то:	2021-22 Senate Executive Committee
	Ann Marshall, Chair
FROM:	Sarah S. LeBlanc, Chair, Curriculum Review Subcommittee
DATE:	January 13, 2022
SUBJECT:	Certificate in Cultural Resource Management

The Curriculum Review Subcommittee supports the proposal from the Department of Anthropology and Sociology, for their proposed Certificate in Cultural Resource Management. We find that the proposal requires no Senate review.

Thank you for your attention in this matter.

Approving	Not Approving	Absent
Laurel Campbell		
Behin Elahi		
Teresa Hogg		
Shannon Johnson		
Sarah LeBlanc		
Jaiyanth Daniel		
Haowen Luo		

Terri Swim, exofficio (non-voting member)

Date:		
Institution: Purdue		
Campus: Fort Wayne		
School or College:		
Department:		
Location:	50% or more online: Yes	No
County:		
Туре:		
Program name:		
Graduate/Undergraduate:		
Degree Code:		
Brief Description:		

Rationale for new or terminated program:

CIP Code:

Name of Person who Submitted Proposal:

Contact Information (phone or email):

Request for a New UNDERGRADUATE Certificate Program

Campus: Fort Wayne

Proposed Title of Certificate Program: Certificate in Cultural Resource Management

Projected Date of Implementation: Fall Semester 2022

NOTE: Undergraduate Certificates generally require 12-27 credits of undergraduate-level academic work.

I. Why is this certificate needed? (Rationale, including market research)

The Certificate in Cultural Resource Management (CRM) will train students in identifying and investigating cultural resources, such as archaeological and historical sites, structures, and artifacts, and developing plans for their preservation, curation, and ethical use. These activities are conducted to comply with the numerous legal statutes, mandates, and regulations affecting historical or cultural properties. The certificate meets or exceeds the requirements for the student to be hired as an "archaeological technician" (Federal government), "archaeological fieldworker" (Indiana), "field crew member" (Mississippi), "archaeological technician II" (California), and comparable designations elsewhere in the U.S. The certificate will prepare students for careers working for professional archaeological firms, environmental consulting and management firms, museums and archives, and relevant local, state, and federal government agencies. If approved, this certificate would be the only certificate or minor in cultural resource management in Indiana, and one of a relatively small number in the United States.

Training in Cultural Resource Management in Indiana has been in decline over the past 10 years due to faculty retirements and departures, the closure of Ball State's master's program in archaeology that focused on CRM, and a shift in research focus in Indiana Anthropology Departments away from CRM and North American archaeology towards research conducted on other continents. This decline in training, however, is not due to declining industry need. U.S. archaeological firms employing over 10,000 CRM professionals generated \$1 billion in revenue in 2016 (ACRA 2019) and environmental consulting firms, who frequently complete both environmental and cultural resource assessment and compliance work and employ far larger numbers, generated \$15 billion in revenue in 2019 (IBIS World 2020). The U.S. Bureau of Labor Statistics' 2020-2030 Occupational Outlook Handbook reports 7% growth for anthropology and archaeology but indicates that most employment (27%) is in scientific and technical consulting, which includes CRM. Local CRM firms report the need to advertise nationally and regularly hiring entry-level positions from across the US due to the lack of local talent (Odden 2020, personal communication). The recently signed \$1.2 trillion "Infrastructure Investment and Jobs Act" (Pub. L. 117-58) will lead to considerable growth in the CRM industry as they will be needed to determine compliance with federal, state, and local regulations for these new projects. The proposed certificate would provide education and practical training in a subfield of anthropology with considerable opportunities for employment in the region and nationally. The certificate would also be useful for students interested in historical preservation, museum curation, environmental consulting, and those interested in pursuing graduate studies in archaeology and related fields.

