading, project design, data collection, and, above all, communication across genres and media to various stakeholders.<sup>4</sup> In the mid-2010s, Lou Simpson, then Geico CEO, called for the hiring of PhDs, including those with humanities backgrounds:

I can hire an MBA but it would take me years I don’t have to teach them . . . how to write, how to present ideas, or in fact how to have ideas, how to bring a major research

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<sup>3</sup> <https://www.aacu.org/research/fulfilling-the-american-dream-liberal-education-and-the-future-of-work>

<sup>4</sup> “Employers Actively Seek Humanities Majors’ Skills,” Study the Humanities Toolkit, National Humanities Alliance, 2021, [https://www.studythehumanities.org/point\\_1\\_valued\\_skills](https://www.studythehumanities.org/point_1_valued_skills).

project to term, and how to teach fellow employees. On the other hand, I can hire a PhD who knows how to do all those things and teach this individual a particular task in an hour. Why would I not hire your PhD graduate?<sup>5</sup>

Employers in every field need employees who can teach, be taught, develop persuasive research-based arguments, and communicate at a high level both verbally and in writing.

Indeed, a growing body of recent scholarship on graduate education argues strongly for the re-envisioning of doctoral education in the humanities, arguing that rather than seeing the PhD as a mechanism solely to train future professors, doctoral education should instead be reimagined as an apparatus for multiple career paths outside of the academy. As one recent study notes, “embracing career diversity is essential: diverse career outcomes are a must if we are to have thriving graduate programs and graduate students.”<sup>6</sup> Gray’s Associates’ market analysis data also supports this perspective, indicating that while traditional doctoral degrees in English literature are in decline, degrees that emphasize the professional and technical communication skills that our program will offer are in high demand—in fact, doctoral completions in this expansive area of study are up by 25% in our region—not to mention offer the highest earning potential of all concentrations in the discipline.<sup>7</sup> For the same reason, we believe there is high student demand for an innovative PhD combining training in professional and technical writing, digital humanities, and public engagement. The proposed English PhD in Public Humanities seeks to answer these demands from both employers and students in direct ways. Through interdisciplinary coursework, fieldwork, and required public humanities research projects, this degree will prepare students as editors, writers, researchers, administrators, educators, non-profit leaders, digital curators, content designers, data analysts, project managers, and more. As others attest, PhDs in the humanities and related fields not only “acquire skills that equip them for a wide range of careers”,<sup>8</sup> but are particularly well suited to take on the challenges facing the larger public sphere. We envision our graduates putting their advanced expertise in writing and communication to work to support not just UW and the academy, but the greater Wyoming community and beyond.

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<sup>5</sup> Quoted from Leonard Cassuto and Robert Weisbuch, *The New PhD: How to Build a Better Graduate Education* (Baltimore: Johns Hopkins UP, 2021), pp. 121.

<sup>6</sup> Leanne M. Horinko, Jordan M. Reed, and James M. Van Wyck’s *The Reimagined PhD: Navigating 21<sup>st</sup> Century Humanities Education* (Rutgers UP, 2021), pp. xvi.

<sup>7</sup> See Gray’s Data assembled in Appendix 3, specifically pp. 15-17.

<sup>8</sup> Again, see Horinko, Reed, and Van Wyck, pp. xiv.



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## **Feasibility Study: English PhD in the Public Humanities**

### **Overview and Description of Degree, Purpose, and Strategic Play Overlay**

The English Doctoral Degree in the Public Humanities will be an interdisciplinary program with close ties to the three successful master's programs the department already has in place. Mirroring the objectives of these programs, the doctoral program will emphasize interdisciplinary research stemming from student interest in literature, rhetoric, writing, culture, and creative expression, with all students being involved in the community-focused scholarship of the public humanities. Our pedagogical objectives are to produce both excellent teacher-scholars and public-sector professionals who can engage the wider Wyoming community—that is, graduates who can take on leadership roles in the public humanities around the state and region, as well as feed our university, community college, and K-12 ecosystems in innovative ways. All told, we will offer hands-on student learning, community-based internships, and a flexible program of study that supports a wide range of job placements.

The English PhD in the Public Humanities builds on current department successes. Over the last several years, English has reshaped our master's programs to include a new capstone option, the public-facing thesis portfolio, which allows students to tailor their theses to career tracks in government, the non-profit sector, K-12 and community college education, cultural tourism, marketing and business, and so on. Buoyed by this innovative thesis option, the state-funded residential MA program recently received twice our highest past total of applications, indicating the high demand for this kind of study. Further, both MA and MFA students in our on-campus programs receive state-of-the-art preparation to teach first-year writing and other USP COM courses, and thus they serve the entire university community—as will our PhD students while not involved in their community-based internship placements. We also offer a three-year, tuition-driven low-residency MA degree popular among secondary teachers and other working professionals in Wyoming and nationwide. This program has grown from a dozen students in 2012, to multiple overlapping cohorts of over 30 students today. Beyond our two MA programs, the on-campus MFA in creative writing has a two-decade history as a nationally ranked program known for interdisciplinary excellence. In short, a PhD in English would expand our department's already significant contributions to the university's graduate programming and research mission and, by extension, further grow UW's presence around the state, nation, and world.

We also want to emphasize that English is a financially prudent department that has a long history of responsibly managing our resources while expanding into new markets. Because of the success of our low-residency online MA, for example, English has the capacity to independently fund many master's assistantships, and we also contribute over \$140,000 each year of department budget and Foundation funds to support our graduate programs. Further, because of their advanced standing, doctoral students will be able to teach one-third more courses annually than master's-level students, including the often-bottlenecked 4000-level USP COM3 courses that master's-level students are not qualified to teach. Put simply, the addition of PhD students to our department will allow us to virtually eliminate the temporary faculty positions that support our COM3 courses, yielding an upwards of \$145,000 annually to sync back into the doctoral program.<sup>9</sup>

Taken as a whole, this doctoral program will fill an important gap in the state-wide community by directly connecting the research, teaching, and service of doctoral students to the people of Wyoming. To kick off our program's public humanities emphasis, we are excited to announce a Mellon Foundation sponsored state-wide research project, "Re-Storying the West for a Transformative Future: We Are Wyoming," a

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<sup>9</sup> As our 4-Year Graduated Budget Request for Ongoing Salary and GTA Costs notes (See Appendix 1), in addition to cost savings from eliminating two full-time temporary instructor lines traditionally used to staff COM 3 courses, English will continue to contribute substantial dollars annually to support department-funded GTA lines, though now at the doctoral level.

sustainable, high-impact signature initiative that will distinguish our doctoral program from the outset and strengthen UW's community relations across Wyoming. With this \$850,000 grant, primary investigator and Associate Professor of English Nancy Small is forming a motivated team that will commit to traveling around the state conducting story-gathering events designed to amplify the voices of everyday Wyoming citizens across a range of identities, professions, and roles. From the people who cook our food, educate our children, serve our country in the military, build our homes, and keep our communities running through good times and challenges, their stories will be the spotlight of this research. Primary outcomes include a sharable repository of materials for pursuing community story work, a living public archive of Wyoming stories generated through innovative methods, and an effort to promote university-community relations through high quality interactions and dialogue. Along with faculty investigators, our doctoral students will play a key role in developing this database of Wyoming stories and sharing them broadly with the public, which will not only appeal to students who wish to study in our program, but will prepare them for public humanities positions across the state and nation and distinguish our doctoral program as cutting edge from the outset.

Furthermore, this kind of community-engaged research will make the English PhD in the Public Humanities a complementary component to UW's Carnegie Community Engagement initiatives, distinguishing UW as a national hub for innovation in humanities education and research as it supports all four pillars of President Seidel's strategic plan. The program will be **1) digital** in its emphasis on the public and digital humanities; on professional, technical, and digital rhetoric and communication; and on film, media, and digital culture. The PhD will be **2) diverse, inclusive, and global** in an array of contexts, including through its participation not just in Mellon-sponsored statewide programming, but also in its involvement in programs such as Saturday University; Wyoming Institute for Humanities Research; the School of Culture, Gender, and Social Justice; the School of Computing; and UW in Scotland and other initiatives spearheaded by the Center for Global Studies; among others. Finally, the program will continue the English Department's long history of **3) interdisciplinarity** and **4) entrepreneurialism** by developing programming that engages faculty and students across the disciplines as it generates online and traditional tuition revenue that will help the doctoral program and UW grow simultaneously. Given the funding models and innovations that English has already demonstrated it can create, supporting the PhD in English will raise already established standards of excellence in our evolving college of arts, humanities, and social sciences and across other colleges.

### Learning Outcomes

Generally, our doctoral program's curriculum will expose students to multiple career paths and require their collaboration with the public sector, with PhD students entering public life as part of their academic research. Innovative features include internships with state agencies, schools, nonprofits, arts organizations, historical preservation societies, and businesses; community-focused coursework and dissertations; and interdisciplinary partnerships with professionals within and outside UW. We imagine the program equipping graduates for career paths including museum curation, non-profit administration, public and environmental advocacy, public health activism, and Wyoming tourism, cultural heritage, and more, as well as traditional academic positions focused on teaching, research, and creative activity. Although traditional academic positions are few and far between and thus not the central focus of preparation in our program (see Appendix 3, pp. 16), the professional dexterity we will offer graduates will surely attract a range of employers, as scholarship footnoted above emphasizes.

