

March 14-15, 2024

From: Interim Deputy Commissioner Joe Thiel

To: Board of Regents

Please see below for an executive overview of the Request to Plan items that are being proposed for your review and action at the March 2024 meeting of the Board of Regents. These items have been submitted by the campuses and reviewed by the Chief Academic Officers of the Montana University System and community colleges. OCHE staff has reviewed the items and provided a short analysis below relying on information submitted by the campuses. For more information and specific details on each item, please see the supporting documentation included on the Academic, Research, and Student Affairs Committee agenda.

Montana State University Billings

Request to Plan to Reorganize the Department of Health and Human Development under the College of Education, Health, and Human Development

Currently the Department of Health Care Services has two tenure-track faculty, one tenured faculty and one fixed-term faculty and consists of two programs: Health Administration and RN to BSN. The Department of Health and Human Performance consists of Athletic Training, Outdoor Adventure Leadership, and Human Performance. A merger between departments will create better growth opportunities, curricular alignment, broaden learning and career outcomes, and provide mentorship to junior faculty. The merger will result in two full professors, three tenured professors, four tenure-track faculty, one clinical lecturer and a fixed term assistant professor that will serve 248 students in undergraduate and graduate programs.

The merger will result in minimal administrative costs and some cost saving can be expected due to the elimination of one department chair. Both departments currently share a health care focus. The merger should allow pathways from Health and Human Performance degrees into Health Care Services programs, along with shared research opportunities for faculty and staff.

The University of Montana Missoula

Request for authorization to plan consolidation of Learning LAB Preschool under UM Institute for Early Childhood Education

The UM Institute for Early Childhood Education aims to (1) foster collaboration among university faculty with a strong common interest in research with early childhood populations; (2) model demonstration of research-based, high-quality practices through the Learning and Belonging (LAB) School and community school partnerships; (3) promote research to practice across degree programs, local classrooms, informal learning spaces, and community settings and, (4) engage university faculty in collaborative relationships with local, state, and regional stakeholders.

As this is a merger of existing programs, there is not a need for significant resources or new staff.

Request for authorization to plan to establish the Indigenous Research and STEM Education Center

The Indigenous Research and STEM Education Center is dedicated to the advancement of Native American, Alaskan Native, Native Hawaiian, and First Nation students in science, technology, engineering, and mathematics (STEM) academic disciplines and professions and focuses on Indigenous based research for both faculty and students and well as supporting Native-based STEM education and

academic programming for K-12 students, undergraduates, and graduate students. The Center will be a part of the workforce development of Tribal communities through the education of Indigenous students and Indigenous centered, community-based research. IRSEC will support current Indigenous K-12, undergraduate, and graduate students while continuing to provide pathways for students to complete their degrees in STEM disciplines.

Indigenous Research and STEM Education has been running as a program for 10 years and has continued to grow with the increase of more grant and donor funding. Due to secured grant funding, a request to elevate the work to a Center feels sustainable.

Center collaboration will continue with other Native based Centers and Institutes across the MUS and will also work closely with Montana's Tribal Colleges. In an effort towards Inclusive Excellence, this includes our collaborations with Indigenous students and Tribal communities. It is Indigenous student's success that is the center of IRSEC. The proposed center will also focus on supporting the UM Mission, Partnering with Place, where students reside and the importance of place based, and culturally based learning with Montana's Indigenous population.

Montana Technological University

Request for authorization to Plan a Certificate of Applied Sciences in Smart Manufacturing Technology

Highlands College was selected to be part of a network of Montana agencies assembled to assist in the education and development of Smart Manufacturing Technology in Montana, with the goal of supporting and encouraging Montana industry to embrace smart manufacturing processes. The proposed CAS would provide students with entry-level skills in Smart Manufacturing Technology.

The technical level of the required coursework will result in the need for new equipment and faculty. These costs will be covered by grant funding for the first three years. It is anticipated that the program will be self sufficient after this time.

As part of a larger state initiative, Highlands College will collaborate with the Montana Department of Environmental Quality and the Montana Manufacturing Extension Center at Montana State University to deliver this and other quality education and training opportunities across Montana.

Request for authorization to plan a Certificate of Applied Sciences in Broadband Technology

This one-semester, 30-credit program will provide students with the training needed for employment in broadband/telecommunication and will educate students in the procured for safety, warehousing, fiber and splicing and equipment operations. The program will be delivered in a hybrid format and students will receive training in CDL, OSHA-10, Flagging, First Aid & CPR and Splicing.

Montana sees a significant need to increase broadband access. Projections indicate that more than half of Montana's broadband workforce face shortages. O*Net projects a 5% growth rate from 2020-2030 with a median annual salary of \$55,000 in Montana.

Much of the curriculum will need to be created, faculty will need to be hired and some equipment will need to be purchased. The program will share resources with the pre-apprentice line program. Both programs require most of the same training. Additionally, aligning schedules for evenings and weekends will allow for the program to share heavy equipment and CDL tractor/trailers.