II. In narrative form, explain the major topics to be covered in the curriculum of the certificate.

The core courses will provide a strong introduction to archaeology as a discipline and CRM as a field of study and career. This will include an introduction to the study of archaeological artifacts,

architecture, sites, and cultural landscapes to understand cultural history and reconstruct past lifeways. Students will receive instruction in the complex laws, regulations, and ethical concerns surrounding the investigation, excavation, and preservation of cultural, historical, and archaeological remains. Students will also receive extensive laboratory and field training, including a six-week-long archaeological field school, and training in technical report writing. There will be instruction in the archaeology of North America, an area of study that is critical to anyone pursuing CRM as a profession and those with broader interest in cultural and historical preservation. Finally, students will complete an elective course in Anthropology, Biology, Geology (EAPS), or History that complements and extends their education in CRM. These courses include topics such as basic geology, the use of GIS in mapping, history of Colonial American, human osteology, and environmental science.

III. How does this certificate complement the campus/college/departmental mission? Explain any relationship to existing programs on the campus or within the university.

This certificate is consistent with the Anthropology Program's mission of helping students acquire a comprehensive and integrated knowledge base within the discipline and the skills to apply this knowledge in their professional lives or post-graduate education. This certificate is consistent with the campus mission of championing student success by providing an educational resource that offers intellectual and economic advancement. The certificate also enables the university to enhance quality of place for the region by providing training necessary for regional development and historical preservation.

IV. Describe any innovative features of the program (e.g., involvement with local or regional agencies, or offices, cooperative efforts with other institutions, etc.)

Certainly, the most innovative feature of the program is that instruction and training are provided both by PFW academics and professional archaeologists with years of experience in cultural resource management. The Anthropology Program has a close relationship with the environmental consulting firm RESCOM Environmental Corp that was formalized with a signed memorandum of understanding in 2020. Two of RESCOM's leadership team, Jamie Cochran-Smith (Vice President of Cultural Resources) and Andrew Smith (Chief Operating Officer) are now also Professors of Practice at PFW, and regularly teach three different courses for us, including the archaeological field school. This blend of training by both academics and professionals is rare in the social sciences.

The Anthropology Program also has an active and ongoing collaborating with the Indiana Department of Natural Resources Department Division of Historical Preservation and Archaeology (IN-DNR DHPA). The DHPA has been providing archaeological materials extracted from around the state but not yet analyzed for use in our archaeological laboratory methods course (ANTH 40002), which is a unique pedagogical opportunity for students. The Anthropology Program also has an agreement with DHPA so that our students can intern in their offices in Indianapolis for academic credit.

- V. What methods of delivery will be used for this program (check all that apply)?
 - Residential
 - □ Hybrid
 - Online

Are all courses to be offered hybrid or online approved in Curriculog for that mode of delivery? \blacksquare Yes \Box No

Two of the core courses / 6 credits (ANTH 20003 and 31300) must currently be completed online, and an additional 6 credits can be completed online depending upon the student's choice of elective and instructional modality for ENGL 23401. All remaining coursework is completed in-person.

VI. List the major student learning outcomes (or set of performance-based standards) for the proposed certificate.

After completing the required coursework and archaeological field school to complete the certificate, students will be able to:

- Explain key concepts, theories, and perspectives of archaeology and Cultural Resource Management (CRM).
- Understand and apply Federal resource laws, regulations, and requirements surrounding cultural, historical, and archaeological remains.
- Demonstrate proficiency in the basic field techniques associated with CRM, including surveying, mapping, spatial analysis, and excavation.
- Identify and properly categorize historical and culturally significant sites, structures, and artifacts common to the Midwestern United States.
- Demonstrate proficiency in laboratory methods associated with the identification, analysis and preservations of physical artifacts.
- Communicate research findings effectively to diverse stakeholders, including the scientific community, government agencies, landowners, and the general public.
- VII. Explain how student learning outcomes will be assessed (student portfolios, graduate follow up, employer survey, standardized test, etc.) and describe the structure/process for reviewing assessment findings for the purpose of ensuring continuous improvement of the certificate.
 - Student portfolio, including selected graded assignments from the core courses and self-reflective narratives
 - Survey of certificate recipients every two years after graduation over an eight-year period
 - Report of archaeological field school supervisors on general student performance

Results from these assessments will be reviewed by the Anthropology Program every three years and used to improve the certificate program as needed.

VIII. Describe target audience to be served as well as the goal for the number of participants. What are the admission requirements?