Our specific degree learning outcomes include:

- Developing a strong understanding of the role the humanities play in society and public life;
- Gaining expertise in various areas of public humanities, such as community engagement, cultural heritage preservation, education, and public programming;

- Developing critical thinking and communication skills, which are essential for effective public engagement;
- Gaining practical experience through internships and hands-on projects, which help students apply their learning to real-world situations;
- Gaining knowledge of the ethical and social issues involved in public humanities, such as representation, accessibility, cultural sensitivity, and power dynamics;
- Contributing to the advancement of the public humanities field through original research, publications, and presentations;
- Gaining experience teaching in academic classrooms as well as in non-academic venues;
- Developing the ability to collaborate with diverse stakeholders, including community members, policymakers, cultural institutions, and nonprofit organizations, as well as with scholars from across the academic disciplines.

Indeed, while the program will be housed in the English Department, we encourage participation by all graduate faculty on campus. Although we imagine particular synergies with Anthropology, History, Modern and Classical Languages, Philosophy and Religious Studies, Visual Arts, and the schools of Culture, Gender, and Social Justice and Politics, Public Affairs, and International Studies, we also imagine the program engaging a broad mixture of non-A&S units, including the Haub School of Environment and Natural Resources, the College of Health Sciences, the Honors College, and the School of Computing, plus cross-disciplinary hubs such as the American Heritage Center, Coe Library, and the UW Art Museum.<sup>10</sup>

### **Curriculum Map<sup>11</sup> and Program Structure**

The expected course sequence for the English PhD in the Public Humanities will include a mix of required and elective courses, most of which are already approved and that typically will be taken during the first two years of study for full-time doctoral students. Because we will require that our doctoral candidates will enter the program with master's-level degrees, they will essentially be extending that coursework to tailor to their research interests and future professional employment. Further, most of the classes they take will be co-enrolled with other humanities-focused master's students on campus, helping to both ensure maximum enrollments and offset the cost of standing up an entirely exclusive doctoral curriculum. To make clear, this is common practice in English studies. From high-powered private institutions such as Stanford and Notre Dame, to less-moneyed but nonetheless prestigious public schools in the State University of New York and the University of California systems, to similarly sized land-grant institutions like Nevada-Reno and North Dakota State, master's and doctoral students routinely enroll in concurrent coursework, with only a small number of courses limited to doctoral students exclusively.

All the program's required courses will be offered on the Laramie campus, though doctoral students may choose to enroll in UW-based online course electives that complement their research interests. For full-time funded students, the English PhD in the Public Humanities will be a four-year degree requiring 36 hours coursework beyond their master's coursework, plus 8 additional hours of dissertation research. In years one and two, full-time students on state-funded GTA lines will serve as instructors of record for undergraduate COM courses and take on-campus graduate courses (9 credits per semester, i.e., two 4-

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<sup>10</sup> English is currently assembling a list of department endorsements for the program, including potential qualified faculty who would like to design new public humanities courses or cross-list current ones. Thus far, we've received notices of interest and endorsement from the Haub School, the School of Computing, the Honors College, Philosophy and Religious Studies, Visual Arts, Communication and Journalism, and Music. We anticipate additional units will also express interest after we launch the program.

<sup>11</sup> See Appendix 2 for our detailed curriculum map, including a matrix outlining which courses fulfill specific learning outcomes.

credit courses per semester, plus 1-credit 5900, the graduate student teaching practicum). In year three, students move off state-funded GTA lines and engage in funded internships with community engagement fieldwork, collecting data for their dissertations and ultimately completing a portfolio-based qualifying exam. In year four, doctoral candidates move back into the classroom on GTA lines and research, write, and defend their dissertation projects—again, projects that directly engage in public humanities research and programming around the state and in our local communities.<sup>12</sup> While not all academic disciplines embrace state-funded teaching assistantships to the degree that our program will, this is common practice in English departments across the nation—particularly at state-funded institutions—given that the discipline engages in the lion’s share of general education writing instruction and that doctoral candidates in English are particularly well-prepared to teach writing across the disciplines on both the introductory and advanced undergraduate levels.

*Required Courses (20 coursework credits, 8 dissertation research credits)*

Students take courses in three areas: 1) working in the classroom and beyond, 2) writing and storytelling, and 3) literature, rhetoric, and culture. 20 coursework credits and 8 thesis research credits are required.

1) *Working in the Classroom and Beyond (12 credits)*

- ENGL 5011 - Professional and Technical Communication: Histories, Theories, and Public Engagement Pedagogies. (\*New course, see description below. 4 credits)
- ENGL 5020 – Introduction to Public Humanities. (Recently retitled from former ENGL 5020: Public-Facing English Studies. 4 credits)
- ENGL 5071 - Inquiry and Methods for Public Humanities Engagement. (Recently retitled from former English 5071: Qualitative Analysis. 4 credits)

2) *Writing and Storytelling (4 credits; choose one)*

- ENGL 5050a - Writing in Public Genres
- ENGL 5050b - Narrative Storytelling
- ENGL 5075 - Non-Profit Writing and Grants

3) *Literature, Rhetoric, and Culture (4 credits; choose one)*

- ENGL 5062 - Ancient Rhetorics
- ENGL 5063 - Feminist Rhetorics
- ENGL 5065 - Black American Rhetorics
- ENGL 5074 - Studies in Civic Discourse
- ENGL 5220 - Studies in Medieval Literature
- ENGL 5230 - Studies in English Renaissance Literature
- ENGL 5250 - Studies in Shakespeare
- ENGL 5270 - Studies in 18c English Literature
- ENGL 5280 - Studies in 19c English Literature
- ENGL 5290 - Studies in 20c English Literature
- ENGL 5310 - Early American Literature
- ENGL 5320 - Studies in 19c American Literature
- ENGL 5330 - Studies in 20c American Literature
- ENGL 5350 - Global Literatures in English
- ENGL 5360 - Literatures of Diversity

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<sup>12</sup> Part-time students will engage in similar community-focused research, although they will be self-funded: each will work with a faculty advisor to design a degree timeline that meets their personal and professional goals, rather than serving as GTAs in the department.

- ENGL 5455 - Slavery and Freedom
- ENGL 5885 - Studies in Popular Culture
- ENGL 5890 - Consumption, Markets, Cultures

*Other Required Credits (12 credits)*

- ENGL 5900 - Mentored Teaching Practicum (1 credit per semester, 4 semesters)
- ENGL 5960 - Thesis/Dissertation Research I (4 credits)
- ENGL 5965 - Thesis/Dissertation Research II (4 credits)

*Elective Courses (12 coursework credits; up to 8 credits outside English):*

12 credits are available for electives, selected in consultation with the student's advisor and committee. At least 4 and up to 8 credits will be from units outside English. Electives aim to introduce methods and concepts from multiple disciplines and public-facing fields of study with both community and/or global relevance. When resources permit, students will be advised to enroll in courses such as the following, pending home-department approval and faculty interest:

- ENGL 5000 – Studies in Special Topics<sup>13</sup>
- AMST 5020 - American Folklife
- AMST 5200 - Material Culture
- AMST 5300 - American Culture and the Public Sector
- AMST 5800 - Historic Preservation
- ENR 5870 - Environmental Justice
- ENR 5870 - Communicating Across Environments
- HIST 5630 - Seminar on Western American History
- HIST 5645 - Seminar on American Indian History
- LTST 5650 - Women, Gender & Migration
- NAIS 5110 - Foundations of American Indian Education
- NAIS 5141 - Instructional Methods of American Indian Education
- PBAD 5000 - Survey of Public Administration
- PBAD 5440 - Public Budgeting and Finance
- PBAD 5465 - Survey of Non-Profit Sector
- PBAD 5510 - Public Policy and Program Management
- POLS 5420 - Seminar in Public Administration
- POLS 5710 - Topics: Local Government Management
  - Topics: Non-Profit Management
  - Topics: Wyoming Futures
- STAT 5220 - Statistical Methods

Additional courses from other departments interested in participating will also be offered. We note those above as representative examples of public humanities inflected courses already on the books, but recognize that not all departments listed may be interested in participating.

In year three, as noted above, full-time students will move off state-funded GTA lines and will be supported through grant, department, and Foundation funding as they participate in an approved internship with local business, non-profit, arts, governmental, or educational organizations approved and

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<sup>13</sup> We imagine that all English faculty but particularly our new faculty hires will take advantage of this special topics designation to design new courses in the public humanities, with emphases such as “Ethnicity and Community in Wyoming,” “Digital Humanities for the Public Sphere,” and “Professional and Technical Communication and Community Engagement.” This course number will also be convenient for cross-listing courses in English with departments that already have public humanities coursework on the books. As our new hires are made and their future courses take shape, we will put relevant recurring offerings through the course approval process.

monitored by the PhD program director, the staff coordinator, and the dissertation advisor.<sup>14</sup> Dissertation committees must be formed by the end of fourth semester and portfolio-based qualifying exams must be completed by the end of the fifth semester.

Year four will be devoted to dissertation completion, with full-time doctoral candidates moving back onto state-funded GTA lines and typically teaching COM courses. This capstone will be customized to each student's career goals in consultation with the graduate director and the student's dissertation committee. The PhD dissertation capstone may take multiple forms: a traditional, multi-chapter, argument-driven dissertation; a series of integrated publishable articles (each 20-30 pages in length) aimed at public-facing venues; a large-scale portfolio of writing and research on critical, pedagogical, creative, digital, and/or professional genres (grants, curricula, websites, short films, podcasts, etc.); a mixed- or multi-media archive combining objects, digital recordings, or other artifacts of public programs designed, organized, and led, including events, exhibits, tours, lectures, visual mapping, film series, fundraisers; a professional project, following research-based best practices, undertaken to further the aims of an organization or other entity accompanied by appropriate written deliverables outlining design, implementation, and results; etc.