Request for authorization to establish a Center for Education and Ecosystems Studies

The Clark Fork Watershed Education Program (CFWEP) has been operating at Montana Technological University since 2005. The main charge of the program is watershed science, providing in-class service days and field trips for the communities of the Clark Fork. As the program has developed, K12 teacher professional development has become a second focus and has continued to provide multiple pathways for STEM education for Montana students.

CFWEP is prepared to expand across Montana and will use a designed approach to address ecological education, addressing current and future ecological threats, including climate change, populations growth and development. The proposed center aims to create an EcosySTEM, empowering teachers, opening multiple STEM Pathways for all students, and conducting and publishing empirical research on STEM teaching and learning. Targeting low-income, rural, and Indigenous communities in Montana, the center will address disparities in the state's education landscape, where 41% of students in districts have incomes below the poverty threshold.

While the program is currently self-sufficient under soft funding, the proposed expansion would require the need for an additional staff member. This position will play a pivotal role in supporting the proposed center in the development of partnerships.

CFWEP has long partnered with different entities across Montana Tech, Montana University System, and Montana's Tribal Colleges.

University of Montana Western

Request for authorization to Plan a B.S. in Farm and Ranch Management

The University of Montana Western offers a minor in Farm and Ranch Management. In the past four years, this offering has grown, with over 60 students now enrolled. Due to growing interest and local ranch partner involvement, a major is now being proposed. While Farm and Ranch Management positions are flat nationally, O*Net projects a 5% growth rate for the occupation in Montana.

As the minor is being taught by current business faculty, the initial program will continue to rely on these resources; however, plans to add an additional tenure faculty line have been discussed and have campus support.

Montana State University offers closely related degree pathways, including a Farm and Ranch Management option in their Agricultural Business B.S., a livestock management option in their Animal Science B.S., and a standalone Ranching Systems B.S. Currently there are almost 200 students enrolled in these multiple programs. Additionally, Montana State University Northern offers an Agricultural Operations Technology program with a fall 2023 enrollment count of 20 students. Montana State University Northern, Miles Community College and Dawson Community College also offer related two-year programs.

The proposed degree aligns with UM Western's mission of becoming a leader in experiential education through utilization of hands-on learning. Beaverhead County has over 400 ranches and over 1 million acres of farm and ranch land. Students will spend time in the field with farmers and ranchers, completing field experiences, practicums, and internships.

Request for authorization to plan a Strength and Conditioning Minor

Current Kinesiology students and Physical Education and Health students pursue advanced certificates to further education goals and career attainment. The kinesiology core curriculum prepares students for advanced certifications, particularly the National Strength and Condition Associations (NSCA) Strength and Condition Specialist Certifications.

NSCA has moved to restrict access to the certification examination to only those who graduate from the Council on Accreditation of Strength and Conditioning Education (CASCE) accredited program by 2030. UM Western's Department of Health and Human Performance has determined that this accreditation is a necessary priority for students and their prospective careers. For the process accrediting process to take place, a Strength and Conditioning Program must be established.

UM Western currently has a Strength and Conditioning Laboratory to support the educational needs of the proposed minor. Currently no need faculty members are required.

Montana University System
REQUEST TO PLAN – OCHE ANALYSIS

ITEM 211-2701-R0324

ITEM NAME: Request for authorization to consolidate the Department of Health Care Services and the Department of Health and Human Performance into the new Department of Health Sciences and Human Performance establish a Center for Education and Ecosystems Studies

OCHE ANALYSIS				
Labor market outlook	n/a			
Related programs / centers / institutes	n/a			
Budget Impact	x	LOW <ul style="list-style-type: none"> Only incidental costs 	MEDIUM	HIGH <ul style="list-style-type: none"> substantial commitment of resources relative to institutional budget
	Current faculty and staff will support the program and some savings may result due to merger.			
CAO discussion and follow-up				
ARSA/BOR comment and direction for Level II proposal				

Montana University System
REQUEST TO PLAN – OCHE ANALYSIS

ITEM 211-1001-R0324

ITEM NAME: Request for authorization to plan consolidation of Learning LAB Preschool under UM Institute for Early Childhood Education

OCHE ANALYSIS

Labor market outlook	While may not directly have a labor market outlook, work conducted at the Institute can have an impact on wages and employment outcomes through research and advocacy for the profession.			
Related programs / centers / institutes	The Child Development Center at Montana State University. As well as several institutions offering degrees and programming in Early Childhood Education.			
Budget Impact	x	LOW • Only incidental costs	MEDIUM	HIGH • substantial commitment of resources relative to institutional budget
CAO discussion and follow-up	Current faculty and staff will support the program.			
ARSA/BOR comment and direction for Level II proposal				

Montana University System
REQUEST TO PLAN – OCHE ANALYSIS

ITEM 211-1002-R0324

ITEM NAME: Request for authorization to plan to establish the Indigenous Research and STEM Education Center