Students most interested in this certificate program will be Anthropology, History, and Biology majors and minors, and those who are interested in pursuing careers in cultural resource management, historical preservation, museum curation, and environmental consulting. The target audience may also include students interested in pursuing graduate work in archaeology, history, and environmental sciences.

Given the lack of formalized training in CRM in Indiana and existence of this as a "stand-alone" certificate, the target audience will also include students with undergraduate degrees interested in pursuing CRM as a career. We will actively promote the program though the Society for American Archaeological website and Anthropology, History, and Biology departments at other universities in the Midwest, particularly in areas with reciprocal tuition agreements. We think the ability of students to complete much of the degree online followed by a single Summer and Fall Semester in Fort Wayne may make the certificate particular appealing to those living relatively close to Fort Wayne.

The admissions requirement is a minimum GPA of 2.5. Students who pursue the certificate after receiving a baccalaureate degree must first be formally admitted to PFW.

IX. List all specific program completion requirements, including all required courses, minimum course GPA, minimum overall GPA to earn certificate, maximum number of transfer credits, etc.

The proposed certificate requires a total of 21 or 22 credits depending upon the student's choice of electives. Students must receive a minimum grade of C- in all courses. A maximum of 9 transfer credits are allowed. Students pursuing a minor in Anthropology in addition to the certificate must have at least nine (9) credit hours in ANTH courses that do not count towards the certificate.

Name	Course	Credits	Modality	Pre-Reqs
Introduction to Prehistoric Archaeology	ANTH 20003	3	Online only	None
Archaeology of North America	ANTH 31300	3	Online only	None
Archaeological Methods & Techniques	ANTH 40002	3	In-person	None
Technical Report Writing	ENGL 23401	3	Online and in-person	ENGL 13100

Core Courses (12 credit hours)

Archaeological Fieldwork Experience (6 credit hours)

Name	Course	Credits	Modality	Pre-Reqs
Fieldwork in Archaeology	ANTH 40501	6	In-person	None

Note: Students may also complete this requirement by completing an approved archeological field school of the equivalent duration.

Electives (3 - 4 credits)

Name	Course	Credits	Modality	Pre-Reqs
Environmental Science	BIOL 34900	3	In-person	Jr or Sr standing
Elementary Surveying	CM 20400	3	In-Person	MA 15400
General Geology and lab	EAPS 10001 or 10003 & 10002	4	Both in-person & online (10001); in-person (10002)	None
Technical Writing Projects	ENGL 42100	3	Online	ENGL 23401
Physical Systems of the Environment	GEOG 10700	3	Online	None
Mapping our World / GIS	GEOG 23700	3	In-person	None
Colonial America	HIST 30101	3	Varies	None
Revolutionary America	HIST 30201	3	Varies	None
The United States from 1789-1865	HIST 30302	3	Varies	None
The American West	HIST 31801	3	Varies	None
Public History ¹	HIST 32503	3	In-person	None
Atlantic World 1400 – 1600	HIST 36001	3	Varies	None

Note: ¹ HIST 32503 is only eligible when the variable title is "Public History".

X. List and indicate the resources required to implement the proposed program. Indicate sources (e.g., reallocations or any new resources such as personnel, library holdings, equipment, etc.) of resources.

The library allows full-text access to relevant journals, including American Antiquity, Journal of Archaeological Science, Journal of Cultural Heritage, Archaeology of Eastern North America, Canadian Journal of Archaeology, Historical Archaeology, Central States Archaeological Journal, Journal of Archaeological Method and Theory, Journal of Archaeological Research, and Southeastern Archaeology. All relevant maps and government documents are freely available online.

The Department of Anthropology & Sociology needs two resources to create and maintain the certificate program:

(1) Sufficient LTL Funding

Three of the required core courses (ANTH 31300, 40002, and 40501) and 12 of the required 21 credits hours for the certificate are taught by Professors of Practice Jamie Cochran-Smith and Andrew Smith. Their compensation is drawn from the Department of Anthropology & Sociology's limited term lecturer budget. For FY2023, their compensation will be \$13,248 based on the current LTL pay scale. Compensation for other LTLs teaching for the department is expected to be \$13,248 for a total predicted annual need of \$26,496. The department's original FY2022 LTL budget of \$23,332 was adjusted sharply downwards to an unmanageable \$8,156, which left us unable to pay for our LTLs even in Fall 2021. The certificate's success relies on a more realistic budget.