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<sup>14</sup> Existing Internal and External Partnerships for Internships

A. Internal English Department Partnerships:

ACES: Advising, Career, Exploratory Studies Center Advisor Handbook internship (Richard Miller)  
Art Museum (Nicole Crawford)  
Coe Library Research and Instruction Internship (Kaijsa Calkins/Sammie Peter)  
[Eighteenth-Century Life](#) Internship (Ric Reverand & Michael Edson, editors)  
English Language Center (Petra Heinz)  
Green Dot  
Haub School (John Koprowski)  
Honors College SOAR Internship (Peter Parolin and Breezy Taggart)  
Neltje Center for Excellence in Creativity and the Arts  
[Prompt: A Journal of Academic Writing Assignments](#) (Kelly Kinney & Rick Fisher, editors)  
UW Foundation Prospect Development & Corporate Engagement Internships (Cayden Ferrin/Angela Ploeg)  
Writing Center (Francesca King)  
Wyoming Institute for Humanities Research (Scott Henkel)  
Wyoming Pathways from Prison (Robert Coulter)  
Wyoming Youth Latino Conference Instructional Design & School Coordinator Internships (Cecilia Aragon)

B. Past and Present External (local, statewide) Partnerships:

Thomas Baker, Superintendent, Fort Laramie NPS  
Brenda Birkle, My Front Door, Cheyenne  
Mark Brammer, Wyoming State Museum, Cheyenne  
Rosie Berger, Executive Council Member, ENDOW Committee, Cheyenne  
Pete Gosar, Downtown Clinic, Laramie  
John Keck, State Coordinator, Wyoming-Montana NPS, Bighorn  
Damien Kortum, Dean, Academic Affairs, LCCC, Cheyenne  
Delissa Minnick, Field Manager, Bureau of Land Management, Cody  
Bailey Quick, Grants Manager, Albany County  
Bob Sell, CEO, Ark Regional Services, Laramie  
Trey Sherwood, Main Street Alliance, Laramie  
Kelly Strampe, Eastern Wyoming College, Torrington  
Buck Tilton, Central Wyoming College, Riverton  
Gayle Woodsum, Founder, Feeding Laramie Valley, Laramie  
Robin Zimmer, Executive Director, COMEA Shelter, Cheyenne

We are, of course, seeking out new partnerships all the time, so this list will continue to grow.

Such research is in keeping with the Modern Language Association (MLA)'s recommendations in its 2014 *Report of the MLA Task Force on Doctoral Study in Modern Language and Literature*, which recommends the traditional dissertation be reimagined in flexible, relevant ways.<sup>15</sup> This recommendation informs the design of a dissertation as a kind of extended professional portfolio customized to student needs and aimed at audiences both within but increasingly also beyond the academy.

### **New Course Description**

Our only new course needed to start the program, English 5011: Professional and Technical Communication: Histories, Theories, and Public Engagement Pedagogies, focuses on theoretical and practical issues in technical communication, giving doctoral students a strong basis to develop USP COM technical communication courses that explore real-world, public engagement contexts. Students will read and write about theories, trends, and issues in the profession; explore the historical growth of technical communication to include community engagement work; and learn about research issues they might encounter in more depth later in their studies. Because the course is intended to give students an understanding of the discipline of technical communication's role in public engagement, it will focus on questions surrounding what the profession is. Is technical writing and communication a product or a practice? A discipline or a profession? Where and how has it been and will it be formed? Where did it come from and where is it going? Featured assignments will include:

- A program profile, through which students research technical communication courses at other institutions that engage in public humanities and community work;
- A textbook review, through which students examine a potential textbook they may adopt for a COM technical communication course on community engagement;
- A prototype syllabus, through which students use best practices discussed in our course readings and inspiration from colleagues, favorite teachers, and their own pedagogical imagination to develop a sample syllabus for English 4010 or another COM course that focuses on technical and professional communication and community engagement;
- Through informal classroom activities such as classroom discussion, journaling/posting, and peer review, students will also become acquainted with issues that complicate public humanities research, teaching, and work across sites in Wyoming and beyond, and thus become better prepared to take on a range of community-engaged research tasks and work beyond the doctoral program.

### **Assessment Plan**

Although English as a discipline has no national accrediting body, UW English consistently wins top scores for the assessment of our USP programs, undergraduate major, and master's programs. This is in no small part because many English faculty are specialists in assessment, and we will continue to meet the highest standards for university accreditation should the PhD program come to fruition.

#### *Phase 1. Implement Outcomes/Evaluate Objectives*

Working with PhD faculty, the English Department chair and PhD program director will evaluate 2-3 learning outcomes in core courses per assessment cycle or as determined by the institution.

#### *Phase 2. Direct Assessment of Student Learning*

##### Entrance Justification (pre)

Every matriculating student will submit by the end of their first semester a statement of rationale/justification for pursuing the English PhD, including identifying a career goal and preferred coursework.

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<sup>15</sup> <https://www.mla.org/content/download/25437/file/taskforcedocstudy2014.pdf>, page 14 specifically.



### Surveys (during)

Students will be given a direct assessment quiz at both the start and the end of the required coursework assessing one or two of the degree outcomes.

### Exit Reflection (post)

In addition to an exit interview, graduating students reflect in writing on what skills they gained in the program. This reflection focuses on outcomes determined in Phase 1.

### Direct Assessment of Dissertation (post)

English PhD faculty appointed by PhD director will develop rubrics for assessing capstone quality according to ENGL PhD learning outcomes. This assessment will be conducted annually via two methods:

- Dissertation Post-Defense Evaluation, Students
- Dissertation Post-Defense Evaluation, Committee Members

Using a four-point rating system (excellent/good/fair/poor, with poor = 1 point and excellent = 4 points), faculty chairing dissertations will assess student learning outcomes. Using a similar four-point system already established for our master's program, students will assess their learning experience during the dissertation process, albeit with attention to the specific learning outcomes to the doctoral program.

### Degree Program Evaluation (ongoing)

The English Graduate Committee will review assessment data for the program every five years. Materials to be reviewed include exit interviews, surveys, and post-defense evaluations, from both students and committee members. The committee will produce a report with recommendations for changes in the PhD structure based on the data collected.

### Substantive Change Determination

According to the Higher Learning Commission's determination, the new English PhD in the Public Humanities has been authorized given the program's lack of substantive changes to UW's offerings: as the response email dated 12/22/23 reads "HLC has determined that it has sufficient information to constitute notification of the proposed degree program per policy and no further action is required."

### New Resources Required

Fortunately, the faculty hires necessary to stand up the program have been approved by the Provost's Office and fast-tracked given the generous support of the Mellon Foundation. They include three faculty searches to commence in AY 2024-2025, and an additional hire following. The hires will include:

- Assistant Professor in Creative Writing-Nonfiction with an emphasis in Public Humanities Programming
- Assistant Professor in Indigenous Humanities with an emphasis in Environmental Stewardship
- Assistant Professor in Ethnic Humanities (open specialty) with an emphasis on Digital Humanities
- Assistant Professor in Professional and Technical Communication with an emphasis on Public Advocacy

To attract the broadest range of qualified applicants, the job advertisements for these positions will be inclusive, broad, and leave the secondary emphases flexible.

Regarding program administration and graduate student instructional staffing, we can keep our on-campus graduate programs roughly the same size but reallocate 9 of our current master's-level GTA lines into 12 of the PhD GTA lines necessary to stand up a competitive program with appropriate minimum graduation rates: that is, our goal after the initial four-to-five years is to graduate up to 3 full-time doctoral students plus at least 2 additional part-time students annually, thus achieving the 5 degree conferrals needed each year to keep the program sustainable. This will mean only a modest infusion of new money to support 3 state-funded doctoral-level GTA positions, totaling in **\$65,114.56 new ongoing dollars**

**annually** (see Appendix 1: Four-Year Graduated Budget). Again, other ongoing costs will be covered by the elimination of two of our full-time temporary faculty—money that is already allocated within the English Department’s current budget. As our department’s FTEs and credit hour generation demonstrate, we are among the most financially efficient departments on campus, but we will require a modest infusion of new dollars to help pay for the 3 additional GTAs lines.

To recap, the department is prepared to convert a large sum of existing budget dollars to support the doctoral program by eliminating two full-time temporary instructors. Further, UW English already devotes over \$140k annually in department budget and Foundation money to fund graduate teaching assistants: many of these funds were previously allocated to the department because of the revenue generation power of our successful low-residency online MA program. Perhaps most promisingly, the Mellon Foundation has recently awarded the department an \$850k seed grant for developing our public humanities doctoral initiatives, dollars that will allow us to expedite the hiring of additional faculty required to stand up the doctoral program, but that will only be available to us in the first three years. In short, English has a long and successful history of entrepreneurial programming and successful fundraising, and we will continue to put those dollars back into our graduate programs. Mellon Funds and our already existing technological, library, marketing, and digital funding sources will cover costs we have in these areas.