OCHE ANALYSIS

Labor market outlook	The Center will be a part of the workforce development of Tribal communities through the education of Indigenous students and Indigenous centered, community-based research			
Related programs / centers / institutes	The Cobell Land and Culture Institute that has focused more on GIS, Forestry, and Native American Studies at UM. The American Indian Governance and Policy Institute which focuses on law and policy. The Center for American Indian and Rural Health Equity at MSU.			
Budget Impact	x	LOW • Only incidental costs	MEDIUM	HIGH • substantial commitment of resources relative to institutional budget
	Current faculty and staff will support the program. Center has developed sustainable soft money funding.			
CAO discussion and follow-up				
ARSA/BOR comment and direction for Level II proposal				

Montana University System
REQUEST TO PLAN – OCHE ANALYSIS

ITEM 211-1501-R0324

ITEM NAME: Request for authorization to plan a Certificate of Applied Sciences in Smart Manufacturing Technology

OCHE ANALYSIS

Labor market outlook	The proposed program offers current employees in manufacturing and new students the opportunity to gain entry-level skills in the latest manufacturing technology. Currently many of Montana’s manufacturers have not had the technical support and capability to implement the newest technologies. The proposed program would increase that educational and skill access.				
Related programs / centers / institutes	Montana Manufacturing Extension Center – Montana State University				
Budget Impact	x	LOW • Only incidental costs	x	MEDIUM	HIGH • substantial commitment of resources relative to institutional budget
CAO discussion and follow-up	While there are significant costs associated with the start-up and maintenance of the program, the federal grant awarded will cover expenses for the first 3 years of the program.				
ARSA/BOR comment and direction for Level II proposal					

Montana University System
REQUEST TO PLAN – OCHE ANALYSIS

ITEM 211-1502-R0324

ITEM NAME: Request for authorization to plan a Certificate of Applied Sciences in Broadband Technology**OCHE ANALYSIS**

Labor market outlook	Montana projects significant shortages of skilled employees in broadband technology throughout the next five years. In Montana, telecommunication techs have average annual wages of \$69,000.				
Related programs / centers / institutes	n/a				
Budget Impact		LOW • Only incidental costs	X	MEDIUM	HIGH • substantial commitment of resources relative to institutional budget
CAO discussion and follow-up	New faculty and some equipment will need to be purchased.				
ARSA/BOR comment and direction for Level II proposal					

Montana University System
REQUEST TO PLAN – OCHE ANALYSIS

ITEM 211-1503-R0324

ITEM NAME: Request for authorization to establish a Center for Education and Ecosystems Studies**OCHE ANALYSIS**

Labor market outlook	While not a program, the Center works to support educators and students to promote development and interest in STEM education, scientific literacy, active citizen participation in research, and localized problem solving. These intentional activities and outreach help to support positive education and career exploration.				
Related programs / centers / institutes	n/a				
Budget Impact	x	LOW <ul style="list-style-type: none"> • Only incidental costs 	x	MEDIUM	HIGH <ul style="list-style-type: none"> • substantial commitment of resources relative to institutional budget
CAO discussion and follow-up	While current staffing and funding structures are in place to support the proposed Center, the campus does foresee the need to hire one additional new position.				
ARSA/BOR comment and direction for Level II proposal					

Montana University System
REQUEST TO PLAN – OCHE ANALYSIS

ITEM 211-1602-R0324

ITEM NAME: Request for authorization to plan a BS in Farm and Ranch Management**OCHE ANALYSIS**

Labor market outlook	While national employment in Farm and Ranch Management is expected to decline, O*Net projects a 4% growth for the industry in Montana from 2020-2030 with average annual salary of \$75,000.			
Related programs / centers / institutes	MSU has several programs related to the proposed program (Ranching Systems, Livestock Management and Industry, Agribusiness Management with a Farm and Ranch Management option) Montana State University Northern has a program in Agricultural Operations Technology bachelor's degree and several two-year campuses have related degrees.			
Budget Impact	x	LOW <ul style="list-style-type: none"> • Only incidental costs 	MEDIUM	HIGH <ul style="list-style-type: none"> • substantial commitment of resources relative to institutional budget
CAO discussion and follow-up	Current faculty and staff will support the program. A minor with similar content is currently being offered.			
CAO discussion and follow-up	UM Western administration and faculty will meet with MSU administration and faculty.			
ARSA/BOR comment and direction for Level II proposal				

Montana University System
REQUEST TO PLAN – OCHE ANALYSIS

ITEM 211-1601-R0324

ITEM NAME: Request for authorization to plan a Strength and Conditioning Minor**OCHE ANALYSIS**

Labor market outlook	This minor often provides students with additional credentialing to best serve their employment opportunities. Additionally, O*Net marks exercise training and fitness as a growing industry with a 30% growth rate in Montana and average annual wages of \$45,000.			
Related programs / centers / institutes	Several campuses across the MUS have related programming in kinesiology and exercise science.			
Budget Impact	X	LOW <ul style="list-style-type: none"> • Only incidental costs 	MEDIUM	HIGH <ul style="list-style-type: none"> • substantial commitment of resources relative to institutional budget
Current faculty and staff will support the program.				
CAO discussion and follow-up				
ARSA/BOR comment and direction for Level II proposal				