(2) Basic archaeological field equipment

We request a one-time grant of \$985 to cover the cost of purchasing basic field archaeology equipment for use in the summer archaeological field school (ANTH 40501). An itemized list is provided in an appendix.

XI. Include a Liaison Library Memo.

See attached.

Liaison Librarian Memo

Date: 10/28/21

From: Ann Marshall

To: Hal Odden

Re: Certificate in Cultural Resource Management (CRM)

Describe availability of library resources to support proposed new program:

Helmke Library already subscribes to databases related to this program, as listed on the library resource questionnaire. Full text journal content is available through existing subscriptions and additional content may be accessed with document delivery. Acquisition of books to support the program can be purchased within the existing Helmke Library budget. If new subscriptions are needed at a future date, they may need to be funded by an increase in the Library's budget. Currently, the Library is able to support the new Certificate in Cultural Resource Management.

Comments:

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Liaison Librarian Signature

10/28/2021

Appendix: Requested funding for Archeological Equipment Purchases

Proposal for new Certificate in Cultural Resource Management

As indicated in section X, the Anthropology Program requests \$984.38 in funds to purchase equipment for two courses associated with the proposed certificate: primarily ANTH 40501 "Fieldwork in Archaeology", which would be the 6-credit hour course in which the summer archaeological field school will be taught, but also ANTH 40002 "Archaeological Methods & Techniques." Lab fees are assessed when students enroll in these two courses, but those lab fees cover the cost of consumables (e.g., Ziplock bags, survey tape and string, photocopying) and replacement of damaged equipment. There are insufficient to cover the cost of purchasing the full range of necessary, new equipment.

Attached you will find an invoice from Forestry Supplies Inc, an approved Purdue FW vendor, for the equipment in question. I have replicated the items and pricing below but with additional information on the items' uses.

ltem	Price	Quantity	Extended Price
Archaeology Photo Board (used to label unit, site, stratigraphic level, and date in excavation photos)	\$161.95	1	\$161.95
Garmin GPSMAP 78 GPS receiver (used in initial surveying of large areas)	\$199.99	2	\$399.98
Munsell Soil Color Book (to aid color identification of archaeological specimens, rocks, animal pelage, etc. in soil)	\$227.00	1	\$227.00
Digital microscope 200x (for analysis of artifacts)	\$99.95	1	\$99.95
Hand trowel, 4.5" x 2.5" with pointed blade (for excavation)	\$18.25	4	\$73.00
Shipping			\$22.50
Tax			\$0
Total			\$984.38

Confirm Information

Step 1: Review the order information.

Note: To complete your purchase, you MUST click the Place This Order button at the bottom of this page.

Billing Address	Shipping Address	Payment	Shipping Method
Purdue University Fort Wayne	Same as Billing	Open Account	UPS Ground Shipping
Harold Odden	Edit Shipping	Edit Payment	Ship Complete
Dept Anthro and Sociology			Edit Ship Method
2101 E Coliseum Blvd			
Fort Wayne, IN 46805			
Edit Billing			

	ltem#	Name	Qty	Stock	Notes	ltem Price	ltem Total
	53416	Forestry Suppliers Photo Board and Scales	1	In Stock	۵	161.95	\$161.95
	39097	Garmin GPSMAP 78 GPS	2	In Stock		199.99	\$399.98
C	77321	Munsell Soil Color Book	1	In Stock		227.00	\$227.00
A	61106	American Scientific USB Digital Microscope, 200x	1	In Stock		99.95	\$99.95
E	53696	Marshalltown Trowel, Pointing, 4-1/2" x 2-1/4" Blade	4	In Stock		18.25	\$73.00
Edit Iter	ns					Subtotal:	\$961.88
						Shipping:	\$22.50
			(Tax only col	lected on orders s	hipped to Mi	ississippi) Tax:	\$0.00
				Weight Tota	: 10.1lbs	Total:	\$984.38

Step 2: Include Any Special Instructions (Optional)

PO Number:

Special Instructions:

Purdue University Fort Wayne Gainful Employment (GE) Form

(must accompany Graduate Certifications Proposals)

TO BE COMPLETED BY DEPARTMENT CHAIR/DIRECTOR

Application for Review for Title IV Federal Student Aid Eligibility

NAME OF PROGRAM: ____Cultural Resource Management Certificate

DEPARTMENT: Anthropology and Sociology

_SCHOOL/COLLEGE: _College of Liberal Arts

A program eligible to participate in Title IV federal student aid would be considered a Gainful Employment Program if it can be completed as a standalone certificate program and prepares students for "gainful employment in a recognized occupation." A review and documentation of these criteria is essential prior to program implementation. Failure to meet these criteria may jeopardize Purdue University's eligibility to award federal student financial aid or take part in other programs under the Higher Education Act. Final approval for eligibility may be determined by the U.S. Department of Education.

	QUESTION	ELIGIBILITY CRITERIA
1.	Is this a standalone certificate program?	1X_YesNo
2.	Is the student required to be enrolled in a degree-seeking program while pursuing this certificate?	2 YesX_No
3.	Would this certificate alone prepare a student for gainful employment in a recognized occupation?	3X_YesNo If YES, list the Standard Occupation Code(SOC):19-3091.00 (The Department of Labor's Standard Occupational Code (SOC) must be provided to show the occupation that the program prepares students to enter and can be found on the Department of Labor's O*NET website - <u>http://www.onetonline.org</u>)
4.	Is the program a one-year minimum training program that leads to a degree (or other recognized educational credential) and prepares students for gainful employment in a recognized occupation?	 4X_YesNo If YES, describe how this program prepares the student for gainful employment: <u>The Certificate meets or exceeds the requirements for employment as an "archeology</u> <u>fieldworker" in Indiana (312 Ind. Admin. Code 21-3-4 sec 4e), for Federal employment in</u> <u>the archeology series (GS 0193), and comparable positions in other U.S. states</u> <u>***If you answered NO to all of the above – STOP HERE. Certificate</u>
		is <u>not</u> eligible for Gainful Employment***

AREA OF REVIEW	ELIGIBILITY CRITERIA
Academic Year Definition Requirements	Number of weeks of instructional time per academic year for this program:32 In an academic year, a full-time student must complete at least24 semester hours. (NOTE: Federal regulations define academic year as a period of a minimum of 30 weeks of instructional time. In an academic year, a week of instructional time is any week in which at least one day of regularly scheduled instruction or examination occurs, or at least one day of study for exams for final exams if it occurs after the last scheduled day of classes for the semester. Instructional time does not include periods of orientation, counseling, vacation, or any other activity not related to class preparation or examinations. Internships, cooperative education, and independent study are forms of instruction that may be included in the definition of academic year. For an undergraduate educational program, an academic year is a period a full-time student must complete at least 24 semester hours.) The length of the program isless than 1 academic years. (Federal regulations require that the program length is at least two academic years and provides an associate, bachelors, graduate, or professional degree or a one-year training program that leads to a degree or certificate (or other recognized educational credential) and prepares students for gainful employment in a recognized occupation.)
	Department Head (please attach a Program of Study documenting the following):
	• This program prepares students for gainful employment in the same or related recognized occupation as an educational program that has previously been designated as an eligible program at Purdue University Fort Wayne.
Document(s) Required	If program proposal and approvals (Faculty Senate, Vice Chancellor for Academic Affairs, and Provost's Office, and the Indiana Commission for Higher Education, if applicable) are not on file with the Office of Academic Affairs, you may be asked to provide documentation.
Harold Odde	n 12/12/2021

Signature: Department Head

Date

When Completed Send to: Ron Herrell, Director of Financial Aid, Purdue University Fort Wayne 2101 E. Coliseum Blvd, KT 103B Fort Wayne, IN 6805 rherrell@pfw.edu

Office Use: This program is

Eligible – Based on submitted documentation, the Division of Financial Aid has determined that this certificate IS ELIGIBLE for Title IV federal student aid.

_ Ineligible – Based on submitted documentation, the Division of Financial Aid has determined that this certificate IS INELIGIBLE for Title IV federal student aid.