### **Executive Summary of Demand Statistics**

The English PhD in the Public Humanities will recruit and attract many non-traditional doctoral students with professional backgrounds beyond a recent BA or MA in English: inquiries about the program have already come, for instance, from people working in the non-profit sector with backgrounds in Communications; from working professionals in museum management and curation with MA degrees in Public History; from Wyoming community college instructors across a variety of disciplines; from Wyoming Humanities Council employees, and so forth. However, it is also worth noting that Grays Market data indicates a significant recent increase in graduates (30% in English Language & Literature; 72% in Rhetoric, Composition & Writing Studies, which includes Professional and Technical Communication, over the past three years) from English MA programs in the region (WY, UT, SD, NE, ND, MT, ID, and CO), and that very few PhD programs—none in the Public Humanities—exist in the Mountain West. Indeed, while English PhD programs nationally graduated 1,197 students per year between 2020 and 2022, English PhD programs in our region graduated only 20 of those students on average annually. Five states in the nation currently offer no English PhD programs: one of them, of course, is Wyoming, and another is nearby Montana. This indicates that there is a regional gap in the market for our PhD program to fill, especially considering most of the English PhD programs that exist in the region (including those at the University of South Dakota; University of Utah; University of Denver; and the University of Colorado, Boulder) follow extremely traditional curricula and culminate in standard book-length dissertation projects that aim to prepare students for academic careers—careers that, as the Grays Market data confirms, are few and far between. UW’s English PhD in the Public Humanities is therefore substantially and innovatively distinct from the programs of our regional comparators, and indeed from virtually all the programs being polled by the Grays Market data national analysis. There are a handful of new Public Humanities certificates that students can add on to more traditional humanities PhD work recently been launched nationally, including at NYU, Yale, and Northwestern, along with several Public Humanities tracks in English MA programs across the country (including our own), but there are no available full-length PhD program comparators that exist. Not one.

In other words, while Grays Market data indicates that the academic job market in the humanities is significantly saturated, the UW English PhD in the Public Humanities will not seek primarily to prepare students for careers in academia. Rather, the program will equip its graduates with the high-level training necessary to become thought leaders in a range of professions, including non-profit, corporate, tourism, heritage, and community engagement sectors. What’s more, Grays Market data indicates that English

PhD graduates with preparation in Professional, Technical, Business, and Scientific Writing—the closest existing comparator category to a degree in the Public Humanities—make on average an annual salary of \$100,130, and that “transferable skills abound” across employment sectors from such degrees: this in large part explains why these degree conferrals are significantly on the rise in our region.<sup>16</sup> Ultimately, then, although there are very few true comparators available for a PhD program focusing on public-facing work and community engagement, our market analysis indicates both broad recruitment opportunities and ample pathways to post-graduation success for our doctoral students.

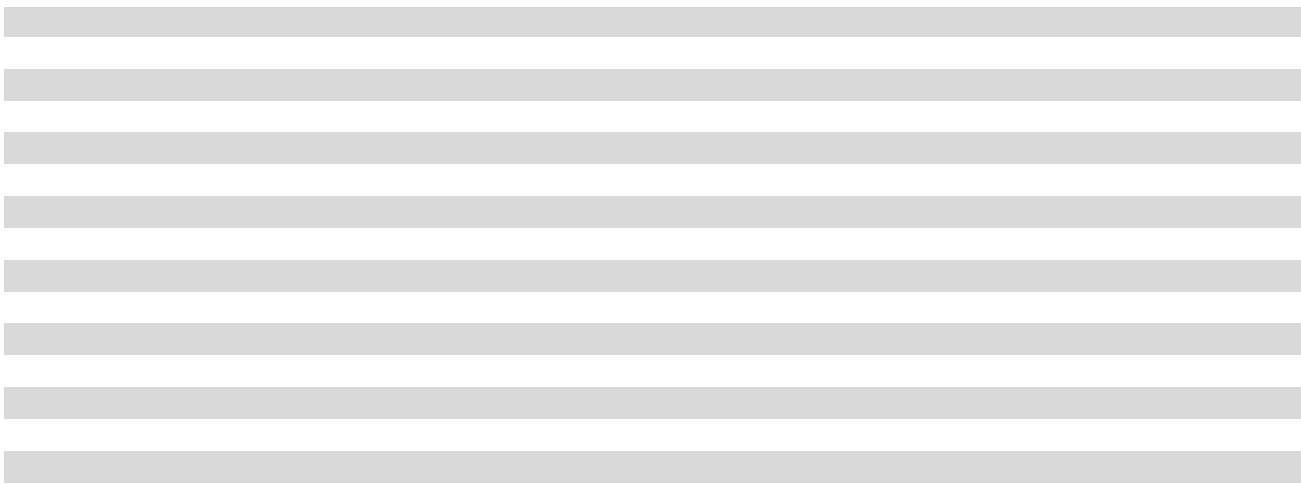
In keeping, beyond the university administration’s and the Mellon Foundation’s generous support of faculty hires—and given the relatively low amount of new dollars necessary to stand up a program of this caliber—the Department of English will work with the College of Arts and Sciences to allocate the necessary **\$202,122.50** annually to begin this signature and groundbreaking program, only some of which will be necessary to allocate during the first four years of its inception. As time moves forward, as additional campus units and community partners become invested in the program, and as the English Department pursues future funding opportunities, we are optimistic that more funding sources will become available to help offset these costs.

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<sup>16</sup> See, again, Appendix 3, pp. 16.







	Academic Year 2024-2025		Academic Year 2025-2026				Academic Year 2026-2027					Academic Year 2027-2028					Comments	
	New Admitted Students	Total Student Credit Hours	New Admitted Students	2nd Year Students	Total Enrollment	Total Student Credit Hours	New Admitted Students	2nd Year Students	3rd Year Students	Total Enrollment	Total Student Credit Hours	New Admitted Students	2nd Year Students	3rd Year Students	4th Year Students	Total Enrollment		Total Student Credit Hours
<b>Main Campus*</b>																		Notes
Resident	6	108.0	3	6	9	162.0	3	3	6	12	156.0	3	3	3	6	15	180.0	<p>Given Mellon Funding, we will admit 6 rather than the traditional 3 fully-funded students in the first year. Thereafter, we will admit 3 students per AY, with the ongoing total enrollment after year four of 12 (rather than 15) students.</p> <p>Because we will only admit students on grant or state funding, all students will qualify for resident tuition.</p>
Non-resident	0	0.0	0	0	0	0.0	0	0	0	0	0.0	0	0	0	0	0	0.0	
	<b>6</b>	<b>108.0</b>	<b>3</b>	<b>6</b>	<b>9</b>	<b>162.0</b>	<b>3</b>	<b>3</b>	<b>6</b>	<b>12</b>	<b>156.0</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>6</b>	<b>15</b>	<b>180.0</b>	

Enter the anticipated number of students admitted to the program each year by student type in the yellow cells.

\*Main Campus refers to the student's classification, not the the location of any particular course offerings.

If you are proposing a program with a tuition rate other than the standard university rate, please contact the Budget Office.

	Academic Year 2024-2025			Academic Year 2025-2026			Academic Year 2026-2027			Academic Year 2027-2028		
	<i>Projected Tuition Rates</i>	<i>Student Credit Hours</i>	<i>FY25 Projected Revenue</i>	<i>Projected Tuition</i>	<i>Student Credit Hours</i>	<i>FY26 Projected Revenue</i>	<i>Projected Tuition</i>	<i>Student Credit Hours</i>	<i>FY27 Projected Revenue</i>	<i>Projected Tuition</i>	<i>Student Credit Hours</i>	<i>FY28 Projected Revenue</i>
<b>Main Campus</b>												
Resident	\$336	108.0	\$ 36,288	\$349	162.0	\$ 56,609	\$363	156.0	\$ 56,693	\$378	180.0	\$ 68,032
Non-resident	\$1,006	0.0	-	\$1,046	0.0	-	\$1,088	0.0	-	\$1,132	0.0	-
		<b>108.0</b>	<b>\$36,288</b>		<b>162.0</b>	<b>\$56,609</b>		<b>156.0</b>	<b>\$56,693</b>		<b>180.0</b>	<b>\$68,032</b>





**ACADEMIC AND STUDENT AFFAIRS**  
**COMMITTEE MEETING MATERIALS**

**AGENDA ITEM TITLE: Consideration and Action: Modifications to UW Regulation 11-7 (Wyoming Union), (Sullivan, Chestnut, Evans)**

- OPEN SESSION
- CLOSED 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:

UW Regulation 11-7 (Wyoming Union) outlines the purposes of the Wyoming Union, including that it will provide for services, dining amenities, and conveniences in accordance with the needs of the University community; opportunities for experiential learning through various activities and programs facilitated or coordinated in collaboration with faculty and staff; a variety of educational, cultural, recreational, social, and entertainment programs; multi-purpose facilities for activities, programs, meetings, and conferences of University students, recognized student organizations, University employees, and related educational groups; and public space and furnishings which are comfortable, modern, aesthetically pleasant, and support the informal gathering of University students, employees, and other members of the University community.

The regulation also describes the Student Involvement and Leadership Committee. The proposed changes revert the Committee name back to the Wyoming Union Board and modifies representation of this committee. These changes will bring the University in alignment with best practices with other Unions by including students from a variety of areas related to programming in the building serving as representatives.

Per the routing process for UW Regulations, the proposed modifications to UW Regulation 11-7 were provided to the President's Cabinet, Deans and Directors, Faculty Senate, Staff Senate, ASUW, and the Internal Auditor. No comments were provided.

PRIOR RELATED COMMITTEE DISCUSSIONS/ACTIONS:

The Board is regularly presented with proposed modifications to UW Regulations.

WHY THIS ITEM IS BEFORE THE COMMITTEE:

UW Regulation 1-101 requires that the Board approve modifications to UW Regulations.

**ACTION REQUIRED AT THIS COMMITTEE MEETING:**

Committee and Board approval or disapproval of the proposed modifications.

**PROPOSED MOTION:**

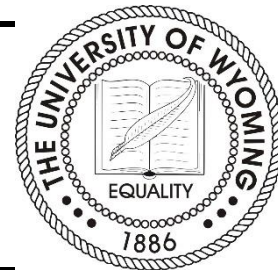
"I move to approve modifications to UW Regulation 11-7 as presented to the Board. "

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## UNIVERSITY OF WYOMING REGULATIONS

**Subject:** Wyoming Union  
**Number:** UW Regulation 11-7

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### I. GENERAL INFORMATION

Under the constitutional and statutory authority established by the State of Wyoming, the Board of Trustees of the University approved the establishment and construction of the Wyoming Union facility and approved the issuance of bonds for the purpose of financing this construction. Pursuant to UW Regulation 1-1 and as the chief executive officer of the University, the President, subject to the authority of the Trustees, has ultimate responsibility in all matters of general policy relative to the use, administration and management of the Wyoming Union. In accordance with that responsibility, the Wyoming Union will be administered and utilized in accordance with this Regulation.

### II. PURPOSE

The Wyoming Union shall provide a community center at the University of Wyoming and shall enhance and complement activities in pursuit of the educational purposes of the University. The Wyoming Union shall remain student-oriented by providing employment, involvement, and governance opportunities for students, and operating within the physical and financial capabilities of the facilities. In the interest of fulfilling the needs of the University community, the Wyoming Union will provide:

- A. Services, dining amenities, and conveniences in accordance with the needs of the University community;
- B. Opportunities for experiential learning through various activities and programs facilitated or coordinated in collaboration with faculty and staff. Engagement approaches will utilize both informal and formal education methods, with in-person and online interactions, all of which enhance student leadership and management skills;
- C. A variety of educational, cultural, recreational, social, and entertainment programs;

- D. Multi-purpose facilities for activities, programs, meetings, and conferences of University students, recognized student organizations, University employees, and related educational groups; and
- E. Public space and furnishings which are comfortable, modern, aesthetically pleasant, and support the informal gathering of University students, employees, and other members of the University community.

~~I. STUDENT INVOLVEMENT AND LEADERSHIP COMMITTEE~~

III. WYOMING UNION BOARD

~~The Student Involvement Wyoming Union Board is an advisory board to the Director of the Wyoming Union and Leadership Committee shall be chaired by the Dean of Students or designee, and consists of the Vice President for Finance and Administration or designee, one faculty member to be appointed by~~ operate in accordance with the Wyoming Union Board Policy. Composition of the board shall include twelve (12) student representatives, a representative from Faculty Senate, and no more than 12 members of the Center for Student Involvement and Leadership, as determined by the Dean of Students. ~~This Committee may provide recommendations to the President and a representative from Staff Senate, the Vice President for Student Affairs on operation of the Wyoming Union (or designee), the Vice President for Budget and Finance (or designee), and the Vice President for Campus Operations (or designee).~~

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**Responsible Division/Unit:** Division of Student Affairs

**Source:** None

**Links:** <http://www.uwyo.edu/regs-policies>

**Associated Regulations, Policies, and Forms:** None

**History:**

University Regulation 245, Revision 2; adopted 7/17/2008 Board of Trustees meeting  
 Revisions adopted 9/12/2014 Board of Trustees meeting  
 Reformatted 7/1/2018: previously UW Regulation 2-245, now UW Regulation 11-7  
 Revisions adopted 3/26/2020 Board of Trustees meeting

**ACADEMIC AND STUDENT AFFAIRS**  
**COMMITTEE MEETING MATERIALS**

**AGENDA ITEM TITLE:** Changes to Existing Programs, (Carman, Barrett)

- OPEN SESSION  
 CLOSED 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:

During AY23/24 several changes to existing programs have been processed through Academic Affairs. The changes are considered minor in nature and provided to the AA/SA Committee for review. The changes include:

- B.S. degree in Animal and Veterinary Science (ANVS) - the Animal Science and Veterinary Sciences departments are proposing a revised curriculum that only requires 120 credit hours and is reduced to four concentrations:
  - Equine Science
  - Food Animal Industries
  - Pre-Veterinary Medicine
  - Animal Biosciences
- Arts Entrepreneurship Certificate – adapted from existing Music Entrepreneurship certificate :
  - The Department of Music created the Certificate of Music Entrepreneurship in 2019 with the goal of expanding music students’ understanding of employment opportunities in music and music-adjacent fields after graduation. In the summer of 2020, the Departments of Art and Theatre & Dance expressed interest in adapting Music’s format and offering a similar certificate.
  - The new version of the certificate curriculum and name better reflects the work that was already being done while allowing faculty to learn from each other and emphasize common threads in each discipline.

PRIOR RELATED COMMITTEE DISCUSSIONS/ACTIONS:

None

WHY THIS ITEM IS BEFORE THE COMMITTEE:  
Provided for AA/SA Committee for review.

ACTION REQUIRED AT THIS COMMITTEE MEETING:

PROPOSED MOTION:



**Existing College, Department, Degree Program, Certificate Program  
Change Request for  
Title Change, Degree Designation, Content Change, or CIP Change**

**Directions:** Complete this form and proposal template to request a change to the title (name) of an existing college, department, degree program or certificate program; to request a change to the Classification of Instructional Programs (CIP) code of an existing degree or certificate program; and/or the content change for an existing degree or certificate program. The degree or certificate 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 rationale 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 recommends 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.



**Request for a change to the title (name) of an existing college, department, degree program, or certificate program. For degree or certificate name change, please describe any change in content (if any) to the program.**

**Guidance:** Name and identity are closely related. A “brand” as represented by the name has value and so careful planning for a name or designation change is a worthwhile investment. Academic entities 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 entity for many years to come. Ideally, consultation with and support from the entity’s students in course and alumni should be evident in the proposal.

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

Names that narrow the 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 name or CIP code are that the new name more accurately reflects the academic entity than the old name; that the activities of the 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 information on p. 4**

1. Proposing Unit: Department of Animal Science and Department of Veterinary Sciences
  
2. Current College, Department, Degree Program, or Certificate Title – *Current official name of the college, department, degree program, or certificate (e.g., College of Business, Department of Botany, Bachelor of Business Administration degree with a major in Accounting, etc.):*  
  
College of Agriculture, Life Sciences and Natural Resources; Department of Animal Science and Department of Veterinary Sciences; Bachelor of Science degree in Animal and Veterinary Sciences
  
3. If Degree Program or Certificate change, Current Degree Program CIP Code:
  
4. Contact Person: *Provide contact information for the person who can answer specific questions about the degree program and change proposal.*

Name: Bledar Bisha & Jonathan Fox

Title: Department Heads (Animal Science & Veterinary Sciences)

E-mail: [bbisha@uwyo.edu](mailto:bbisha@uwyo.edu) ; [jfox7@uwyo.edu](mailto:jfox7@uwyo.edu)

Phone: 307-766-3140; 307-766-9988

**Request for Change in College, Department, Degree Program, Certificate Designation**

**Reason for Change:**

- Background: An overview explanation of why the change(s) is being requested; how will it improve the college, department, or degree program and benefit students and faculty?

The B.S. degree in Animal and Veterinary Science (ANVS) is jointly administered by the Animal Science and Veterinary Sciences departments. The degree program currently includes eight concentrations from which students can focus their studies:

- Production
- Range Livestock
- Business
- Communication
- Animal Biology
- Meat Science and Food Technology
- Pre-Veterinary Medicine
- Equine Science

All eight concentrations require completion of 128 credit hours for graduation. Recently, college administrators requested that the Animal Science and Veterinary Sciences departments re-evaluate the ANVS degree program to reduce the credit load to 120 credit hours, which is equivalent to the majority of other undergraduate degree programs offered at UW. Additionally, faculty in both departments and undergraduate advisors have raised concerns about the low enrollment numbers in a few of the eight concentrations offered.

To address both concerns, the Animal Science and Veterinary Sciences departments are proposing a revised curriculum that only requires 120 credit hours and is reduced to four concentrations:

- Equine Science
- Food Animal Industries
- Pre-Veterinary Medicine
- Animal Biosciences

These four concentrations align with the interests of the majority of undergraduate students who are currently working toward, or have historically earned, an ANVS degree from UW. More importantly, students following degree requirements in any of the four concentrations will meet student learning outcomes jointly outlined by both departments. Students will be well prepared for a career in the fields of animal science, animal industries, animal health, and veterinary sciences after completing coursework under the newly proposed curriculum.

In addition, the previous curriculum was unnecessarily complicated with substantial overlap between the eight concentrations. This change to four concentrations will allow for clear alignment of concentration-specific learning goals and create more clarity between the specific areas of focus within the Animal and Veterinary Science major.

A logistic advantage to the proposed curriculum change is that each of the four concentrations will require students to take a common core set of courses. The current curriculum does not have a continuity in course requirements, as no common core is outlined. This means that some students graduating with the current ANVS degree have not taken a common set of courses integral to the training of students as animal or veterinary scientists. Faculty in both the Animal Science and Veterinary Sciences

departments have agreed upon the proposed common core to ensure that graduating students will be consistently trained in areas related to both disciplines. Core courses include an introduction to animal science, anatomy and physiology, animal nutrition, animal reproduction, animal diseases, and communication within animal and veterinary disciplines. This addition of a common core will also make advising students in the ANVS degree much more seamless, particularly if a student wishes to switch concentrations within the major. Additionally, the reduction to four concentrations maintains student choice in an area of emphasis while still maintaining alignment of core learning objectives. This provides flexibility to students wishing to switch between concentrations without delaying academic progress.

- Proposed changes: List the specific rationale for that change.

We propose a change from the current ANVS major with 8 concentrations (Animal Biology, Business, Communication, Equine, Pre-Veterinary Medicine, Production, Range Livestock, Meat Science & Food Technology) and a 128 credit hour requirement, to 4 concentrations (Food Animal Industries, Equine Science, Pre-Veterinary Medicine, Animal Biosciences) with a 120 credit hour requirement. This revision simplifies the major, adds a core-curriculum, and ensures that all concentrations have a standard 120 credit hour requirement. The proposed curriculum for each “new” concentration is outlined below:

Equine Science Concentration						
University Studies Program (USP 2015)		Cr Hrs	UD	Major	Notes	
FYS	First Year Seminar course	3				
COM1	College Composition and Rhetoric	3				
COM2	Intermediate Communication	3				
COM3	Advanced Communication	*			met within concentration	
Q	Quantitative Reasoning	*			met within concentration	
PN	Physical & Natural World	*			met within concentration	
PN	Physical & Natural World	*			met within concentration	
H	Human Culture	*			met within concentration	
H	Human Culture	3				
V	US/WY Constitution course	3				
<i>subtotal</i>		<b>15</b>	<b>0</b>	<b>0</b>		
Animal and Veterinary Science Core		Cr Hrs	UD	Major	Pre-Requisites	
<u>Animal and Veterinary Sciences</u>						
	ANSC 1010	Introduction to Animal Science	4		4	<i>none</i>
	ANSC 3010	Comp Anatomy & Physiology of Dom Animals I (C)	4	4	4	LIFE 2022 (C) or concurrent
	ANSC 3100	Principles of Animal Nutrition (C)	3	3	3	ANSC 2010 or CHEM 2300
	ANSC 4120	Principles of Mammalian Reproduction (C)	4	4	4	ANSC 3010 or ZOO 3115
COM3	ANSC 4630	Topics and Issues in Animal Science (C)	3	3	3	SR standing, COM2
-OR-						
COM3	PATB 4130	Mammalian Pathobiology (C)	*3	*3	*3	LIFE 2022 (C)
	PATB 4110	Diseases of Food Animals (C)	3	3	3	LIFE 2022
<u>Supporting Math/Science</u>						
PN	LIFE 1010	General Biology (C)	4			MATH ACT 23 or concurrent MATH 1400
PN	LIFE 2022	Animal Biology (C)	4			LIFE 1010 (C)
Q	MATH 1400	College Algebra (C)	3			MATH 0925(C) or MATH ACT 23 or MPE 3
Q	STAT 2050	Fundamentals of Statistics	4			MATH 1400 (C)
<i>subtotal</i>		<b>36</b>	<b>17</b>	<b>21</b>		
Equine Science Concentration		Cr Hrs	UD	Major	Pre-Requisites	
<u>Animal and Veterinary Sciences</u>						
	ANSC 1030	Equine Management	3		3	<i>none</i>
	ANSC 2000	Equine Industry Career Preparation	3		3	ANSC 1030
	ANSC 2020	Feeds & Feeding	4		4	<i>none</i>
	ANSC 3150	Equine Nutrition and Physiology	3	3	3	4 hrs biological science
	ANSC 3250	Equine Behavior and Welfare	3	3	3	ANSC 1030, 3150
	ANSC 4132	Equine Reproduction	3	3	3	
	ANSC 4250	Advanced Equine Production and Management	3	3	3	ANSC 1030, 3100, 4120, 4542
	PATB 4500	Veterinary Parasitology	4	4	4	8 hr biological sciences
	ANSC 4540	Principles of Animal Breeding (C)	3	3	3	STAT 2050
<u>Supporting Agriculture/Math/Science</u>						
PN	CHEM 1000	Introductory Chemistry	4			MATH 0925(C) or MATH ACT 23 or MPE 3
	ANSC 2010	Domestic Animal Metabolism	3		3	CHEM 1000
-OR-						
	CHEM 2300	Introductory Organic Chemistry	*4			CHEM 1000
H	AGEC 1020	Principles of Microeconomics	3			<i>none</i>
	AGEC 2020	Farm and Ranch Business Management	4			<i>none</i>
	REWM 2000	Principles of Range Management	3			LIFE 1010
<i>subtotal</i>		<b>46</b>	<b>19</b>	<b>32</b>		
Electives						
Free electives		23	6			
<i>subtotal</i>		<b>23</b>	<b>6</b>	<b>0</b>		
TOTAL		120	42	53		

Food Animal Industries Concentration						
University Studies Program (USP 2015)				Cr Hrs	UD	Major Notes
FYS			First Year Seminar course	3		
COM1			College Composition and Rhetoric	3		
COM2			Intermediate Communication	3		
COM3			Advanced Communication	*		met within concentration
Q			Quantitative Reasoning	*		met within concentration
PN			Physical & Natural World	*		met within concentration
PN			Physical & Natural World	*		met within concentration
H			Human Culture	*		met within concentration
H			Human Culture	3		
V			US/WY Constitution course	3		
<b>subtotal</b>				<b>15</b>	<b>0</b>	<b>0</b>
Animal and Veterinary Science Core				Cr Hrs	UD	Major Pre-Requisites
<b>Animal and Veterinary Sciences</b>						
	ANSC	1010	Introduction to Animal Science	4		4 none
	ANSC	3010	Comp Anatomy & Physiology of Dom Animals I (C)	4	4	4 LIFE 2022 (C) or concurrent
	ANSC	3100	Principles of Animal Nutrition (C)	3	3	3 ANSC 2010 or CHEM 2300
	ANSC	4120	Principles of Mammalian Reproduction (C)	4	4	4 ANSC 3010 or ZOO 3115
COM3	ANSC	4630	Topics and Issues in Animal Science (C)	3	3	3 SR standing, COM2
-OR-						
COM3	PATB	4130	Mammalian Pathobiology (C)	*3	*3	*3 LIFE 2022 (C)
	PATB	4110	Diseases of Food Animals (C)	3	3	3 LIFE 2022
<b>Supporting Math/Science</b>						
PN	LIFE	1010	General Biology (C)	4		4 MATH ACT 23 or concurrent MATH 1400
PN	LIFE	2022	Animal Biology (C)	4		4 LIFE 1010 (C)
Q	MATH	1400	College Algebra (C)	3		3 MATH 0925(C) or MATH ACT 23 or MPE 3
Q	STAT	2050	Fundamentals of Statistics	4		4 MATH 1400 (C)
<b>subtotal</b>				<b>36</b>	<b>17</b>	<b>21</b>
Food Animal Industries Concentration				Cr Hrs	UD	Major Pre-Requisites
<b>Animal and Veterinary Sciences</b>						
	ANSC	2020	Feeds & Feeding	4		4 none
	ANSC	2070	Livestock Behavior and Handling	2		2 ANSC 1010
	ANSC	4540	Principles of Animal Breeding (C)	3	3	3 STAT 2050
	FDSC	2040	Principles of Meat Animal Evaluation	3		3 none
	FDSC	3060	Principles of Meat Science and Muscle Biology (C)	4	4	4 CHEM 1000; LIFE 1010
	ANSC	4220	Advanced Beef Production and Management	3	3	3 ANSC 3100, 4120, 4540
	ANSC	4230	Advanced Sheep Production and Management	3	3	3 ANSC 3100, 4120, 4541
	PATB	4500	Veterinary Parasitology	4	4	4 8 hr biological sciences
<b>Supporting Agriculture/Math/Science</b>						
PN	CHEM	1000	Introductory Chemistry	4		4 MATH 0925(C) or MATH ACT 23 or MPE 3
	ANSC	2010	Domestic Animal Metabolism	3		3 CHEM 1000
-OR-						
	CHEM	2300	Introductory Organic Chemistry	*4		*4 CHEM 1000
H	AGEC	1020	Principles of Microeconomics	3		3 none
	AGEC	2020	Farm and Ranch Business Management	4		4 none
	REWM	2000	Principles of Range Management	3		3 LIFE 1101 or LIFE 1010
-OR-						
	PLNT	4700	Forage Crop Science	*3	3	*3 LIFE 1010
<b>subtotal</b>				<b>43</b>	<b>20</b>	<b>29</b>
Electives						
Free electives				26	11	
<b>subtotal</b>				<b>26</b>	<b>11</b>	<b>0</b>
<b>TOTAL</b>				<b>120</b>	<b>48</b>	<b>50</b>

Pre-Veterinary Medicine Concentration						
<b>University Studies Program (USP 2015)</b>						
			Cr Hrs	UD	Major	Notes
FYS		First Year Seminar course	3			
COM1		College Composition and Rhetoric	3			
COM2		Intermediate Communication	3			
COM3		Advanced Communication	*			met within concentration
Q		Quantitative Reasoning	*			met within concentration
PN		Physical & Natural World	*			met within concentration
PN		Physical & Natural World	*			met within concentration
H		Human Culture	3			
H		Human Culture	3			
V		US/WY Constitution course	3			
<b>subtotal</b>			<b>18</b>	<b>0</b>	<b>0</b>	
<b>Animal and Veterinary Science Core - Pre-vet</b>						
			Cr Hrs	UD	Major	Pre-Requisites
<b>Animal and Veterinary Sciences</b>						
	ANSC	1010	Introduction to Animal Science	4		4 none
	ANSC	3010	Comp Anatomy & Physiology of Dom Animals I (C)	4	4	4 LIFE 2022 (C) or concurrent
	ANSC	3100	Principles of Animal Nutrition (C)	3	3	3 ANSC 2010 or CHEM 2300
	ANSC	4120	Principles of Mammalian Reproduction (C)	4	4	4 ANSC 3010 or ZOO 3115
	PATB	4110	Diseases of Food Animals (C)	3	3	3 LIFE 2022
COM3	ANSC	4630	Topics and Issues in Animal Science (C)	3	3	3 SR standing, COM2
-OR-						
COM3	PATB	4130	Mammalian Pathobiology (C)	*3	*3	*3 LIFE 2022 (C)
<b>Supporting Math/Science</b>						
PN	LIFE	1010	General Biology (C)	4		MATH ACT 23 or concurrent MATH 1400
PN	LIFE	2022	Animal Biology (C)	4		LIFE 1010 (C)
Q	MATH	1400	College Algebra (C)	3		MATH 0925(C) or MATH ACT 23 or MPE 3
Q	STAT	2050	Fundamentals of Statistics	4		MATH 1400 (C)
<b>subtotal</b>			<b>36</b>	<b>17</b>	<b>21</b>	
<b>Pre-Veterinary Medicine Concentration</b>						
			Cr Hrs	UD	Major	Pre-Requisites
<b>Required Courses</b>						
	MICR/MOLE	2021	General Microbiology	4		LIFE 1010 (C or better), CHEM 1000 or CHEM 1020 (C or better)
	ZOO	3115	Human Systems Physiology	4	4	LIFE 1010 (C or better), CHEM 1050 or CHEM 1020 (C or better) or CHEM 1000 (B or better)
	MOLB	3610	Principles of Biochemistry	4	4	LIFE 1010; CHEM 2300 (C) or CHEM 2420 (C)
	PATB	2220	Pathogenic Microbiology	3		3
<b>Pathobiology (minimum 6 cr from the following)</b>						
	PATB	4500	Veterinary Parasitology	*4	*4	*4 8 hr biological sciences
	PATB	4710	Medical Virology	*3	*3	*3 MICR/MOLB 2240
	PATB	4300	Microscopic Anatomy	*3	*3	*3 LIFE 2022
	PATB	3400	Host Defense Against Infection	*3	*3	*3 MOLB/MICR 2021 or PATB/MICR 2220
<b>Animal Science (minimum 3 cr from the following)</b>						
	ANSC	4540	Principles of Animal Breeding (C)	*3	*3	*3 STAT 2050
	ANSC	4260	Mammalian Endocrinology	*3	*3	*3 ANSC 3010 or ZOO 3115 or equivalent
	ANSC	4050	Animal Growth and Development	*3	*3	*3 LIFE 2022
	FDSC	3060	Principles of Meat Science and Muscle Biology (C)	*4	*4	*4 CHEM 1000; LIFE 1010
	ANSC	4132	Equine Reproduction	*3	*3	*3 ANSC 1030 and ANSC 4120
	ANSC	3150	Equine Nutrition and Physiology	*3	*3	*3 none
<b>Supporting Math/Science/Chem</b>						
	MATH	1405	Trigonometry	3		MATH 1400 (C) or Math ACT 25 or MPE 4
	PHYS	1110	General Physics I	4		MATH 1405 or MATH 1450
	CHEM	2440	General Physics II	4		PHYS 1110
PN	CHEM	1020	General Chemistry I	4		MATH ACT 23 or concurrent MATH 1400
PN	CHEM	1030	General Chemistry II	4		CHEM 1020
	CHEM	2420	Organic Chemistry I	4		CHEM 1030
	CHEM	2440	Organic Chemistry II	4		CHEM 2420
	LIFE	3050	Genetics	4	4	LIFE 2022 (C)
	MOLB	4670	Advanced Molecular Cell Biology	3	3	MOLB 3610 or CHEM 4400 or MOLB 4600
-OR-						
	LIFE	3600	Cell Biology	*4	*4	LIFE 1010 (C or better) and LIFE 2022, LIFE 2023, MICR 2021 or MICR 2400 (C or better)
	STAT	4015	Regression Analysis		3	3 STAT 2050
-OR-						
	STAT	4025	Design and Analysis of Experiments I	*3	*3	STAT 2050
<b>subtotal</b>			<b>61</b>	<b>27</b>	<b>12</b>	
<b>Electives</b>						
Free electives			5			
<b>subtotal</b>			<b>5</b>	<b>0</b>	<b>0</b>	
<b>TOTAL</b>			<b>120</b>	<b>44</b>	<b>33</b>	

Animal Biosciences Concentration							
University Studies Program (USP 2015)				Cr Hrs	UD	Major	Notes
FYS			First Year Seminar course	3			
COM1			College Composition and Rhetoric	3			
COM2			Intermediate Communication	3			
COM3			Advanced Communication	*			met within concentration
Q			Quantitative Reasoning	*			met within concentration
PN			Physical & Natural World	*			met within concentration
PN			Physical & Natural World	*			met within concentration
H			Human Culture	3			
H			Human Culture	3			
V			US/WY Constitution course	3			
<b>subtotal</b>				<b>18</b>	<b>0</b>	<b>0</b>	
Animal and Veterinary Science Core				Cr Hrs	UD	Major	Pre-Requisites
<b>Animal and Veterinary Sciences</b>							
	ANSC	1010	Introduction to Animal Science	4		4	none
	ANSC	3010	Comp Anatomy & Physiology of Dom Animals I (C)	4	4	4	LIFE 2022 (C) or concurrent
	ANSC	3100	Principles of Animal Nutrition (C)	3	3	3	ANSC 2010 or CHEM 2300
	ANSC	4120	Principles of Mammalian Reproduction (C)	4	4	4	ANSC 3010 or ZOO 3115
COM3	ANSC	4630	Topics and Issues in Animal Science (C)	3	3	3	SR standing, COM2
-OR-							
COM3	PATB	4130	Mammalian Pathobiology (C)	*3	*3	*3	LIFE 2022 (C)
	PATB	4110	Diseases of Food Animals (C)	3	3	3	LIFE 2022
<b>Supporting Math/Science</b>							
PN	LIFE	1010	General Biology (C)	4			MATH ACT 23 or concurrent MATH 1400
PN	LIFE	2022	Animal Biology (C)	4			LIFE 1010 (C)
Q	MATH	1400	College Algebra (C)	3			MATH 0925(C) or MATH ACT 23 or MPE 3
Q	STAT	2050	Fundamentals of Statistics	4			MATH 1400 (C)
<b>subtotal</b>				<b>36</b>	<b>17</b>	<b>21</b>	
Animal Biosciences Concentration				Cr Hrs	UD	Major	Pre-Requisites
<b>Animal and Veterinary Sciences</b>							
	FDSC	3060	Principles of Meat Science and Muscle Biology (C)	4	4	4	CHEM 1000; LIFE 1010
	ANSC	4540	Principles of Animal Breeding (C)	3	3	3	STAT 2050
	PATB	4300	Microscopic Anatomy	3	3	3	LIFE 2022
	PATB	2400	Host Defense Against Diseases	3	3	3	MOLB/MICR 2021, PATB 2220
<b>Choose any 1 or more from the following:</b>							
	ANSC	4220	Advanced Beef Production and Management	3	3	3	ANSC 3100, 4120, 4540
	ANSC	4230	Advanced Sheep Production and Management	*3	*3	*3	ANSC 3100, 4120, 4540
	ANSC	4250	Advanced Equine Production and Management	*3	*3	*3	ANSC 1030, 3100, 4120, 4540
<b>Supporting Agriculture/Math/Science</b>							
PN	CHEM	1020	General Chemistry I	4			MATH ACT 23 or concurrent MATH 1400
PN	CHEM	1030	General Chemistry II	4			CHEM 1020
	CHEM	2300	Introductory Organic Chemistry	4			CHEM 1000
-- or --							
	CHEM	2420	Organic Chemistry I	4*			CHEM 1030
	CHEM	2440	Organic Chemistry II	4*			CHEM 2420
	MOLB	3610	Principles of Biochemistry	4	4	4	LIFE 1010; CHEM 2300(C) or CHEM 2420 (C)
	LIFE	3050	Genetics	4	4	4	LIFE 2022 (C)
	PHYS	1050	Concepts of Physics	4			MATH 1000 or MPE 2
	MICR/MOLB	2021	General Microbiology	4			LIFE 1010(C); CHEM 1000 or CHEM 1020
	ZOO	3600	Principles of Animal Behavior	3	3	3	intro course in zoology, biology or psychology
<b>subtotal</b>				<b>47</b>	<b>27</b>	<b>16</b>	
Electives							
Free electives				19	3		
<b>subtotal</b>				<b>19</b>	<b>3</b>	<b>0</b>	
<b>TOTAL</b>				<b>120</b>	<b>47</b>	<b>37</b>	



- Logistics: When is the change proposed to be effective. How will current students in the entity be handled? (Note: Generally, program 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.)

The curriculum change is proposed to be effective Fall 2024. Current students will remain under their existing catalog year and current curriculum requirements, unless they elect to change to the Fall 2024 catalog and hence to the proposed curriculum. The College's advisors will work with students to determine the feasibility/desirability of such change based on their progress toward degree completion. Students choosing to remain on a previous catalog year will not be affected, as all courses required in the current 8 concentrations will continue to be taught.

All courses in the proposed curriculum are currently being offered, with the exception of FDSC 2070: Livestock Behavior and Handling. This course has not been taught since 2021 due to faculty loss, however the vacancy has been filled and will be taught again starting in Spring 2025.

As some courses in the proposed curriculum would now be required for more than one concentration, there will likely be enrollment increases. This is expected in ANSC 1010: Introduction to Animal Science, ZOO 3115: Human Systems Physiology, and PATB 4500: Veterinary Parasitology. Instructors for these courses have been consulted on this expected enrollment increase and have advised they are equipped to handle such increases.



**Existing College, Department, Degree Program, Certificate Program  
Change Request for  
Title Change, Degree Designation, Content Change, or CIP Change**

**Directions:** Complete this form and proposal template to request a change to the title (name) of an existing college, department, degree program or certificate program; to request a change to the Classification of Instructional Programs (CIP) code of an existing degree or certificate program; and/or the content change for an existing degree or certificate program. The degree or certificate 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 rationale 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 recommends 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.

**Request for a change to the title (name) of an existing college, department, degree program, or certificate program. For degree or certificate name change, please describe any change in content (if any) to the program.**

The Department of Music created the Certificate of Music Entrepreneurship in 2019 with the goal of expanding music students' understanding of employment opportunities in music and music-adjacent fields after graduation. In the summer of 2020, the Departments of Art and Theatre & Dance expressed interest in copying Music's format and offering a similar certificate. Over the next two years, representatives from each department collaborated to identify similar courses already offered, create a new cross-disciplinary class to serve as the summation of the certificate program, and approve a final curriculum for the new program. The resultant new course, ART / MUSC / THEA 4002, highlighted below in red, was approved in early 2023.

**Current Music Entrepreneurship Certificate**

**MUSC 4000** Careers in Music (2)

**MUSC 4001** Music Entrepreneurship Seminar (3)

**MUSC 4005** Internship in Music Business (1)

**ENTR 2700** Entrepreneurial Mindset (3)

Choose one:

**MGT 2100** Management and Organization (3)

or

**MKT 2100** Introduction to Marketing (3)

**New Arts Entrepreneurship Certificate**

**ART 4600 / MUSC 4000 / THEA 3850, 4720, or 4700** (1-3)

**ART / MUSC / THEA 4002** Arts Entrepreneurship Seminar (3)

**ART 4400 / MUSC 4005 / THEA 4975** (1-3)

**ENTR 2700** Entrepreneurial Mindset (3)

Choose one:

**MGT 2100** Management and Organization (3)

or

**MKT 2100** Introduction to Marketing (3)

The faculty of all three departments believe that this expansion of the MEC to include all performance and visual arts on campus benefits students by creating learning labs which incubate collaborative work across disciplines, strengthening ties between artistic communities in Wyoming, and preparing UW's students to work in the rapidly changing arts job market. As most of these courses were already offered by their home departments, this new certificate curriculum and name better reflects the work that was already being done while allowing faculty to learn from each other and emphasize common threads in each discipline. As with the original MEC, the AEC directly responds to the President's call for an innovative, entrepreneurial approach to what we teach.

**Administrative Information**

**Complete all info in this box, and then complete the appropriate information on p. 4**

1. Proposing Unit:

Music

2. Current College, Department, Degree Program, or Certificate Title – *Current official name of the college, department, degree program, or certificate (e.g., College of Business, Department of Botany, Bachelor of Business Administration degree with a major in Accounting, etc.):*

College of Arts and Sciences, Department of Music, Music Entrepreneurship Certificate

3. If Degree Program or Certificate change, Current Degree Program CIP Code:

50.0999

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

Name: Dr. Nicole Riner

Title: Visiting Assistant Professor

E-mail: nriner@uwyo.edu

Phone: 307-223-5184

Request for Change in College, Department, Degree Program, Certificate Designation

Current Designation: Music Entrepreneurship Certificate

Proposed Designation: Arts Entrepreneurship Certificate

Proposed Implementation Date (MM/DD/YYYY): 01/12/2023

Reason for Change:

- Background: Many artists work in collaborative ways after college, particularly in arts advocacy, management, and other areas of entrepreneurship. By expanding our Music Entrepreneurship Certificate to include all performing and visual arts on campus, we are affording our students broader opportunities for connection and employment after graduation. The Departments of Arts and Theatre & Dance expressed an interest in joining the Department of Music to offer a more clearly organized opportunity to explore entrepreneurial aspects of their fields while maintaining strong enrollment numbers in classes.
- Proposed changes: The title change (Arts Entrepreneurship Certificate) is imperative to clearly reflect disciplines covered. One existing course, MUSC 4001: Music Entrepreneurship Seminar, will be replaced by a newly approved cross listed course, ART / MUSC / THEA 4002: Arts Entrepreneurship Seminar. This will allow students from each of the named departments to work together and learn about each other's disciplines. All other courses listed for the AEC already exist and are clear correlates to each other.
- Logistics: The proposed effective date for this change is 08/28/23, or the start of fall 2023 semester. Students in the previous cohort will have just completed the last required course, MUSC 4001, in spring 2023 and will graduate with the Music Entrepreneurship Certificate.

Request Change in CIP Code

Current Code: 50.0999

Proposed Code: 50.1001

Implementation Date (MM/DD/YYYY): 01/15/2023

Reason for Change:

- Background: See above for general benefits of this expanded certificate program. More specifically, the change to CIP code will more accurately reflect the work that is already being done in each department to prepare students for meaningful work in the arts after graduation.
- Proposed changes: Music Entrepreneurship Certificate program will be changed to Arts Entrepreneurship Certificate program. Please see above information under "proposed changes".
- Logistics: The proposed effective date for this change is 08/28/23, or the start of fall 2023 semester. Students in the previous cohort will have just completed the last required course, MUSC 4001, in spring 2023 and will graduate with the Music Entrepreneurship Certificate.



Steven F. Barrett  
Associate Vice Provost Undergraduate Education  
Professor, Electrical & Computer Engineering  
Office of Academic Affairs  
1000 E. University Avenue  
University of Wyoming  
Laramie, WY 82071-2000

Dear Steve,

We are offering this letter of support regarding the re-naming of the Music Entrepreneurship Certificate as the Arts Entrepreneurship Certificate, as well as the fact that we are happy to provide continued involvement in the Arts Entrepreneurship Certificate. We are strongly supportive of efforts to provide entrepreneurship education and training across campus.

Please feel free to reach out if you have any questions or need any additional information.

Sincerely,



Dr. Patrick M. Kreiser  
Rile Endowed Chair of Entrepreneurship and Leadership  
University of Wyoming College of Business  
Management & Marketing Department  
1000 E. University Ave  
Laramie, WY 82071  
[pkreiser@uwyo.edu](mailto:pkreiser@uwyo.edu)

**ACADEMIC AND STUDENT AFFAIRS**  
**COMMITTEE MEETING MATERIALS**

**AGENDA ITEM TITLE:** New degree and certificate progress report, (Sullivan, Carman)

- OPEN SESSION
- CLOSED 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:**

Annually Academic Affairs is required to provide a status report on new degrees and certificates. Enrollment and completion data is provided for new degree and certificate programs launched in the last five years.

**PRIOR RELATED COMMITTEE DISCUSSIONS/ACTIONS:**

None

**WHY THIS ITEM IS BEFORE THE COMMITTEE:**

Provided for AA/SA Committee for review.

**ACTION REQUIRED AT THIS COMMITTEE MEETING:**

**PROPOSED MOTION:**



**ACADEMIC AND STUDENT AFFAIRS**  
**COMMITTEE MEETING MATERIALS**

**AGENDA ITEM TITLE: Information and Discussion: Update on Wyoming Community College Discussion and BAS Degrees, (Sullivan/Carman)**

- OPEN SESSION
- CLOSED 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:

Trustee Sullivan and Provost Carman will provide a status report on the recent discussion during the Wyoming Community College Commission meeting and the BAS.

PRIOR RELATED COMMITTEE DISCUSSIONS/ACTIONS:

WHY THIS ITEM IS BEFORE THE COMMITTEE:

Requested topic of discussion by Chair.

ACTION REQUIRED AT THIS COMMITTEE MEETING:

PROPOSED MOTION:

**ACADEMIC AND STUDENT AFFAIRS**  
**COMMITTEE MEETING MATERIALS**

**AGENDA ITEM TITLE:** Trustees Award of Merit and Honorary Degree Process and Timeline, (Sullivan)

- OPEN SESSION
- CLOSED 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 the UW Board of Trustees By-laws, the Academic and Student Affairs Committee is responsible for recommending to the Board of Trustees the awarding of both the Trustees' Award of Merit and Honorary Degrees. The Academic and Student Affairs Committee will discuss the process and timeline.

PRIOR RELATED COMMITTEE DISCUSSIONS/ACTIONS:

WHY THIS ITEM IS BEFORE THE COMMITTEE:

Per the Academic and Student Affairs Committee Annual Schedule of Topics.

ACTION REQUIRED AT THIS COMMITTEE MEETING:

PROPOSED MOTION: