LEVEL II MEMORANDUM

DATE: August 3, 2016

TO: Chief Academic Officers, Montana University System

FROM: John Cech, Deputy Commissioner for Academic and Student Affairs

RE: Level II Proposals

The campuses of the Montana University System have proposed new academic programs or changes under the Level II approval process authorized by the Montana Board of Regents. The Level II proposals are being sent to you for your review and approval. If you have concerns about a particular proposal, you must share those concerns with your colleagues at that institution and try to come to some understanding prior to the Chief Academic Officer's conference call on August 31, 2016. If you cannot resolve your concerns, raise them at the Chief Academic Officer's conference call. Issues not resolved at that meeting should be submitted in writing to OCHE by noon on Friday, September 2. If no concerns are received, OCHE will assume that the proposals have your approval.

Level II Items

Montana State University Bozeman:

- Request for authorization to create the Montana Engineering Education Research Center (MEERC)
 Item 172-2010-R0916 | Academic Proposal Request Form | Research Center and Institute Proposal Form | Intent to Plan | Attachment #1
- Request for authorization to offer Early Childhood Education and Child Services: Child Development option
 - Item 172-2011-R0916 | Academic Proposal Request Form | Curriculum Proposal Form | Intent to Plan | Attachment #1
- Request authorization to offer Early Childhood Education and Child Services: P-3 (preschool to grade 3)
 option
 - Item 172-2012-R0916 | Academic Proposal Request Form | Curriculum Proposal Form | Intent to Plan | Attachment #1

Montana State University Billings:

Request for authorization to establish an RN to BSN degree completion program
 Item 172-2701-R0916 | Academic Proposal Request Form | Curriculum Proposal Form | Intent to Plan |
 Attachment #1 | Attachment #2 | Attachment #3

September 14-15, 2016

ITEM 172-2010-R0916

Request for authorization to create the Montana Engineering Education Research Center (MEERC)

THAT

Montana State University requests authorization from the Montana Board of Regents to create the Montana Engineering Education Research Center (MEERC) within the College of Engineering at Montana State University in Bozeman.

EXPLANATION

This center will enable our faculty to better leverage interdisciplinary synergies in order to transform engineering education at MSU and become a leader in an effort of vital national importance. Transformation in engineering education is necessary in order to overcome longstanding issues in undergraduate engineering and computer science programs and educate inclusive communities of engineering students prepared to solve 21st century challenges. The mission of the Montana Engineering Education Research Center is to transform engineering education at MSU and become a national leader in engineering education research. This center will enable MSU faculty to tackle the big research questions and challenges facing engineering education today with an overarching vision of improving student success.

ATTACHMENTS

Academic Proposal Request Form Research Center and Institute Proposal Form Intent to Plan Attachment #1 - Executive Summary

ACADEMIC PROPOSAL REQUEST FORM

ITEM	172-2010-R0916	Meeting Date September 14-15, 2016
Institution:	Montana State University	CIP Code:
Program/Center/Institute Title:	Montana Engineering Education	on Research Center (MEERC)
Includes (please specify below):	Online Offering Options	
sted in parentheses follow o complete an item reques	ing the type of request. For mor	th an Item Template and any additional materials, including those re information pertaining to the types of requests listed below, how it http://mus.edu/che/arsa/preparingacademicproposals.asp .
A. Level I:		
1b. Withdrawi 2. Adding, re-t	nformation on checklist at time of ting a program from moratorium itling, terminating or revising a	
	S/AA/AS Area of Study	r online delivery
4. Offering an	existing program via distance o	r online delivery
OCHE Approvals		
5. Re-titling an	existing postsecondary educat	ional program
6. Terminating	an existing postsecondary edu	cational program (Program Termination Checklist)
7. Consolidatir	g existing postsecondary educa	ational programs (<u>Curriculum Proposal Form</u>)
8. Adding a ne	w minor where there is a major	or an option in a major (Curriculum Proposal Form)
9. Revising a p	rogram (Curriculum Proposal Form	<u>n)</u>
10. Adding a te	emporary Certificate or AAS Deg	gree Program Approval limited to 2 years

ACADEMIC PROPOSAL REQUEST FORM

X	<u>B.</u> L	evel II:
		1. Establishing a new postsecondary educational program (Curriculum Proposal and Reviewed Intent to Plan Form)
		2. Exceeding the 120 credit maximum for baccalaureate degrees Exception to policy 301.11
	X	4. Forming, eliminating or consolidating a college, division, school, department, institute, bureau, center, station, laboratory or similar unit (Curriculum or Center/Institute Proposal and Reviewed Intent to Plan Form, except when eliminating or consolidating)
		 5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

Montana State University requests authorization from the Montana Board of Regents to create the Montana Engineering Education Research Center (MEERC) within the College of Engineering at Montana State University.

RESEARCH CENTER AND INSTITUTE PROPOSAL FORM

1. State the proposed Institute/Center's name and purpose.

"Montana Engineering Education Research Center (MEERC)"

We are proposing the creation of an engineering education research center within the College of Engineering at Montana State University, Bozeman. The center will enable our faculty to better leverage interdisciplinary synergies in order to transform engineering education at MSU and become a leader in an effort of vital national importance. Transformation in engineering education is necessary in order to overcome long-standing issues in undergraduate engineering and computer science programs and educate inclusive communities of engineering students prepared to solve 21st century challenges.

2. A comprehensive statement of the Institute/Center's mission and its relationship to the University mission.

A. State the Institute/Center's mission.

The mission of the Montana Engineering Education Research Center is to transform engineering education at MSU and become a national leader in engineering education research. This center will enable MSU faculty to tackle the big research questions and challenges facing engineering education today with an overarching vision of improving student success.

B. Identify the Institute/Center's goals and objectives.

- Goal 1: Significantly increase the research productivity in the area of engineering education at MSU. Within three years of creating this center we will:
 - o Increase the amount of externally-funded engineering education research being conducted at MSU 5-fold from \$300k/year to \$1.5M/year.
 - Increase the number of scholarly articles published on engineering education by MSU faculty 3-fold from 5/year to 15/year.
- Goal 2: Initiate large-scale research studies at MSU to generate empirical findings to address
 the challenges facing engineering education. Within two years of creating this center we will
 initiate externally-funded research projects at MSU to further our understanding on how to:
 - Improve student learning of complex engineering concepts.
 - o Improve the efficiency of engineering education in order to increase retention rates and reduce time-to-graduation.
 - Broaden participation of underrepresented groups within engineering, specifically women and Native Americans.
 - Explain why students opt out of engineering during their degree or after entering the workforce.

RESEARCH CENTER AND INSTITUTE PROPOSAL FORM

- Goal 3: Implement large-scale educational interventions at MSU to address the challenges facing engineering education. Within three years of creating this center these interventions will create data-driven strategies to enhance student success with specific emphasis on improving student learning, increasing student retention, and broadening participation.
- Goal 4: Establish MSU as a leader within the American Society of Engineering Education
 (ASEE). Within three years of creating this center MSU will increase its national profile in
 ASEE through holding leadership roles, disseminating our findings in high impact ASEE
 outlets, and participating in national educational initiatives.
- Goal 5: Contribute to the training of tomorrow's professoriate by increasing the number of students pursuing doctoral degrees at MSU through funding by external grants and by providing pedagogical training for Ph.D. students desiring to pursue academic careers. Within 2 years we will initiate funding for 2-3 Ph.D. students. It should be noted that these Ph.D. students will likely be in the departments of Psychology and Education. Using external research funds secured through the College of Engineering to support non-COE Ph.D. students represents an unprecedented approach to increasing graduate student production and is made possible by MEERC's interdisciplinary nature.

Within 2 years we will also deploy pedagogical training activities for COE Ph.D. students desiring to pursue academic careers. The training activities will include formal education on teaching strategies followed by individual mentoring by faculty and classroom teaching experience. The formal component of this training will leverage existing courses/resources from the College Teaching Certificate (CTC) in the College of Education, Health and Human Development.

C. What specific need is being responded to in developing the proposed Institute/Center?

Educating the engineers of the 21st century has become a national imperative. We need more engineers, more diverse engineers, and engineers who are better prepared to solve complex problems in an interdisciplinary, global context. MSU should be an important player in this national imperative. MSU's College of Engineering has experienced dramatic growth in the past 5 years. This has led to a record number of students (3000+) and faculty (75).

There are a variety of exciting activities occurring and developing within MSU's College of Engineering that motivate the creation of this center. First, College of Engineering faculty currently have an unprecedented number of active grants from the National Science Foundation to conduct educational projects. These awards have been won using the traditional *lone wolf* approach (7 NSF educational grants in the past 5 years totaling \$1.3M). We now believe we have formed critical mass in this research area, gained sufficient institutional knowledge on how to propose and conduct this research, and formed critical interdisciplinary collaborations to form a center. Collectively, faculty within the center will be able to win external-funding and output scholarly products at a rate that is higher than individual faculty working alone.

Second, there is a push from the national funding agencies to propose research that is interdisciplinary in nature to solve the most pressing problems of our day. In the field of engineering education research, this means teams must not contain solely engineering faculty,

RESEARCH CENTER AND INSTITUTE PROPOSAL FORM

but also researchers from the fields of behavioral & social science and education. A center will provide a formal infrastructure at MSU to facilitate interdisciplinary research on engineering education and lead to an increase in scholarly output by our faculty on critical challenges facing our nation.

Third, there has been a recent increase in federal, foundation, and industrial funding opportunities that aim to advance our understanding of how to better prepare the engineering workforce and promote diversity within the field. Our group feels we are being limited in the number of opportunities we can pursue in our current, lone wolf approach. A center will create synergies that will optimize the proposal preparation process, project implementation, and dissemination and lead to higher research productivity.

Finally, the planned Norm Asbjornson Innovation Center will provide an educational laboratory in which to develop, test, and assess educational interventions and innovations. The creation of this center in conjunction with our new building (whose theme is *engineering innovation*) will aid us in becoming nationally recognized in the engineering education research arena.

D. Describe how the Institute/Center benefits the department, college, or institution.

This center will provide a formal infrastructure for proposing and conducting engineering education research. It will benefit individual departments by facilitating cross-departmental collaborations. Engineering faculty will gain knowledge about how to conduct education research within their respective departments while faculty from non-engineering departments (psychology, sociology, education, etc.) will be able to study engineering student success on an expansive student body. These types of studies are historically difficult without departmental buy-in from the instructors teaching the courses and/or management the curriculums.

The college of engineering will ultimately benefit from the interventions developed by the research conducted on enhancing student success and improving efficiency. Improving student success will raise the prestige of the college, which can lead to increased enrollments, increased donations, and an overall better educational experience for COE students. Improving educational efficiency will allow COE to optimally apply its resources to better serve its students.

The institution will benefit by establishing a research center that is a leader within its field. This will increases MSU's prestige, which can lead to increased enrollments, recruitment of high caliber faculty, and increased research productivity. The specific goals for this center will also directly contribute to raising MSU's Carnegie classification (i.e., increasing graduate student production in both STEM and non-STEM programs, increasing research expenditures, and increasing publications).

E. Describe the Institute/Center's relationship to the University mission.

The MEERC is well aligned with the MSU Strategic plan as outlined below.

MSU Strategic Plan Goal: MSU prepares students to graduate equipped for careers and further education. The research that will be conducted by faculty within the MEERC specifically seeks to understand student motivation in choosing to pursue a degree in engineering, motivation to persist to graduation, and motivation to enter and stay in the engineering workforce. The MEERC

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research also focuses on educational efficiency and will deploy interventions to improve student success. The collective activity of the MEERC will directly serve to:

- Perform in-depth assessment of student learning and take action to improve learning of critical knowledge and skills (MSU Strategic Plan: Objective L.1)
- Understand the mechanisms in which students decide to opt out of engineering and take action to keep them enrolled. This will have a direct impact on increasing graduation rates at MSU (MSU Strategic Plan: Objective L.2).
- Understand why engineering graduates don't choose to pursue an engineering career, and for those that do, why they leave the profession early in their careers. This research on the professional formation of the engineering workforce will directly contribute to increasing job placement for our students and promoting life-long learning throughout their careers (MSU Strategic Plan: Objective L.3).

MSU Strategic Plan Goal: MSU will raise its national and international prominence in research, creativity, and scholarly achievement. The specific objectives that the MEERC will seek to accomplish are directly aligned with this MSU goal. They are:

Increase productivity in the area of engineering education research with specific focus on
increasing the number of externally funded projects, increasing the number or research
publications by our faculty, and becoming a leader in the American Society of
Engineering Education (MSU Strategic Plan: Objective D.1). The MEERC's objectives are
designed to support the center's mission, which is stated as:

"The mission of the Montana Engineering Education Research Center is to transform engineering education at MSU and become a national leader in engineering education research."

The mission, objectives, and activities within the MEERC are all directly aligned with this MSU Strategic Plan Goal. The creation of the MEERC will provide the infrastructure to support our interdisciplinary research activities (MSU Strategic Plan: Objective D.2).

The MEERC also has a specific objective of increasing graduate student production (MSU Strategic Plan: Objective D.3). Our approach is unique in that funds awarded to College of Engineering faculty will be used to support Ph.D. students in non-COE departments (psychology and education). This represents a new source of Ph.D. graduates for MSU.

MSU Strategic Plan Goal: Members of the MSU community will be leaders, scholars and engaged citizens of their local, national, and global communities. The MEERC seeks to become a leader in the field of engineering education research and has a specific objective to "become a leader in the American Society of Engineering Education". ASEE is the leading society in this field and has sections and zones across the country that facilitate community engagement. MSU seeks to become more involved in ASEE in order to establish the MEERC as a leader in its field (MSU Strategic Plan: Objective E.3).

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MSU Strategic Plan Goal: By integrating learning, discovery and engagement the MSU community will improve the world. The research that the MEERC will conduct specifically integrates learning and discovery by implementing hypothesis-driven interventions to improve the education of engineering students (MSU Strategic Plan: Objective I.1). The ultimate mission of the MEERC is to transform engineering education. The discoveries that will be made by the MEERC will have a broader impact across our state, nation, and ultimately improve engineering education globally. This challenging works requires interdisciplinary teams of researchers from the fields of engineering, behavioral/social science, psychology, and education. The existence of the MEERC will directly increase interdisciplinary research on campus (MSU Strategic Plan: Objective I.2).

MSU Strategic Plan Goal: MSU is committed to widening access to higher education and ensuring equality of opportunity for all. Specific objectives of the MEERC include "improving engineering education efficiency" and "Broadening participation of underrepresented groups within engineering, specifically women and Native Americans". These activities directly contribute to this particular MSU Strategic Plan Goal (MSU Strategic Plan: Objective A.1 & Objective A.2).

3. Briefly describe the Institute/Center's anticipated activities.

The MEERC will facilitate the development of large-scale research proposals as well as the implementation of projects resulting from new awards. This will be accomplished by taking a higher level view of the research opportunities available, assembling interdisciplinary teams of researchers who have the knowledge to conduct such research, and providing logistical support to the development and implementation of this research. The MEERC will also coordinate and support activities to establish MSU as a leader in this field in American Society for Engineering Education.

A. Identify faculty expertise available for participation in the Institute/Center's activities.

The team of researchers who are currently driving the establishment of this center are listed below. Faculty from this group are actively involved in engineering education research and have secured external funding from a variety of state and federal sources over the past decade. This have included funding from the National Science foundation, NASA, Montana Space Grant Consortium, and the Montana Office of the Commission of Higher Education.

Brock LaMeres, Electrical & Computer Engineering
Paul Gannon, Chemical & Biological Engineering
Jim Becker, Electrical & Computer Engineering
Ryan Anderson, Chemical & Biological Engineering
Carolyn Plumb, College of Engineering
Colter Ellis, Sociology & Anthropology
Bryce Hughes, Adult and Higher Education
Jessie Smith, Psychology
Nick Lux, Education
Jennifer Green, Mathematical Sciences
Kevin Amende, Mechanical & Industrial Engineering
William Schell, Mechanical & Industrial Engineering
Effat Rady, Head of Pre-Engineering, Flathead Valley Community College, Kalispell, MT
Kathryn Plymesser, Pre-Engineering, Montana State University — Billings, MT

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Mark Jacobson, Pre-Engineering, Montana State University – Billings, MT Thomas Trickle, Professor of Engineering, Salish Kootenai College – Pablo, MT

We anticipate that additional faculty will join MEERC activities when its creation is made public to the MSU community.

B. Which departments on campus will be involved and how will the Institute/Center contribute to the academic programs of the institution?

Department of Electrical & Computer Engineering
Department of Chemical & Biological Engineering
Department of Computer Science
Department of Mechanical & Industrial Engineering
Department of Civil Engineering
Department of Education
Department of Psychology
Department of Sociology & Anthropology

The MEERC will facilitate interdisciplinary research at MSU that includes faculty from the above listed departments. The MEERC will provide the infrastructure to allow faculty to propose and conduct large scale research projects targeted at transforming engineering education.

4. Identify the organizational structure of the Institute/Center within the institution.

The MEERC will reside in the College of Engineering at MSU. One faculty member will serve as the center director and will coordinate the activities of the MEERC. The center director will report directly to the Dean of the College of Engineering and also be advised by an advisory council.

The MEERC will invite all faculty at MSU who have a shared interest in transforming engineering education to become members. A web page will be created with an invitation form that will allow faculty to sign up and receive notifications of center activities and upcoming training/seminar/workshop events. Faculty wishing to engage more formally in research activities will contact the center director and then be put in touch with other faculty with similar interests.

A. Identify all agencies, organizations and/or institutions that will be involved.

The College of Engineering
The College of Education, Health and Human Development
The College of Letters and Sciences

B. Identify advisory council information.

An advisory council will be formed for the MEERC. Its members will be comprised of college representatives (COE, EHHD, and L&S) along with national members from other engineering education centers and industrial partners. The council will meet by teleconference twice per year.

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5. Identify first year and continuing finances necessary to support the Center/Institute, including the sources of funding.

Existing Funding

Our current implementation team has four active grants from the National Science Foundation that are serving as the motivation to form this center.

- "Deploying Adaptive Learning Environments to Overcome Background Deficiencies and Facilitate Mastery of Computer Engineering Content", National Science Foundation, (Award ID: 1432373), \$298,102, Pls: Brock LaMeres & Carolyn Plumb, 1/15-12/17.
- "Engineering a Culture of Engagement", National Science Foundation, (Award ID: 1544147), \$150,000, PIs: Brock LaMeres & Jessie Smith, 1/16-12/17,.
- "Promoting the Development of Metacognition and Combating Robust Misconceptions In a Gateway STEM Course Using an Intelligent, Web-based Homework System", PI: Jim Becker, (Award ID: 1504880), \$249,724, 6/15 – 6/18.
- "Research Initiation: Effectively Integrating Sustainability within an Engineering Program", (Award ID: 1544174), PIs: Paul Gannon, Carolyn Plumb, & Ryan Anderson, \$150,000.

Future Funding

The goal of the MEERC with respect to funding is to increase our research expenditures 5-fold from \$300k/year to \$1.5M/year within three years.

A. Will additional faculty and other resources be required to implement this Center/Institute? If yes, please describe the need and indicate the plan for meeting this need.

No additional faculty, staff, or building space is needed by the MEERC. The MEERC will use grant writing assistance from existing services on campus (i.e., OSP, COE, Center for Faculty Excellence, etc.)

B. Are other, additional resources required to ensure the success of the proposed Center/Institute? If yes, please describe the need and indicate the plan for meeting this need.

n/a

6. Describe other similar Centers/Institutes or research capacities in the state and surrounding region.

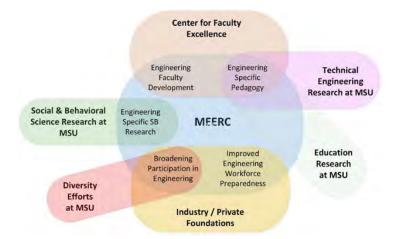
To our knowledge, there are no other centers in the state of Montana focusing specifically on engineering education research. The following is a list of other institutions with similar centers.

- Purdue School of Engineering Education (ENE) https://engineering.purdue.edu/ENE
- Michigan State Center for Engineering Education Research (CEER) http://ceer.egr.msu.edu/home

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- University of Pittsburgh Engineering Education Research Center (EERC) http://www.engineering.pitt.edu/eerc/
- University of Texas at Austin Engineering Education Research Center (EERC) opens in 2017 http://www.engr.utexas.edu/eerc
- Northwestern University NorthWestern Center for Engineering Education Research (NCEER) http://www.nceer.northwestern.edu/
- Univ. of Michigan Center for Research on Learning and Teaching in Engineering (M-CRLT-ENGIN) http://crlte.engin.umich.edu/
- University of Washington Center for Engineering Learning & Teaching (CELT) http://depts.washington.edu/celtweb/
- MIT Teaching and Learning Laboratory http://tll.mit.edu/help/education-research-mit
- Tufts University Center for Engineering Education (CEEO) http://www.ceeo.tufts.edu/research/
- University of Oklahoma Sooner Engineering Education Center (SEED)
 https://vpr-norman.ou.edu/centers-institutes/list/sooner-engineering-education-center
- University of Illinois Engineering Education Research Group (EERC) https://publish.illinois.edu/engineering-education-research/
- A. Describe the relationship between the proposed Center/Institute and any similar Centers/Institutes, programs, or research capacities within the Montana University System.

The MEERC will complement existing activities at MSU, but will not duplicate them. The MEERC's primary focus is transforming engineering education through *research*. This is different from centers which focus on providing students support services to improve student success of provide activities for faculty development. The MEERC will conduct externally-funded research to understand how to improve education and then implement interventions at MSU and test their effectiveness. The following figure shows how the MEERC complements existing MSU activities.



B. In cases of substantial duplication, explain the differences between these and the need for the proposed Center/Institute at an additional institution. Describe any efforts that were made to

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collaborate with these Centers/Institutes, programs or research capacities. If no efforts were made explain why.

n/a

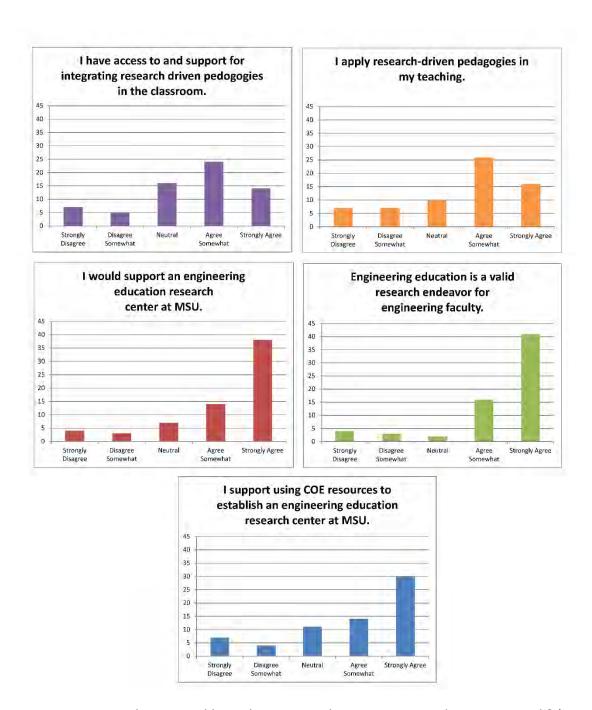
7. Assessment: How will the success of the program be measured?

The success of the MEERC will be assessed at year 3 by the Office of the Dean of the College of Engineering and by the MEERC advisory council. The success of the MEERC will be measured against its specific goals/outcomes:

- Goal 1: Significantly increase research expenditures and publications in the area of engineering education research by MSU faculty.
- Goal 2: Initiate large-scale research students at MSU on engineering education.
- Goal 3: Implement large-scale research interventions at MSU on engineering education.
- Goal 4: Establish MSU as a leader within ASEE.
- Goal 5: Increase graduate student production.
- 8. State the internal campus review and approval process which has occurred prior to submission to the Commissioner's Office. Indicate, where appropriate, involvement by faculty, students, community members, professional constituencies, etc.

Our proposal has been reviewed by the Dean of the College of Engineering and the COE Leadership Council (Dean's office staff & COE department heads). We have also conducted a survey of the COE faculty (results below). Our members will be giving a COE research seminar on 4/15/16 to discuss the MEERC. The following reviews are current scheduled: 1) Research Council: 4/7/16; Faculty Senate: 4/13/16; Dean's Council: 5/10/16. The proposal will then go to the Provost, President, and BOR).

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Survey Comments: Do you have any additional comments about engineering education research? (Optional)

- We still need more people to teach basic engineering courses without the basics the students lose
- There should be some level of interaction with local companies. Get them involved.
- This seems like the perfect time to establish an engineering education research center.
- I have done both engineering education "research" and more traditional product/materials/investigative
 research: From those efforts and the work of others I've determined that engineering education
 research is a soft side effort, aligned only loosely with effective teaching. I think most engineering
 education research is performed to generate papers/presentations at conferences attended by others

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who have done similar work, but dissemination of this work to a larger audience is weak. Adoption of 'novel' approaches is also weak. I think this type of work does help a little to further engineering education but only just. It is not well aligned with more traditional research efforts which are more valuable across the board.

- COE should seek external support for this as well.
- As far as the research center goes, it would depend on what the goals and plan of execution was.
- I do believe engineering education is a valid research endeavor as even a mutual component of more traditional research, however, I am not sure I feel it would be valid as an engineering faculty's only research endeavor.
- I believe that engineering education research is increasingly skewed towards the trendy so called innovations (which usually aren't), and diversity while marginalizing the realm of actual engineering learning. If the MSU COE invests in this, it would be nice to have some assurance that the resources won't be siphoned off into the wasteland of the trends of the day.
- While certainly a good idea, we have plenty of good ideas in the COE. If like-minded faculty want to coalesce and join together, then go ahead! However, if this was science based research, COE resources wouldn't be requested.
- It is about time!
- I am a research professor and do not teach.
- Having resources (training, examples, support, etc.) available would significantly increase/improve the chance of including research into the classroom.
- COE funding should be used for more pressing needs related to facing the growing enrollment. Examples are TAs support, scholarships, possibility to have several section of a single course in order to decrease to number of students per class
- Discussions/presentations on the topic at MSU would be useful
- It helps busy professor do their jobs more effectively and is incredibly valuable. It's nice to have someone distill the current research into a ready to deploy classroom technique

Montana University System

NOTICE OF INTENT TO PLAN

Program/Institute Title: Montana Engineering Education Research Center (MEERC)

Campus, School/Department: MSU-Bz, College of Engineering

Contact Name/Info: Brock J. LaMeres, lameres@montana.edu

Expected Submission Date: SEP 2016

Mode of Delivery: N/A

To increase communication, collaboration, and problem solving opportunities throughout the MUS in the program/center/institute development process, please complete this form not more than 18 months in advance of the anticipated date of submission of the proposed program/center/institute to the Board of Regents for approval.

For more information regarding the Intent to Plan process, please visit the Academic and Student Affairs Handbook.

1) Provide a description of the program/center/institute.

We are proposing the creation of an engineering education research center within the College of Engineering at Montana State University, Bozeman. The center will enable our faculty to better leverage interdisciplinary synergies in order to transform engineering education at MSU and become a leader in an effort of vital national importance. Transformation in engineering education is necessary in order to overcome long-standing issues in undergraduate engineering and computer science programs and educate inclusive communities of engineering students prepared to solve 21st century challenges. The mission of the Montana Engineering Education Research Center is to transform engineering education at MSU and become a national leader in engineering education research. This center will enable MSU faculty to tackle the big research questions and challenges facing engineering education today with an overarching vision of improving student success.

2) Describe the need for the program/center/institute. Specifically, how the program/center/institute meets current student and workforce demands. (Please cite sources).

Educating the engineers of the 21st century has become a national imperative. We need more engineers, more diverse engineers, and engineers who are better prepared to solve complex problems in an interdisciplinary, global context. MSU should be an important player in this national imperative.

MSU's College of Engineering has experienced dramatic growth in the past 5 years. This has led to a record number of students (3000+) and faculty (75). There are a variety of exciting activities occurring and developing within MSU's College of Engineering that motivate the creation of this center. First, College of Engineering faculty currently have an unprecedented number of active grants from the National Science Foundation to conduct educational projects. These awards have been won using the traditional lone wolf approach (7 NSF educational grants in the past 5 years totaling \$1.3M). We now believe we have formed critical mass in this research area, gained sufficient institutional knowledge on how to propose and conduct this research, and formed critical interdisciplinary collaborations to form a center. Collectively, faculty within the center will be able to win external-funding and output scholarly products at a rate that is higher than individual faculty working alone. Second, there is a push from the national funding agencies to propose research that is interdisciplinary in nature to solve the most pressing problems of our day. In the field of engineering education research, this means teams must not contain solely engineering faculty, but also researchers from the fields of behavioral & social science and education. A center will provide a formal infrastructure at MSU to facilitate interdisciplinary research on engineering education and lead to an increase in scholarly output by our faculty on critical challenges facing our nation. Third, there has been a recent increase in federal, foundation, and industrial funding opportunities that aim to advance our understanding of how to better prepare the engineering workforce and promote diversity within the field. Our group feels we are being limited in the number of opportunities we can pursue in our current, lone wolf approach. A center will create synergies that will optimize the proposal preparation process, project implementation, and dissemination and lead to higher research productivity. Finally, the planned Norm Asbjornson Innovation Center will provide an educational laboratory in which to develop, test, and assess educational interventions and innovations. The creation of this center in conjunction with our new building (whose theme is engineering innovation) will aid us in becoming nationally recognized in the engineering education research arena.

3) Describe how the program/center/institute fits with the institutional mission, strategic plan, and existing institutional program array.

The research that will be conducted by faculty within the MEERC specifically seeks to understand student motivation in choosing to pursue a degree in engineering, motivation to persist to graduation, and motivation to enter and stay in the engineering workforce. The MEERC research also focuses on educational efficiency and will deploy interventions to improve student success. The collective activity of the MEERC will directly contribute to MSU's strategic plan goal of "preparing students to graduate equipped for careers and further education". Another specific goal of this center is to become a national leader within the area of engineering education research. These center activities will directly contribute to MSU's strategic plan goal of "raising its national and international prominence in research, creativity, and scholarly achievement".

4) How does the proposed program/center/institute fit within the MUS system?

The MEERC is an all-inclusive center and will invite all faculty members within the MUS interested in

engineering education research to be members. The center will form a state-wide network of scholars that will use their individual expertise to form highly qualified, interdisciplinary research teams. These teams will propose, conduct, and disseminate research findings to improve multiple aspects of engineering education.

Signatures

Intent to Plan

Program/Institute/Center Title: Montana Engineering Education Research Center (MEERC)

Campus: MSU-Bz

Expected Submission Date: SEP 2016

Signature/Date	DocuSigned by:	
Associate Provost: (procedural, not approval)	Ron Larsen	5/13/2016
College/School Dean:	DocuSigned by: Brett Llunnink 3E122B977D064AC	5/13/2016
Chief Academic Officer:	Docusigned by: Martha L. Potvin 43A1A78D200F474	5/20/2016
Chief Executive Officer:	DocuSigned by: 7D6A4CE96C3F415	5/23/2016
Flagship Provost:	Docusigned by: Martha L. Potrin 43A1A78D200F474	5/20/2016
Flagship President:	DocuSigned by: 7D6A4CE96C3F415	5/23/2016
Date of Final Review:	July 19, 2016	

When submitting the proposal to the BOR, include this signed form with the Level II request.



Montana Engineering Education Research Center (MEERC)

Montana State University

Executive Summary

We are proposing the creation of an engineering education research center within the College of Engineering at Montana State University, Bozeman. The center will enable our faculty to better leverage interdisciplinary synergies in order to transform engineering education at MSU and become a leader in an effort of vital national importance. Transformation in engineering education is necessary in order to overcome long-standing issues in undergraduate engineering and computer science programs and educate inclusive communities of engineering students prepared to solve 21st century challenges.

Mission Statement

The mission of the Montana Engineering Education Research Center is to transform engineering education at MSU and become a national leader in engineering education research. This center will enable MSU faculty to tackle the big research questions and challenges facing engineering education today with an overarching vision of improving student success.

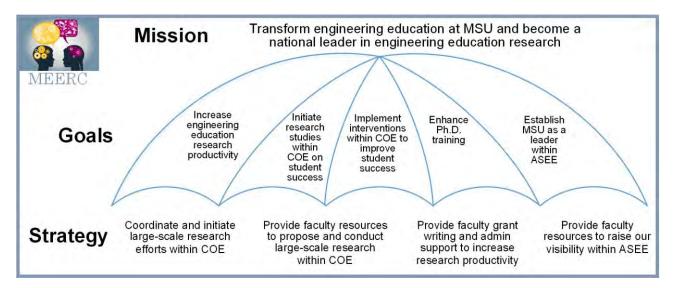
Our Goals Are:

- Significantly **increase the research productivity** in the area of engineering education at MSU. Within three years of creating this center we will:
 - o Increase the amount of <u>externally-funded</u> engineering education research being conducted at MSU 5-fold from \$300k/year to \$1.5M/year.
 - o Increase the number of <u>scholarly articles published</u> on engineering education by MSU faculty 3-fold from 5/year to 15/year.
- Initiate large-scale research studies at MSU to generate empirical findings to address the challenges facing engineering education. Within two years of creating this center we will initiate externally-funded research projects at MSU to further our understanding on how to:
 - o <u>Improve student learning</u> of complex engineering concepts.
 - Improve efficiency of engineering education to increase retention and reduce time-to-graduation.
 - Broaden participation of underrepresented groups within engineering, specifically women and Native Americans.
 - Explain why students opt out of engineering during their degree or after entering the workforce.
- Implement large-scale educational interventions at MSU to address the challenges facing engineering education. Within three years of creating this center these interventions will create data-driven strategies to enhance student success with specific emphasis on improving student learning, increasing student retention, and broadening participation.
- Establish MSU as a leader within the American Society of Engineering Education (ASEE). Within three years of creating this center MSU will increase its national profile in ASEE through holding leadership roles, disseminating our findings in high impact ASEE outlets, and participating in national educational initiatives.
- Contribute to the training of tomorrow's professoriate by increasing the number of students pursuing doctoral degrees at MSU through funding by external grants and by providing pedagogical training for Ph.D. students desiring to pursue academic careers.

Strategies

To meet our center's goals, we will implement the following strategies within the first three years.

- Provide support (course buyouts, summer salary, or stipend) for a center director to coordinate largescale research efforts at MSU.
- Provide faculty support (course buyouts or summer salary) to meet with program officers, develop proposals, and implement large-scale engineering education research at MSU.
- Provide faculty support (course buyouts or summer salary) to raise our visibility within the American Society of Engineering Education through seeking leadership roles, disseminating MSU's work through high visibility ASEE outlets, and participating in national educational initiatives.
- Provide support to host a nationally renowned engineering education speaker at MSU each year.
- Provide grant-writing support to faculty developing engineering education proposals.
- Provide administrative assistance on proposal development and project execution.
- Specifically include Ph.D. student support in the educational research grants we propose.
- Develop pedagogical training activities for Ph.D. students at MSU interested in academic careers. We will use courses from the existing College Teaching Certificate (CTC) in addition to mentoring from COE faculty and in-class teaching experience to provide a unique training experience for future professors. This will serve to better train our Ph.D. students wishing to pursue careers in academia, help alleviate the teaching load of lower-level course in COE, and establish MSU as a leader in Ph.D. student training quality.



Motivation for this Center

Educating the engineers of the 21st century has become a national imperative. We need more engineers, more diverse engineers, and engineers who are better prepared to solve complex problems in an interdisciplinary, global context. MSU should be an important player in this national imperative. MSU's College of Engineering has experienced dramatic growth in the past 5 years. This has led to a record number of students (3000+) and faculty (75).

There are a variety of exciting activities occurring and developing within MSU's College of Engineering that motivate the creation of this center. First, College of Engineering faculty currently have an unprecedented number of active grants from the National Science Foundation to conduct educational projects. These awards have been won using the traditional *lone wolf* approach (7 NSF educational grants in the past 5 years totaling \$1.3M). We now believe we have formed critical mass in this research area, gained sufficient institutional knowledge on how to propose and conduct this research, and formed critical interdisciplinary collaborations to form a center. Collectively, faculty within the center will be able to win external-funding and output scholarly products at a rate that is higher than individual faculty working alone.

Second, there is a push from the national funding agencies to propose research that is interdisciplinary in nature to solve the most pressing problems of our day. In the field of engineering education research, this means teams must not contain solely engineering faculty, but also researchers from the fields of behavioral & social science and education. A center will provide a formal infrastructure at MSU to facilitate interdisciplinary research on engineering education and lead to an increase in scholarly output by our faculty on critical challenges facing our nation.

Third, there has been a recent increase in federal, foundation, and industrial funding opportunities that aim to advance our understanding of how to better prepare the engineering workforce and promote diversity within the field. Our group feels we are being limited in the number of opportunities we can pursue in our current, *lone wolf* approach. A center will create synergies that will optimize the proposal preparation process, project implementation, and dissemination and lead to higher research productivity.

Finally, the planned Norm Asbjornson Innovation Center will provide an educational laboratory in which to develop, test, and assess educational interventions and innovations. The creation of this center in conjunction with our new building (whose theme is *engineering innovation*) will aid us in becoming nationally recognized in the engineering education research arena.

Seed Funding

The mission of this center can be obtained with an initial investment in faculty support in addition to grant-writing and administrative assistance. The three year start-up period for the center will focus on initiating large-scale research efforts that can be sustained after the seed funding is expended. The investment will be used for:

- Annual support for one faculty member to serve as the center director. The director will be
 responsible for the overall operation of the center and coordination of large-scale research activities
 within the center. This support will be used for course buy-outs, summer salary, or as an
 administrative stipend. Funds will also support travel to other engineering education research
 centers to heighten the visibility of MSU's center in addition to learning from our peer institutions.
- Annual support for three faculty development grants. These grants can be used for course buy-outs
 or summer salary support for faculty to develop engineering education research proposals, conduct
 ongoing education investigations, or develop dissemination products. Funds will also support travel
 to federal funding agency headquarters to meet with program officers.
- Annual support for one faculty member to focus on raising MSU's leadership role in ASEE. Funds
 will support activities that raise the profile of MSU within ASEE. Funds will also support travel to
 ASEE conferences and meetings.
- Annual support to bring in a nationally renowned engineering education speaker to MSU. The
 speaker will give a campus-wide seminar followed by meeting with individual faculty engaged in
 engineering education research.
- Non-cash support for grant-writing and administrative assistance associated with center activities.

Center Contribution to MSU's Existing Activates

This center compliments and expands upon existing research and development activities on campus.

Potential Return on Investment

Our current *lone wolf* approach toward obtaining external funding has resulted in research expenditures at a rate of \$300k per year. Under current conditions, our faculty are able to pursue *small-scale* funding on the order of \$75k/each per year (COE currently has 4x of these style of grants). A center will enable our faculty to pursue medium-scale (\$150k per year) and large-scale (\$600k per year) funding. Under our center proposal, our research capacity will be able to handle two medium-scale and two large-scale projects within three years. This will result in annual expenditures of \$1.5M, an increase of 500% over our current lone wolf approach.

	<u>Annual Expenditures</u>	Annual IDCs Generated
Current Grants (4 small)	\$300k	\$132k
Future Grants (2 medium + 2 large	e) \$1.5M	\$660k
	(+\$1.2M)	(+\$528k)

Faculty Who Will be Active in Center Activities

Brock LaMeres, Electrical & Computer Engineering
Paul Gannon, Chemical & Biological Engineering
Jim Becker, Electrical & Computer Engineering
Ryan Anderson, Chemical & Biological Engineering
Carolyn Plumb, College of Engineering
Colter Ellis, Sociology & Anthropology
Bryce Hughes, Adult and Higher Education
Jessi Smith, Psychology
Nick Lux, Education
Jennifer Green, Mathematical Sciences – Statistics
Kevin Amende, Mechanical & Industrial Engineering
William Schell, Mechanical & Industrial Engineering
Shannon Willoughby, Physics

Shannon Willoughby, Physics
Effat Rady, Head of Pre-Engineering, Flathead Valley Community College, Kalispell, MT
Kathryn Plymesser, Pre-Engineering, Montana State University – Billings, MT
Mark Jacobson, Pre-Engineering, Montana State University – Billings, MT
Thomas Trickle, Professor of Engineering, Salish Kootenai College – Pablo, MT

Faculty/Committees that have Reviewed This Proposal

Brett Gunnink, Dean, College of Engineering Anne Camper, Associate Dean, College of Engineering

Christine Foreman, Assistant Dean, College of Engineering

Rob Maher, Head, Department of Electrical & Computer Engineering

John Paxton, Head, Department of Computer Science

Dan Miller, Head, Mechanical & Industrial Engineering

Jerry Stephens, Head, Civil Engineering

Marilyn Lockhart, Director, Center for Faculty Excellence

Jayne Downey, Head, Department of Education

Keith Hutchison, Head, Department of Psychology

Bob Mokwa, Head, Department of Math

Neil Cornish, co-director, eXtreme Gravity Institute (XGI)

Research Council (approved on 4/7/16)

Faculty Senate (approved on 4/13/16)

Other Engineering Education Research Centers

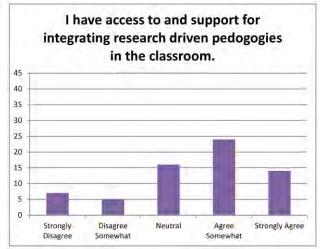
- Purdue School of Engineering Education (ENE) https://engineering.purdue.edu/ENE
- University of Washington Center for Engineering Learning & Teaching (CELT) http://depts.washington.edu/celtweb/
- Colorado School of Mines Center for Engineering Education (CEE) http://engineering-education.mines.edu/
- Michigan State Center for Engineering Education Research (CEER) http://ceer.egr.msu.edu/home
- University of Pittsburgh Engineering Education Research Center (EERC) http://www.engineering.pitt.edu/eerc/
- University of Texas at Austin Engineering Education Research Center (EERC) opens in 2017 http://www.engr.utexas.edu/eerc
- Northwestern University NorthWestern Center for Engineering Education Research (NCEER) http://www.nceer.northwestern.edu/
- Univ. of Michigan Center for Research on Learning and Teaching in Engineering (M-CRLT-ENGIN) http://crlte.engin.umich.edu/
- MIT Teaching and Learning Laboratory http://tll.mit.edu/help/education-research-mit
- Tufts University Center for Engineering Education (CEEO) http://www.ceeo.tufts.edu/research/
- University of Oklahoma Sooner Engineering Education Center (SEED) https://vpr-norman.ou.edu/centers-institutes/list/sooner-engineering-education-center
- University of Illinois Engineering Education Research Group (EERC) https://publish.illinois.edu/engineering-education-research/

Funding Opportunities Available for this Center

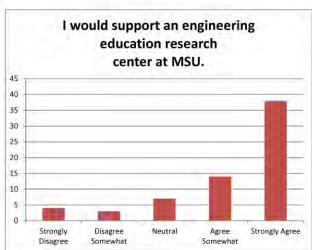
- NSF Directorate for Engineering Division of Engineering Education & Centers
 - Improving Undergraduate STEM Education (IUSE): Exploration, (\$150k over 2 yrs)
 - Improving Undergraduate STEM Education (IUSE): Deployment, (\$300k over 3 yrs)
 - Improving Undergraduate STEM Education (IUSE): Transformation, (\$3M over 5 yrs)
 - Nanotechnology Undergraduate Education (NUE) in Engineering (\$200k over 2 yrs)
 - Research Initiation in Engineering Formation (PFE: RIEF), (\$150k over 2 yrs)
 - Research in the Formation of Engineers (RFE), (\$300k over 3 yrs)
 - Broadening Participation in Engineering (BPE), (\$300k over 3 yrs)
 - Research Experience for Undergraduates (REU), (\$330k over 3 yrs)
 - Research Experience for Teachers (RET) in Engineering and Computer Science, (\$600k over 3 yrs)
 - Revolutionizing Engineering and Computer Science Departments (RED), (\$2M over 5 years)
- NSF Directorate for Education & Human Resources Division of Research on Learning (DRL)
 - EHR Fundamental Research in STEM Education: Level 1, (\$500k over 3 yrs)
 - EHR Fundamental Research in STEM Education: Level 2, (\$1.5M over 3 yrs)
 - EHR Fundamental Research in STEM Education: Level 3, (\$2.5M over 5 yrs)
 - Advanced Technological Education (ATE): Planning, (\$150k over 2 yrs)
 - Advanced Technological Education (ATE): Exploratory Research & Development, (\$300k over 2 yrs)
 - Advanced Technological Education (ATE): Full Scale Research & Development, (\$800k over 3 yrs)
 - Advancing Informal STEM Learning (AISL): *Planning*, (\$150k over 1 yr)
 - Advancing Informal STEM Learning (AISL): Exploratory, (\$300k over 2 yrs)
 - Advancing Informal STEM Learning (AISL): Practice, (\$2M over 5 yrs)
 - Advancing Informal STEM Learning (AISL): Development, (\$3M over 5 yrs)
 - Advancing Informal STEM Learning (AISL): Implementation, (\$3M over 5 yrs)
 - Discovery Research PreK-12 (DRK-12): Level 1, (\$450k over 3 yrs)
 - Discovery Research PreK-12 (DRK-12): Level 2, (\$3M over 4 yrs)
 - Discovery Research PreK-12 (DRK-12): Level 2, (\$5M over 5 yrs)
 - Innovative Technology Experience for Students and Teachers (ITEST): Strategies, (\$1.2M over 3 yrs)
 - Innovative Technology Experience for Students and Teachers (ITEST): Strategies, (\$2M over 3 yrs)
 - Innovative Technology Experience for Students and Teachers (ITEST): Center, (\$3.5M over 3 yrs)
 - STEM + Computing Partnerships (STEM+C): Exploratory, (\$1.25M over 2 yrs)
 - STEM + Computing Partnerships (STEM+C): Development, (\$2.5M over 3 yrs)
 - STEM + Computing Partnerships (STEM+C): Broadening Participation, (\$600k over 3 yrs)
 - STEM + Computing Partnerships (STEM+C): CS-10k, (\$1M over 3 yrs)
- NSF Directorate for Education & Human Resources Division of Undergraduate Education (DUE)
 - Scholarships in STEM (S-STEM): Institutional Capacity, (\$650k over 5 yrs)
 - Scholarships in STEM (S-STEM): Design & Development, (\$1M over 5 yrs)
 - Scholarships in STEM (S-STEM): Multi-Institution, (\$2M over 5 yrs)
- Foundations
 - Numerous NGO and NPO Foundations support Engineering Education Research
- Industry (similar to other industry research center funding mechanisms)
 - Industry often invests >\$200k to recruit and train new engineers. Many companies hire >10 MSU engineering graduates annually. MSU currently graduates >500 engineers annually. There is significant potential for industry funding to improve quality of engineering education and recruitment of graduates.

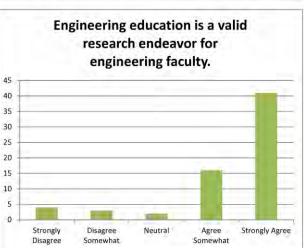
Survey Feedback on the Center from COE Faculty

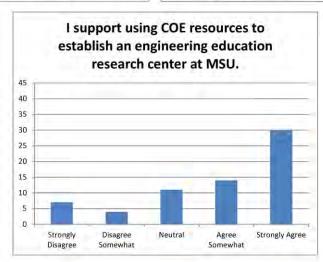
A survey was sent out to all faculty and staff within the College of Engineering in February of 2016 to gauge interest in creating an engineering education research center. There were 141 people invited to complete the survey. There were 66 responses (47% response rate). The survey consisted of five questions. The following plots show the results of the survey and the verbatim comments.











Do you have any additional comments about engineering education research? (Optional)

- We still need more people to teach basic engineering courses without the basics the students lose
- There should be some level of interaction with local companies. Get them involved.
- This seems like the perfect time to establish an engineering education research center.
- I have done both engineering education "research" and more traditional product/materials/investigative research: From those efforts and the work of others I've determined that engineering education research is a soft side effort, aligned only loosely with effective teaching. I think most engineering education research is performed to generate papers/presentations at conferences attended by others who have done similar work, but dissemination of this work to a larger audience is weak. Adoption of 'novel' approaches is also weak. I think this type of work does help a little to further engineering education but only just. It is not well aligned with more traditional research efforts which are more valuable across the board.
- COE should seek external support for this as well.
- As far as the research center goes, it would depend on what the goals and plan of execution was.
- I do believe engineering education is a valid research endeavor as even a mutual component of more traditional research, however, I am not sure I feel it would be valid as an engineering faculty's only research endeavor.
- I believe that engineering education research is increasingly skewed towards the trendy so called innovations (which usually aren't), and diversity while marginalizing the realm of actual engineering learning. If the MSU COE invests in this, it would be nice to have some assurance that the resources won't be siphoned off into the wasteland of the trends of the day.
- While certainly a good idea, we have plenty of good ideas in the COE. If like-minded faculty want to coalesce and join together, then go ahead! However, if this was science based research, COE resources wouldn't be requested.
- It is about time!
- I am a research professor and do not teach.
- Having resources (training, examples, support, etc.) available would significantly increase/improve the chance of including research into the classroom.
- COE funding should be used for more pressing needs related to facing the growing enrollment. Examples
 are TAs support, scholarships, possibility to have several section of a single course in order to decrease to
 number of students per class
- Discussions/presentations on the topic at MSU would be useful
- It helps busy professor do their jobs more effectively and is incredibly valuable. Its nice to have someone distill the current research into a ready to deploy classroom technique

September 14-15, 2016

ITEM 172-2011-R0916

Request for authorization to offer Early Childhood Education and Child Services: Child Development option

THAT

The current bachelor of science in Early Childhood Education (ECE) and Child Services major at Montana State University proposes to develop a new Child Development option.

EXPLANATION

The Department of Health and Human Development at Montana State University proposes to develop two distinct options under the current Early Childhood Education and Child Services major: 1) Child Development, and 2) ECE: P-3, leading to a preschool-grade 3 teacher endorsement in the State of Montana.

The Child Development option of the ECE & CS major will appeal to students with professional interests including parent education, resource and referral, advocacy, and childcare administration, as well as teaching children birth through age eight in non-public school settings.

ATTACHMENTS

Academic Proposal Request Form
Curriculum Proposal Form
Intent to Plan
Attachment # 1- Child Development Option Course List

ACADEMIC PROPOSAL REQUEST FORM

ITEM	172-2011-R0916	Meeting Date September 14-15, 2016
Institution:	Montana State University	CIP Code: 19.0500
Program/Center/Institute Title:	B.S. Early Childhood Education a	and Child Services
Includes (please specify below):	Online Offering Options _	Child Development
sted in parentheses follow	ing the type of request. For more	an Item Template and any additional materials, including those information pertaining to the types of requests listed below, how http://mus.edu/che/arsa/preparingacademicproposals.asp .
A. Level I:		
1b. Withdrawi 2. Adding, re-ti	nformation on checklist at time of te	ampus Certificate of 29 credits or less
		······································
OCHE Approvals 5. Re-titling an	existing postsecondary education	onal program
6. Terminating	an existing postsecondary educa	ational program (Program Termination Checklist)
7. Consolidatin	ng existing postsecondary educat	ional programs (<u>Curriculum Proposal Form</u>)
8. Adding a ne	w minor where there is a major o	or an option in a major (Curriculum Proposal Form)
9. Revising a p	rogram (Curriculum Proposal Form)	
10. Adding a te	emporary Certificate or AAS Degr	ee Program Approval limited to 2 years

ACADEMIC PROPOSAL REQUEST FORM

X	1. Establishing a new postsecondary educational program (Curriculum Proposal and Reviewed Intent to Plan Form)
	2. Exceeding the 120 credit maximum for baccalaureate degrees Exception to policy 301.11
	4. Forming, eliminating or consolidating a college, division, school, department, institute, bureau, center, station, laboratory or similar unit (Curriculum or Center/Institute Proposal and Reviewed Intent to Plan Form, except when eliminating or consolidating)
	 S. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

Montana State University requests authorization to create a new option under the bachelor of science in Early Childhood Education and Child Services major: Child Development option.

CURRICULUM PROPOSAL FORM

1. Overview

The early childhood education and child services (ECE&CS) major emphasizes the dual focus of education and services within the context of family, school, and community. Throughout the program, students are actively engaged in a variety of settings that include children, their families, and other early childhood professionals. Course work and field experience provide multiple opportunities for applied understanding of children's growth and development, building family and community relationships, conducting observations and assessments, understanding developmentally appropriate practices, and promoting the well-being of young children and their families.

A. Provide a one paragraph description of the proposed program. Be specific about what degree, major, minor or option is sought.

The revision to the current program includes the proposal of two new options:

- Child Development option
- ECE: P 3 option, leading to a preschool grade 3 teacher endorsement

This proposal is for the Child Development Option. The Child Development option of the ECE&CS major will appeal to students with professional interests including parent education, resource & referral, advocacy, and childcare administration, as well as teaching children birth through age eight in non-public school settings.

2. Institutional and System Fit

A. What is the connection between the proposed program and existing programs at the institution?

The Child Development option is well-integrated within the College of Education, Health & Human Development and includes new course requirements from MSU's NASX, SOCI, NUTR, and FCS rubrics. This will enable students to have a focused course of study including required, supporting and elective class credits. Interdisciplinary coursework helps students understand the connections between early childhood education and other health and human development programs in the department and to prepare students for careers in classroom and community settings.

B. Will approval of the proposed program require changes to any existing programs at the institution? If so, please describe.

The Child Development option will not require changes to other academic programs.

C. Describe what differentiates this program from other, closely related programs at the institution (if appropriate).

The ECE&CS program focus is on early childhood, birth through age 8, which is unique. Strong connections are made to family, school, and community contributions to the well-being of children and families. No other program on campus provides the same focus.

CURRICULUM PROPOSAL FORM

D. How does the proposed program serve to advance the strategic goals of the institution?

MSU's commitment to learning, discovery, and engagement is evident in the proposed and revised ECE&CS program. Shared values and vision for respect, integrity, student success, and excellence will be experienced through continual program evaluation and improvement, with particular attention paid to the relationships and collaborations with our early childhood partners in the community. These relationships have been developed and strengthened over time, as evidenced by faculty engagement on local and state advisory councils and leadership with the Early Childhood Higher Education Consortium. At the school and programmatic level, ECE&CS faculty work with local school teachers and administrators on grant funded and field supervision projects and also provide advisement and leadership to the MSU Child Development Center, Montana's first preschool program and the laboratory site for teaching and research in the Department of Health & Human Development. Importantly, the ECE&CS program will continue its strong relationship with the Montana Early Childhood Project, an outreach project of MSU that is administering the financial assistance project of the Montana Preschool Development Grant to ensure course and program development as well as financial assistance for statewide Early Childhood Education P – 3 programs.

E. Describe the relationship between the proposed program and any similar programs within the Montana University System. In cases of substantial duplication, explain the need for the proposed program at an additional institution. Describe any efforts that were made to collaborate with these similar programs; and if no efforts were made, explain why. If articulation or transfer agreements have been developed for the substantially duplicated programs, please include the agreement(s) as part of the documentation.

The Child Development option is the result of many discussions and collaborations with members of the Early Childhood Higher Education Consortium (ECHEC), representing community colleges, tribal colleges, and four-year institutions across the state. The coordinated effort and substantial collaboration within and outside the MUS system is the result of the important work of the ECHEC. Dr. Christine Lux, ECE&CS Program Leader, is chair of the ECHEC. During 2014, members of ECHEC were invited by the Office of Public Instruction to draft and propose the Chapter 58 (ARM 10.58.531) Early Childhood Education P – 3 standards under former ECHEC chair Dr. Cindy O'Dell. Dr. Lux worked alongside state colleagues Dr. Cindy O'Dell from Salish Kootenai College, Dr. Julie Bullard from the University of Montana-Western (now from the University of Montana), Dr. Susan Harper Whalen from the University of Montana, and Libby Hancock of the Montana Early Childhood Project. The adoption of the Montana Early Childhood Education P - 3 teaching endorsement on July 1, 2015 elevated the status of preschool and early primary grade teachers who are responsible for establishing children's strong foundation for healthy development in all domains of well-being. In response, all of our campus partners have continued to work together to ensure the delivery of the highest quality early childhood professional preparation, both at the undergraduate and master's level.

Salish Kootenai College, the University of Montana-Western, and MSU-Bozeman were the only institutes of higher education in the state offering a bachelor's degree in Early Childhood Education at the time of the state's approval of the ECE P-3 endorsement. MSU's ECE&CS program is highly regarded, reporting the fastest rate of growth in enrollment with the most limited faculty resources in comparison to the two other four-year undergraduate Early Childhood Education degree programs in the state. Last year, Salish Kootenai College and the University of Montana-Western were able to quickly mobilize their resources to propose and receive approval for their undergraduate Early Childhood Education P-3 programs. Additionally, the University of Montana proposed and received approval for a Master of Education program with one option leading to the ECE: P-3 teaching endorsement. UM recently proposed an

CURRICULUM PROPOSAL FORM

undergraduate Early Childhood Education P-3 undergraduate program and MSU-Billings is hoping to propose an Early Childhood Education P-3 teaching minor to complement their Elementary Education program in the upcoming academic year. The programs complement one another and will meet the growing demand for a highly qualified early childhood workforce across the state and beyond.

3. Program Details

A. Provide a detailed description of the proposed curriculum. Where possible, present the information in the form intended to appear in the catalog or other publications. NOTE: In the case of two-year degree programs and certificates of applied science, the curriculum should include enough detail to determine if the characteristics set out in Regents' Policy 301.12 have been met.

Curriculum Tab sheets for Child Development option (attached)

B. Describe the planned implementation of the proposed program, including estimates of numbers of students at each stage.

The Child Development option will be available to students beginning Fall 2017. New courses will be developed and added to course plans. Each year, the ECE&CS program welcomes approximately 10 - 15 new students and receives approximately 3 - 5 transfer students per academic year. Incoming and transfer students will declare either the Child Development or ECE: P - 3 option beginning Fall 2017.

Beginning Fall 2017, ECE&CS students at sophomore or junior standing can choose to change their curriculum to the 2017 – 2018 catalog and also choose the Child Development or ECE: P-3 option. ECE&CS students with senior standing will be encouraged to complete the 2015-2016 or 2016-2017 catalog. Students pursuing the Elementary Education K-8 teaching endorsement will also have the option to declare ECE&CS with an ECE: P-3 option beginning Fall 2017.

As of the Fall 2015 census report, the ECE&CS program is reporting 13 freshman, 9 sophomores, 11 juniors, and 13 seniors. Additionally, students majoring in Elementary Education who are also pursuing an Early Childhood Option are reporting 19 freshman, 6 sophomores, 8 juniors, and 16 seniors as of Fall 2015. It is anticipated that 5 – 10 Elementary Education majors will change to the ECE&CS curriculum and pursue the ECE: P- 3 option.

Implementation of the program includes:

- planning for revised courses and new course development (Spring Summer 2016)
- propose revised ECE&CS program to appropriate departmental, college, and university Curriculum Committees and then on to Faculty Senate, Deans Council, and Board of Regents (November 2015 – Fall 2016)
- after BOR approval, the ECE&CS proposal will be formally presented to OPI, CSPAC, and BPE (March 2017)

Child Development Option

The Child Development option of the proposed and revised ECE&CS program reflects several program enhancements, including:

• New IS and CS requirements, SOCI101IS and NUTR221CS, respectively. NUTR221CS is offered in the Department of Health & Human Development and is a new prerequisite for EDEC253.

CURRICULUM PROPOSAL FORM

- NASX105D, 205D, or 232D will be required to fulfill the Diversity CORE, consistent with the requirements in the ECE&CS ECE: P 3 option.
- EDEC160 will change from Early Childhood Through Adolescent Development to Early Childhood Development and be focused to child development birth through age 8.
- EDEC385 will change from 3 cr LEC 1 cr LAB to 3 Cr LEC
- EDEC410 Families, Communities, Culture will be added to the ECE&CS Child Development option (developed for UM's ECE: P – 3 program proposal currently under MUS review). Dr. Kalli Decker will add this course to her workload Spring 2018 to reflect a 15 credit/50% teaching commitment in the workload.
- EDEC450 will be revised consistent with the OCHE CCN title Literacy in Early Childhood
- FCS460 Parenting will be required (currently taught by FCS faculty)
- FCS459 Reaching the Hurt Child will be required (currently taught by FCS faculty)
- EDEC498 Early Childhood Internship (6cr) will replace FCS454 Senior Seminar (4cr)

4. Need

A. To what specific need is the institution responding in developing the proposed program?

The state recently adopted a new Early Childhood Education P-3 teaching endorsement, requiring that teachers in public preschool programs be appropriately certified and endorsed by July 1, 2018. The proposed and revised ECE&CS program is responding to the need to provide more specialized course and field experience to early childhood professionals by offering two new options: Child Development option and ECE: P-3 option.

B. How will students and any other affected constituencies be served by the proposed program?

The proposed program revisions simultaneously support student interests as well as early childhood workforce demands by establishing two options within the major: Child Development and ECE: P-3. A strong foundational undergraduate education in ECE&CS prepares students for graduate programs, especially in counseling, social work, early intervention, and early childhood special education. Further, by offering the ECE: P-3 option, MSU can recruit students who are receiving financial assistance through the Montana Preschool Development Grant. The purpose of the grant is to improve access to high quality preschool education in sixteen targeted communities across the state over the next four years. A major aspect of the grant is to offer financial assistance to teachers in the targeted communities to pursue the Early Childhood Education P-3 teaching endorsement. Recipients of the financial assistance can choose Montana State University, University of Montana, University of Montana-Western, or Salish Kootenai College. Finally, out-of-state graduates seeking to expand their teaching licenses can be recommended by MSU for the P-3 teaching endorsement upon transcript review and completion of ECE&CS coursework.

C. What is the anticipated demand for the program? How was this determined?

The recent Institute of Medicine and National Research Council joint publication entitled *Transforming* the Workforce for Children Birth Through Age 8 asserts the critical need for a strong continuum of care for young children birth through age 8, which requires rigorous, thoughtful, and intentional professional preparation. In Montana, increased emphasis and focus on the early childhood years has prompted a response among institutions of higher education to deliver high quality academic programs to best prepare individuals for a range of careers working with young children and their families. The growing

CURRICULUM PROPOSAL FORM

need for out-of-home care for young children in working families requires highly trained and qualified early childhood professionals.

At MSU, we have experienced significant growth of our undergraduate ECE&CS program since its inception in 2008. Enrollment has grown from 10 to 70 students, with one tenure-track faculty member delivering the on-campus program and another tenure-track faculty member delivering an online program to an additional 15 students through June 2014. A significant rise in enrollment in EDEC courses has also occurred among students enrolled in the Elementary Education: K – 8 teacher endorsement degree program. Seven Elementary Education students enrolled in EDEC courses in 2010 and twenty-three students enrolled in 2014. Steady growth and increased enrollment in EDEC courses is indicative of growing student interest to work with young children and their families in a variety of contexts, including home, school, and community.

5. Process Leading to Submission

A. Describe the process of developing and approving the proposed program. Indicate, where appropriate, involvement by faculty, students, community members, potential employers, accrediting agencies, etc.

The proposed and revised ECE&CS program is the result of collaborated planning that has taken place over the past 24 months. As previously detailed, Dr. Christine Lux collaborated with several state partners during 2014 to draft and propose the Chapter 58 (ARM 10.58.531) Early Childhood Education P – 3 standards. Dr. Lux worked alongside state colleagues Dr. Cindy O'Dell from Salish Kootenai College, Dr. Julie Bullard from the University of Montana-Western (now from the University of Montana), Dr. Susan Harper Whalen from the University of Montana, and Libby Hancock of the Montana Early Childhood Project. The standards were approved by the Board of Public Education in late October 2014, effective July 1, 2015. The adoption of the Montana Early Childhood Education P - 3 teaching endorsement prompted campuses to begin planning for new academic programs to meet the new standards.

Here at MSU, Dr. Lux presented a draft ECE: P-3 program to Department of Education faculty in April 2015. The presentation was favorably received and revisions continued.

Campus review of the Child Development option has been completed. Review and approval by CSPAC, OPI, and BPE will occur after securing approval by the Montana Board of Regents in September 2016.

6. Resources

A. Will additional faculty resources be required to implement this program? If yes, please describe the need and indicate the plan for meeting this need.

The Department of Health & Human Development hired a tenure-track faculty member in January 2015 to join the ECE&CS program for the 2015-2106 academic year. Dr. Kalli Decker's expertise in child development complements Dr. Christine Lux's expertise in teacher education to strengthen the ECE&CS program by proposing two options in the major. At this time, our program employs two tenure-track and two non-tenure track faculty. One non-tenure-track faculty, Ron Laferriere, teaches all of the EDSP courses. Our campus is prepared to support early childhood professional development with two tenure-track faculty and two part-time non-tenure track faculty members (one benefits-bearing) with specialized expertise, far below the faculty resource allocation of other academic programs in the department with similar enrollments.

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Montana Board of Regents

CURRICULUM PROPOSAL FORM

B. Are other, additional resources required to ensure the success of the proposed program? If yes, please describe the need and indicate the plan for meeting this need.

No other resources are necessary at this time.

7. Assessment

A. How will the success of the program be measured?

The current ECE&CS program assessment, created and submitted for the 2012-2014 catalog, has been revised to reflect the proposed ECE&CS program outcomes for both the Child Development and ECE: P-3 options. Program goals are consistent with NAEYC Professional Preparation Standards.

Montana University System

NOTICE OF INTENT TO PLAN

Program/Institute Title: Early Childhood Education & Child Services (Child Development Option)

Campus, School/Department: MSU-Bz, Department of Health & Human Development

Contact Name/Info: Christine Lux, christine.lux@montana.edu

Expected Submission Date: SEP 2016

Mode of Delivery: Face-to-Face

To increase communication, collaboration, and problem solving opportunities throughout the MUS in the program/center/institute development process, please complete this form not more than 18 months in advance of the anticipated date of submission of the proposed program/center/institute to the Board of Regents for approval.

For more information regarding the Intent to Plan process, please visit the Academic and Student Affairs Handbook.

1) Provide a description of the program/center/institute.

The Early Childhood Education and Child Services (ECE&CS) major emphasizes the dual focus of education and services within the context of family, school, and community. Throughout the program, students are actively engaged in a variety of settings that include children, their families, and other early childhood professionals. Course work and field experience provide multiple opportunities for applied understanding of children's growth and development, building family and community relationships, conducting observations and assessments, understanding developmentally appropriate practices, and promoting the well-being of young children and their families.

The revision to the current program includes the proposal of two new options: 1) Child Development, and 2) ECE: P – 3, leading to a preschool – grade 3 teacher endorsement in the State of Montana. The Child Development option of the ECE&CS major will appeal to students with professional interests including parent education, resource & referral, advocacy, and childcare administration, as well as teaching children birth through age eight in non-public school settings. The Child Development option includes new course requirements from MSU's NASX, SOCI, NUTR, and FCS rubrics. This will enable students to have a more focused course of study rather than selecting 40+ supporting and elective class credits. Interdisciplinary coursework helps students understand the connections between early childhood education and other health and human development programs in the department and to

prepare students for careers in classroom and community settings.

2) Describe the need for the program/center/institute. Specifically, how the program/center/institute meets current student and workforce demands. (Please cite sources).

The recent Institute of Medicine and National Research Council joint publication entitled "Transforming the Workforce for Children Birth Through Age 8" asserts the critical need for a strong continuum of care for young children birth through age 8, which requires rigorous, thoughtful, and intentional professional preparation. In Montana, increased emphasis and focus on the early childhood years has prompted a response among institutions of higher education to deliver high quality academic programs to best prepare individuals for a range of careers working with young children and their families. The growing need for out-of-home care for young children in working families requires highly trained and qualified early childhood professionals.

The proposed program revisions simultaneously support student interests as well as early childhood workforce demands by establishing two options within the major: Child Development and ECE: P-3. A strong foundational undergraduate education in ECE&CS prepares students for graduate programs, especially in counseling, social work, early intervention, and early childhood special education.

3) Describe how the program/center/institute fits with the institutional mission, strategic plan, and existing institutional program array.

The ECE&CS program focus is on early childhood, birth through age 8, which is unique. Strong connections are made to family, school, and community contributions to the well being of children and families. No other program on campus provides the same focus. The Child Development option is nearly identical to the existing ECE&CS major and responds to the needs and interests of students seeking teaching careers in non-public settings as well as careers serving children and families in community contexts. Further, the Child Development option includes new course requirements from MSU's NASX, SOCI, NUTR, and FCS rubrics. This will enable students to have a more focused course of study rather than selecting 40+ supporting and elective class credits. Interdisciplinary coursework helps students understand the connections between early childhood education and other health and human development programs in the department and to prepare students for careers in classroom and community settings.

MSU's commitment to learning, discovery, and engagement is evident in the proposed and revised ECE&CS program. Shared values and vision for respect, integrity, student success, and excellence will be experienced through continual program evaluation and improvement, with particular attention paid to the relationships and collaborations with our early childhood partners in the community. These relationships have been developed and strengthened over time, as evidenced by faculty engagement on local and state advisory councils and leadership with the Early Childhood Higher Education Consortium. At the school and programmatic level, ECE&CS faculty work with local school teachers and administrators on grant funded and field supervision projects and also provide advisement and

leadership to the MSU Child Development Center, Montana's first preschool program and the laboratory site for teaching and research in the Department of Health & Human Development. Importantly, the ECE&CS program will continue its strong relationship with the Montana Early Childhood Project, an outreach project of MSU that is administering the financial assistance project of the Montana Preschool Development Grant to ensure course and program development as well as financial assistance for statewide Early Childhood Education P – 3 programs.

4) How does the proposed program/center/institute fit within the MUS system?

The proposed and revised ECE&CS program, with options in Child Development and ECE: P-3 teacher endorsement, are the result of many discussions and collaborations with members of the Early Childhood Higher Education Consortium (ECHEC), representing community colleges, tribal colleges, and four-year institutions across the state. The coordinated effort and substantial collaboration within and outside the MUS system is the result of the important work of the ECHEC. Dr. Christine Lux, ECE&CS Program Leader, is chair of the ECHEC. During 2014, members of ECHEC were invited by the Office of Public Instruction to draft and propose the Chapter 58 (ARM 10.58.531) Early Childhood Education P – 3 standards under former ECHEC chair Dr. Cindy O'Dell. Dr. Lux worked alongside state colleagues Dr. Cindy O'Dell from Salish Kootenai College, Dr. Julie Bullard from the University of Montana-Western (now from the University of Montana), Dr. Susan Harper Whalen from the University of Montana, and Libby Hancock of the Montana Early Childhood Project. The adoption of the Montana Early Childhood Education P - 3 teaching endorsement on July 1, 2015 elevated the status of preschool and early primary grade teachers who are responsible for establishing children's strong foundation for healthy development in all domains of well-being. In response, all of our campus partners have continued to work together to ensure the delivery of the highest quality early childhood professional preparation, both at the undergraduate and master's level.

Salish Kootenai College, the University of Montana-Western, and MSU-Bozeman were the only institutes of higher education in the state offering a bachelor's degree in Early Childhood Education at the time of the state's approval of the ECE P-3 endorsement. MSU's ECE&CS program is highly regarded, reporting the fastest rate of growth in enrollment with the most limited faculty resources in comparison to the two other four-year undergraduate Early Childhood Education degree programs in the state. Last year, Salish Kootenai College and the University of Montana-Western were able to quickly mobilize their resources to propose and receive approval for their undergraduate Early Childhood Education P-3 programs. Additionally, the University of Montana proposed and received approval for a Master of Education program with one option leading to the ECE: P-3 teaching endorsement. UM recently proposed an undergraduate Early Childhood Education P-3 undergraduate program and MSU-Billings is hoping to propose an Early Childhood Education P-3 teaching minor to complement their Elementary Education program in the upcoming academic year. The programs complement one another and will meet the growing demand for a highly qualified early childhood workforce across the state and beyond.

Signatures

Intent to Plan

Program/Institute/Center Title: SEP 2016

Campus: Early Childhood Education & Child Services (Child Development Option)

Expected Submission Date: MSU-Bz

Signature/Date			
Associate Provost: (procedural, not approval)	DocuSigned by: Ron Larsen E9B7047DE1CA414	5/23/2016	
College/School Dean:	Docusigned by: USON HAMON 3982A2BF0A94403	5/23/2016	
Chief Academic Officer:	Docusigned by: Martha d. Potrin 43A1A78D200F474	5/24/2016	
Chief Executive Officer:	DocuSigned by: 7D6A4CE96C3F415	5/24/2016	
Flagship Provost:	Docusigned by: Martha A. Potrin 43A1A78D200F474	5/24/2016	
Flagship President:	DocuSigned by: 706A4CE96C3F415	5/24/2016	

When submitting the proposal to the BOR, include this signed form with the Level II request.

July 19, 2016

Date of Final Review:

Early Childhood Education & Child Services Major Child Development Option

Freshman Year

Fall		Spring	
US101US First Year Seminar	3	NASX105D, 205D, or 232D	3
		Native American Studies	
WRIT101W College Writing I	3	SOCI101IS Introduction to Sociology	3
Q, IA, IH, or IN CORE	3	Q, IA, IH, or IN CORE	3
EDEC160 Early Childhood Development	3	Supporting course/elective	6
Supporting course/elective	3		
	15cr		15cr

Sophomore Year

Fall		Spring	
NUTR221CS Basic Human Nutrition	3	EDEC253 Health and Movement in Early	3
		Childhood	
FCS263 Relationships and Family Systems	3	EDEC271 Early Childhood Field	2
		Experience	
EDEC288 Signing for Early Childhood	3	Q, IA, IH, or IN CORE	3
Educators			
Q, IA, IH, or IN CORE	3	Supporting courses/electives	6
Supporting course/elective	3		
	15cr		14cr

Junior Year

Fall		Spring	
EDEC350 Play and Learning in Early Childhood	3	EDEC385 Integrated Curriculum in Early Childhood	3
EDSP306 Exceptional Learners	3	EDEC430 Social Emotional Development in Young Children	3
EDSP307 Exceptional Learner Lab	1	FCS359 Theories and Skills for Help Rel	3
FCS371 Research Methods in HHD	3	FCS460 Parenting	3
Supporting courses/electives	6	Supporting course/elective	3
	16cr		15cr

Senior Year

Fall		Spring	
EDEC450 Literacy in Early Childhood	3	EDEC410 Families, Communities, Culture	3
EDSP458 Assessment & Intervention	4	FCS454 Professional Issues Sen Seminar	4
FCS455R Program Planning and	3	FCS459 Reaching the Hurt Child	3
Administration in FCS			
Supporting courses/electives	5	Supporting courses/electives	5
	15cr		15cr
		Total credits	120

Supporting courses / electives

Business
Education and Administration
Health
Human Services
Social Work / Counseling
Advocacy and Leadership
Family, Culture, and Society

Suggested Minors

Business Administration (30 credits)
Entrepreneurship and Small Business Management (30 credits)
Psychology (23 credits)
Sociology (21 credits)
Anthropology (21 credits)
Women's and Gender Studies (21 credits)
Native American Studies (21 credits)
Human Development (21 credits)

ITEM 172-2012-R0916

Request authorization to offer Early Childhood Education and Child Services: P-3 (preschool to grade 3) option

THAT

The current bachelor of science in Early Childhood Education and Child Services at Montana State University proposes to develop new P-3 (preschool to grade 3) option.

EXPLANATION

The Department of Health and Human Development at Montana State University proposes to develop two distinct options under the current Early Childhood Education (ECE) and Child Services (CS) major: 1) Child Development, and 2) ECE: P-3, leading to a preschool-grade 3 teacher endorsement in the State of Montana.

The ECE: P-3 option of the ECE & CS major will appeal to students with professional interests including teaching in public school settings with children in preschool through grade 3. The endorsement will be required for anyone teaching in a public preschool in the state of Montana.

ATTACHMENTS

Academic Proposal Request Form Curriculum Proposal Form Intent to Plan Attachment #1 - P-3 Option Course List

ACADEMIC PROPOSAL REQUEST FORM

ITEM	172-2012-R0916	Meeting Date September 14-15, 2016
Institution:	Montana State University	CIP Code: 19.0500
Program/Center/Institute Title:	B.S. Early Childhood Education a	and Child Services
Includes (please specify below):	Online Offering Options	P-3 (preschool to grade 3)
sted in parentheses follow	ing the type of request. For more	n an Item Template and any additional materials, including those information pertaining to the types of requests listed below, he http://mus.edu/che/arsa/preparingacademicproposals.asp .
A. Level I:		
1b. Withdrawi 2. Adding, re-ti	nformation on checklist at time of te	ampus Certificate of 29 credits or less
OCHE Approvals		
• •	existing postsecondary education	onal program
6. Terminating	an existing postsecondary educa	ational program (Program Termination Checklist)
7. Consolidatin	ng existing postsecondary educat	cional programs (Curriculum Proposal Form)
8. Adding a ne	w minor where there is a major o	or an option in a major (Curriculum Proposal Form)
9. Revising a p	rogram (Curriculum Proposal Form)	
10. Adding a te	emporary Certificate or AAS Degr	ree Program Approval limited to 2 years

ACADEMIC PROPOSAL REQUEST FORM

<u>B. I</u>	Level II:
X	1. Establishing a new postsecondary educational program (Curriculum Proposal and Reviewed Intent to Plan Form) —
	2. Exceeding the 120 credit maximum for baccalaureate degrees Exception to policy 301.11
	4. Forming, eliminating or consolidating a college, division, school, department, institute, bureau, center, station, laboratory or similar unit (Curriculum or Center/Institute Proposal and Reviewed Intent to Plan Form, except when eliminating or consolidating)
	5. Re-titling a college, division, school, department, institute, bureau, center, station, laboratory or similar unit

Specify Request:

Request authorization to create a new option under the bachelor of science in Early Childhood Education and Child Services major: P-3 (preschool to grade 3) option.

CURRICULUM PROPOSAL FORM

1. Overview

The early childhood education and child services (ECE&CS) major emphasizes the dual focus of education and services within the context of family, school, and community. Throughout the program, students are actively engaged in a variety of settings that include children, their families, and other early childhood professionals. Course work and field experience provide multiple opportunities for applied understanding of children's growth and development, building family and community relationships, conducting observations and assessments, understanding developmentally appropriate practices, and promoting the well-being of young children and their families.

A. Provide a one paragraph description of the proposed program. Be specific about what degree, major, minor or option is sought.

The revision to the current program includes the proposal of two new options:

- Child Development Option
- ECE: P 3 Option (preschool grade 3 teacher endorsement)

This proposal is for the ECE: P-3 Option (Early Childhood Education: Preschool – Grade 3 teacher endorsement). The ECE: P-3 option of the ECE&CS major will appeal to students with professional interests including teaching in public school settings with children in preschool through grade 3. The endorsement will be required for anyone teaching in a public preschool in the state of Montana.

2. Institutional and System Fit

A. What is the connection between the proposed program and existing programs at the institution?

The proposed ECE: P-3 Option is well-integrated within the College of Education, Health & Human Development. Dr. Christine Lux, Program Leader of ECE&CS, has been working with Department of Education faculty for the past several months to revise the ECE&CS program to align with MSU's Teacher Education Programs to meet state and national accreditation standards, particularly ARM Ch.58.531, the new state standards for Early Childhood Education leading to the ECE: P-3 teaching endorsement.

B. Will approval of the proposed program require changes to any existing programs at the institution? If so, please describe.

Two new courses are being proposed to meet the need for the ECE: P-3 teaching endorsement. The revised and proposed ECE&CS program will not require changes to other academic programs.

C. Describe what differentiates this program from other, closely related programs at the institution (if appropriate).

The ECE&CS program focus is on early childhood, birth through age 8, which is unique. Strong connections are made to family, school, and community contributions to the well-being of children and families. No other program on campus provides the same focus. Importantly, the ECE: P-3 option is aligned with MSU's Teacher Education Programs to meet state and national accreditation standards.

CURRICULUM PROPOSAL FORM

D. How does the proposed program serve to advance the strategic goals of the institution?

MSU's commitment to learning, discovery, and engagement is evident in the proposed and revised ECE&CS program. Shared values and vision for respect, integrity, student success, and excellence will be experienced through continual program evaluation and improvement, with particular attention paid to the relationships and collaborations with our early childhood partners in the community. These relationships have been developed and strengthened over time, as evidenced by faculty engagement on local and state advisory councils and leadership with the Early Childhood Higher Education Consortium. At the school and programmatic level, ECE&CS faculty work with local school teachers and administrators on grant funded and field supervision projects and also provide advisement and leadership to the MSU Child Development Center, Montana's first preschool program and the laboratory site for teaching and research in the Department of Health & Human Development. Importantly, the ECE&CS program will continue its strong relationship with the Montana Early Childhood Project, an outreach project of MSU that is administering the financial assistance project of the Montana Preschool Development Grant to ensure course and program development as well as financial assistance for statewide Early Childhood Education P – 3 programs.

E. Describe the relationship between the proposed program and any similar programs within the Montana University System. In cases of substantial duplication, explain the need for the proposed program at an additional institution. Describe any efforts that were made to collaborate with these similar programs; and if no efforts were made, explain why. If articulation or transfer agreements have been developed for the substantially duplicated programs, please include the agreement(s) as part of the documentation.

The proposed and revised ECE&CS program, with options in Child Development and ECE: P – 3 teacher endorsement, are the result of many discussions and collaborations with members of the Early Childhood Higher Education Consortium (ECHEC), representing community colleges, tribal colleges, and four-year institutions across the state. The coordinated effort and substantial collaboration within and outside the MUS system is the result of the important work of the ECHEC. Dr. Christine Lux, ECE&CS Program Leader, is chair of the ECHEC. During 2014, members of ECHEC were invited by the Office of Public Instruction to draft and propose the Chapter 58 (ARM 10.58.531) Early Childhood Education P - 3 standards under former ECHEC chair Dr. Cindy O'Dell. Dr. Lux worked alongside state colleagues Dr. Cindy O'Dell from Salish Kootenai College, Dr. Julie Bullard from the University of Montana-Western (now from the University of Montana), Dr. Susan Harper Whalen from the University of Montana, and Libby Hancock of the Montana Early Childhood Project. The adoption of the Montana Early Childhood Education P - 3 teaching endorsement on July 1, 2015 elevated the status of preschool and early primary grade teachers who are responsible for establishing children's strong foundation for healthy development in all domains of well-being. In response, all of our campus partners have continued to work together to ensure the delivery of the highest quality early childhood professional preparation, both at the undergraduate and master's level.

Salish Kootenai College, the University of Montana-Western, and MSU-Bozeman were the only institutes of higher education in the state offering a bachelor's degree in Early Childhood Education at the time of the state's approval of the ECE P – 3 endorsement. MSU's ECE&CS program is highly regarded, reporting the fastest rate of growth in enrollment with the most limited faculty resources in comparison to the two other four-year undergraduate Early Childhood Education degree programs in the state. Last year, Salish Kootenai College and the University of Montana-Western were able to quickly mobilize their resources to

CURRICULUM PROPOSAL FORM

propose and receive approval for their undergraduate Early Childhood Education P-3 programs. Additionally, the University of Montana proposed and received approval for a Master of Education program with one option leading to the ECE: P-3 teaching endorsement. UM recently proposed an undergraduate Early Childhood Education P-3 undergraduate program and MSU-Billings is hoping to propose an Early Childhood Education P-3 teaching minor to complement their Elementary Education program in the upcoming academic year. The programs complement one another and will meet the growing demand for a highly qualified early childhood workforce across the state and beyond.

3. Program Details

A. Provide a detailed description of the proposed curriculum. Where possible, present the information in the form intended to appear in the catalog or other publications. NOTE: In the case of two-year degree programs and certificates of applied science, the curriculum should include enough detail to determine if the characteristics set out in Regents' Policy 301.12 have been met.

ECE: P – 3 Curriculum Tab sheets (attached)

B. Describe the planned implementation of the proposed program, including estimates of numbers of students at each stage.

The ECE: P - 3 option will be available to students beginning Fall 2017. New courses will be developed and added to course plans. Each year, the ECE&CS program welcomes approximately 10 - 15 new students and receives approximately 3 – 5 transfer students per academic year. Incoming and transfer students will declare either the Child Development or ECE: P - 3 option beginning Fall 2017.

Beginning Fall 2017, ECE&CS students at sophomore or junior standing can choose to change their curriculum to the 2017 – 2018 catalog and also choose the Child Development or ECE: P-3 option. ECE&CS students with senior standing will be encouraged to complete the 2015 – 2016 or 2016 – 2017 catalog. Students pursuing the Elementary Education K-8 teaching endorsement will also have the option to declare ECE&CS with an ECE: P-3 option beginning Fall 2017.

As of the Fall 2015 census report, the ECE&CS program is reporting 13 freshman, 9 sophomores, 11 juniors, and 13 seniors. Additionally, students majoring in Elementary Education who are also pursuing an Early Childhood Option are reporting 19 freshman, 6 sophomores, 8 juniors, and 16 seniors as of Fall 2015. It is anticipated that 5-10 Elementary Education majors will change to the ECE&CS curriculum and pursue the ECE: P- 3 option.

Implementation of the program includes:

- planning for revised courses and new course development (Spring Summer 2016)
- propose revised ECE&CS program to appropriate departmental, college, and university Curriculum Committees and then on to Faculty Senate, Deans Council, and Board of Regents (November 2015 – Fall 2016)
- after BOR approval, the ECE&CS proposal will be formally presented to OPI, CSPAC, and BPE (March 2017)

ECE: P - 3 Option

The ECE: P - 3 option of the proposed and revised ECE&CS program reflects several program enhancements, including:

• New US, Q, IA, D, IS, IH requirements consistent with Elementary Education CORE

CURRICULUM PROPOSAL FORM

- New CS requirement. NUTR221CS is offered in the Department of Health & Human Development and is a new prerequisite for EDEC253.
- EDEC160 will change from Early Childhood Through Adolescent Development to Early Childhood Development and be focused to child development birth through age 8.
- EDEC385 will change from 3 cr LEC 1 cr LAB to 3 Cr LEC
- EDEC450 will be revised consistent with the OCHE CCN title Literacy in Early Childhood
- Several EDU courses will be required to assure alignment of the ECE&CS ECE: P − 3 option with MSU's teacher preparation programs. These are reflected on the tab sheet.
- Two new courses will be developed:
 - o EDEC4XX P 3 Early Childhood STEAM
 - EDEC4XX P 3 Early Childhood Language Arts and Social Studies
 - The Montana Preschool Development Grant has funds available for course revision and development. Dr. Christine Lux utilized some of these monies during Summer 2015 to begin revising and developing the P 3 courses and will finish course preparation during Summer 2017, with support from Dr. Kalli Decker and other College of Education, Health & Human Development faculty.

4. Need

A. To what specific need is the institution responding in developing the proposed program?

The state recently adopted a new Early Childhood Education P-3 teaching endorsement, requiring that teachers in public preschool programs be appropriately certified and endorsed by July 1, 2018. The proposed program is responding to the need to provide more specialized course and field experience to early childhood professionals by offering a new options: ECE: P-3.

B. How will students and any other affected constituencies be served by the proposed program?

The proposed program revision supports student interests as well as early childhood workforce demands by establishing a new option within the major: ECE: P-3. A strong foundational undergraduate education in ECE&CS prepares students for graduate programs, especially in counseling, social work, early intervention, and early childhood special education. Further, by offering the ECE: P-3 option, MSU can recruit students who are receiving financial assistance through the Montana Preschool Development Grant. The purpose of the grant is to improve access to high quality preschool education in sixteen targeted communities across the state over the next four years. A major aspect of the grant is to offer financial assistance to teachers in the targeted communities to pursue the Early Childhood Education P-3 teaching endorsement. Recipients of the financial assistance can choose Montana State University, University of Montana, University of Montana-Western, or Salish Kootenai College. Finally, out-of-state graduates seeking to expand their teaching licenses can be recommended by MSU for the P-3 teaching endorsement upon transcript review and completion of ECE&CS coursework.

C. What is the anticipated demand for the program? How was this determined?

The recent Institute of Medicine and National Research Council joint publication entitled *Transforming* the Workforce for Children Birth Through Age 8 asserts the critical need for a strong continuum of care for young children birth through age 8, which requires rigorous, thoughtful, and intentional professional preparation. In Montana, increased emphasis and focus on the early childhood years has prompted a response among institutions of higher education to deliver high quality academic programs to best prepare individuals for a range of careers working with young children and their families. The growing

CURRICULUM PROPOSAL FORM

need for out-of-home care for young children in working families requires highly trained and qualified early childhood professionals.

At MSU, we have experienced significant growth of our undergraduate ECE&CS program since its inception in 2008. Enrollment has grown from 10 to 70 students, with one tenure-track faculty member delivering the on-campus program and another tenure-track faculty member delivering an online program to an additional 15 students through June 2014. A significant rise in enrollment in EDEC courses has also occurred among students enrolled in the Elementary Education: K – 8 teacher endorsement degree program. Seven Elementary Education students enrolled in EDEC courses in 2010 and twenty-three students enrolled in 2014. Steady growth and increased enrollment in EDEC courses is indicative of growing student interest to work with young children and their families in a variety of contexts, including home, school, and community.

5. Process Leading to Submission

A. Describe the process of developing and approving the proposed program. Indicate, where appropriate, involvement by faculty, students, community members, potential employers, accrediting agencies, etc.

The proposed ECE: P-3 option is the result of collaborated planning that has taken place over the past 24 months. As previously detailed, Dr. Christine Lux collaborated with several state partners during 2014 to draft and propose the Chapter 58 (ARM 10.58.531) Early Childhood Education P-3 standards. Dr. Lux worked alongside state colleagues Dr. Cindy O'Dell from Salish Kootenai College, Dr. Julie Bullard from the University of Montana-Western (now from the University of Montana), Dr. Susan Harper Whalen from the University of Montana, and Libby Hancock of the Montana Early Childhood Project. The standards were approved by the Board of Public Education in late October 2014, effective July 1, 2015. The adoption of the Montana Early Childhood Education P-3 teaching endorsement prompted campuses to begin planning for new academic programs to meet the new standards.

Here at MSU, Dr. Lux presented a draft ECE: P – 3 program to Department of Education faculty in April 2015. The presentation was favorably received and revisions continued.

The campus review of the ECE: P-3 option has been completed. Review and approval by CSPAC, OPI, and BPE will be completed after securing Board of Regents approval in September 2016..

6. Resources

A. Will additional faculty resources be required to implement this program? If yes, please describe the need and indicate the plan for meeting this need.

The Department of Health & Human Development hired a tenure-track faculty member in January 2015 to join the ECE&CS program for the 2015-2106 academic year. Dr. Kalli Decker's expertise in child development complements Dr. Christine Lux's expertise in teacher education to strengthen the ECE&CS program by proposing two options in the major. At this time, our program employs two tenure-track and two non-tenure track faculty. One non-tenure-track faculty, Ron Laferriere, teaches all of the EDSP courses. Our campus is prepared to support early childhood professional development with two tenure-track faculty and two part-time non-tenure track faculty members (one benefits-bearing) with specialized expertise, far below the faculty resource allocation of other academic programs in the department with similar enrollments.

CURRICULUM PROPOSAL FORM

B. Are other, additional resources required to ensure the success of the proposed program? If yes, please describe the need and indicate the plan for meeting this need.

No other resources are necessary at this time.

7. Assessment

A. How will the success of the program be measured?

The current ECE&CS program assessment, created and submitted for the 2012-2014 catalog, has been revised to reflect the proposed ECE&CS program outcomes for both the Child Development and ECE: P-3 options. Program goals are consistent with NAEYC Professional Preparation Standards. Additionally, the ECE: P-3 option is aligned with MSU's teacher preparation programs and Montana ARM Chapter 58 Early Childhood Education standards.

Montana University System

NOTICE OF INTENT TO PLAN

Program/Institute Title: Early Childhood Education & Child Services (ECE: P - 3 Option)

Campus, School/Department: MSU-Bz, Department of Health & Human Development

Contact Name/Info: Christine Lux, christine.lux@montana.edu

Expected Submission Date: SEP 2016

Mode of Delivery: Face-to-Face

To increase communication, collaboration, and problem solving opportunities throughout the MUS in the program/center/institute development process, please complete this form not more than 18 months in advance of the anticipated date of submission of the proposed program/center/institute to the Board of Regents for approval.

For more information regarding the Intent to Plan process, please visit the Academic and Student Affairs Handbook.

1) Provide a description of the program/center/institute.

The Early Childhood Education and Child Services (ECE&CS) major emphasizes the dual focus of education and services within the context of family, school, and community. Throughout the program, students are actively engaged in a variety of settings that include children, their families, and other early childhood professionals. Course work and field experience provide multiple opportunities for applied understanding of children's growth and development, building family and community relationships, conducting observations and assessments, understanding developmentally appropriate practices, and promoting the well-being of young children and their families.

The revision to the current program includes the proposal of two new options: 1) Child Development, and 2) ECE: P-3, leading to a preschool – grade 3 teacher endorsement in the State of Montana. The ECE: P-3 option of the ECE&CS major will appeal to students with professional interests including teaching in public school settings with children in preschool through grade 3. The endorsement will be required for anyone teaching in a public preschool in the state of Montana. Two new courses are being proposed to meet the need for the ECE: P-3 teaching endorsement. The revised and proposed ECE&CS program will not require changes to other academic programs.

2) Describe the need for the program/center/institute. Specifically, how the program/center/institute

meets current student and workforce demands. (Please cite sources).

The recent Institute of Medicine and National Research Council joint publication entitled "Transforming the Workforce for Children Birth Through Age 8" asserts the critical need for a strong continuum of care for young children birth through age 8, which requires rigorous, thoughtful, and intentional professional preparation. In Montana, increased emphasis and focus on the early childhood years has prompted a response among institutions of higher education to deliver high quality academic programs to best prepare individuals for a range of careers working with young children and their families. The growing need for out-of-home care for young children in working families requires highly trained and qualified early childhood professionals.

The proposed program revisions simultaneously support student interests as well as early childhood workforce demands by establishing two options within the major: Child Development and ECE: P-3. A strong foundational undergraduate education in ECE&CS prepares students for graduate programs, especially in counseling, social work, early intervention, and early childhood special education.

Further, the state adopted a new Early Childhood Education P-3 teaching endorsement in July 2015, requiring that teachers in public preschool programs be appropriately certified and endorsed by July 1, 2018. The proposed ECE: P-3 option is responding to the need to provide more specialized course and field experience to early childhood professionals. By offering the ECE: P-3 option, MSU can recruit students who are receiving financial assistance through the Montana Preschool Development Grant. The purpose of the grant is to improve access to high quality preschool education in sixteen targeted communities across the state over the next four years. A major aspect of the grant is to offer financial assistance to teachers in the targeted communities to pursue the Early Childhood Education P-3 teaching endorsement. Recipients of the financial assistance can choose Montana State University, University of Montana, University of Montana-Western, or Salish Kootenai College. Finally, out-of-state graduates seeking to expand their teaching licenses can be recommended by MSU for the P-3 teaching endorsement upon transcript review and completion of ECE&CS coursework.

At MSU, we have experienced significant growth of our undergraduate ECE&CS program since its inception in 2008. Enrollment has grown from 10 to 70 students, with one tenure-track faculty member delivering the on-campus program and another tenure-track faculty member delivering an online program to an additional 15 students through June 2014. A significant rise in enrollment in EDEC courses has also occurred among students enrolled in the Elementary Education: K – 8 teacher endorsement degree program. Seven El Ed students enrolled in EDEC courses in 2010 and twenty-three students enrolled in 2014. Steady growth and increased enrollment in EDEC courses is indicative of growing student interest to work with young children and their families in a variety of contexts, including home, school, and community.

3) Describe how the program/center/institute fits with the institutional mission, strategic plan, and existing institutional program array.

The ECE&CS program focus is on early childhood, birth through age 8, which is unique. Strong connections are made to family, school, and community contributions to the well being of children and families. No other program on campus provides the same focus. Importantly, the ECE: P-3 option is aligned with MSU's Teacher Education Programs to meet state and national accreditation standards.

MSU's commitment to learning, discovery, and engagement is evident in the proposed and revised ECE&CS program. Shared values and vision for respect, integrity, student success, and excellence will be experienced through continual program evaluation and improvement, with particular attention paid to the relationships and collaborations with our early childhood partners in the community. These relationships have been developed and strengthened over time, as evidenced by faculty engagement on local and state advisory councils and leadership with the Early Childhood Higher Education Consortium. At the school and programmatic level, ECE&CS faculty work with local school teachers and administrators on grant funded and field supervision projects and also provide advisement and leadership to the MSU Child Development Center, Montana's first preschool program and the laboratory site for teaching and research in the Department of Health & Human Development. Importantly, the ECE&CS program will continue its strong relationship with the Montana Early Childhood Project, an outreach project of MSU that is administering the financial assistance project of the Montana Preschool Development Grant to ensure course and program development as well as financial assistance for statewide Early Childhood Education P – 3 programs.

4) How does the proposed program/center/institute fit within the MUS system?

The proposed and revised ECE&CS program, with options in Child Development and ECE: P-3 teacher endorsement, are the result of many discussions and collaborations with members of the Early Childhood Higher Education Consortium (ECHEC), representing community colleges, tribal colleges, and four-year institutions across the state. The coordinated effort and substantial collaboration within and outside the MUS system is the result of the important work of the ECHEC. Dr. Christine Lux, ECE&CS Program Leader, is chair of the ECHEC. During 2014, members of ECHEC were invited by the Office of Public Instruction to draft and propose the Chapter 58 (ARM 10.58.531) Early Childhood Education P - 3 standards under former ECHEC chair Dr. Cindy O'Dell. Dr. Lux worked alongside state colleagues Dr. Cindy O'Dell from Salish Kootenai College, Dr. Julie Bullard from the University of Montana-Western (now from the University of Montana), Dr. Susan Harper Whalen from the University of Montana, and Libby Hancock of the Montana Early Childhood Project. The adoption of the Montana Early Childhood Education P - 3 teaching endorsement on July 1, 2015 elevated the status of preschool and early primary grade teachers who are responsible for establishing children's strong foundation for healthy development in all domains of well-being. In response, all of our campus partners have continued to work together to ensure the delivery of the highest quality early childhood professional preparation, both at the undergraduate and master's level.

Salish Kootenai College, the University of Montana-Western, and MSU-Bozeman were the only institutes of higher education in the state offering a bachelor's degree in Early Childhood Education at the time of the state's approval of the ECE P-3 endorsement. MSU's ECE&CS program is highly

regarded, reporting the fastest rate of growth in enrollment with the most limited faculty resources in comparison to the two other four-year undergraduate Early Childhood Education degree programs in the state. Last year, Salish Kootenai College and the University of Montana-Western were able to quickly mobilize their resources to propose and receive approval for their undergraduate Early Childhood Education P-3 programs. Additionally, the University of Montana proposed and received approval for a Master of Education program with one option leading to the ECE: P-3 teaching endorsement. UM recently proposed an undergraduate Early Childhood Education P-3 undergraduate program and MSU-Billings is hoping to propose an Early Childhood Education P-3 teaching minor to complement their Elementary Education program in the upcoming academic year. The programs complement one another and will meet the growing demand for a highly qualified early childhood workforce across the state and beyond.

Signatures

Intent to Plan

Program/Institute/Center Title: SEP 2016

Campus: Early Childhood Education & Child Services (ECE: P - 3 Option)

Expected Submission Date: MSU-BZ

Signature/Date			
Associate Provost: (procedural, not approval)	DocuSigned by: Ron Larsen E9B7047DE1CA414	5/23/2016	
College/School Dean:	Docusigned by: USON HARMON 39B2A2BF0A94403	5/23/2016	
Chief Academic Officer:	Docusigned by: Martha Potrin 43A1A78D200F474	5/26/2016	
Chief Executive Officer:	DocuSigned by: 7D6A4CE96C3F415	5/26/2016	
Flagship Provost:	Docusigned by: Martha Potrin 43A1A78D200F474	5/26/2016	
Flagship President:	DocuSigned by: 7D6A4CE96C3F415	5/26/2016	

Date of Final Review: July 19, 2016

When submitting the proposal to the BOR, include this signed form with the Level II request.

Early Childhood Education & Child Services Major ECE: P - 3 Option

Freshman Year

Fall		Spring	
EDU101US Teaching and Learning	3	NASX105D, 205D, or 232D	3
		Native American Studies	
WRIT101W College Writing I	3	EDU222IS Ed Psych & Child Development	3
M132 Number & Operations for K-8 Teachers	3	M133Q Geometry & Measurement for K-8	3
IN CORE	3	HSTA101IH or 102IH American History	3
EDEC160 Early Childhood Development	3	SOCI101IS Introduction to Sociology	3
	15cr		15cr

Sophomore Year

Fall		Spring	
NUTR221CS Basic Human Nutrition	3	EDU204IA Arts and Lifelong Learning	3
FCS263 Relationships and Family Systems	3	EDEC253 Health and Movement in Early	3
		Childhood	
EDEC288 Signing for Early Childhood	3	STEM elective	3
Educators			
EDEC271 Early Childhood Field Experience	2	EDU211D Multicultural Education	3
EDU370 Integrating Technology in Education	2	Supporting course/ elective	3
Supporting course/ elective	3		
	16cr		15cr

Junior Year

Fall		Spring	
EDEC350 Play and Learning in Early Childhood	3	EDEC385 Integrated Curriculum in Early	3
		Childhood	
EDSP306 Exceptional Learners	3	EDEC430 Social Emotional Development in	3
		Early Childhood	
EDSP307 Exceptional Learner Lab	1	EDU395 Practicum I	3
FCS371 Research Methods in HHD	3	EDU330 Emergent Literacy	3
EDU382 Assessment, Curriculum, &	3	EDEC4?? P – 3 Language Arts & Social Studies	3
Instruction			
EDEC450 Literacy in Early Childhood	3		
	16cr		15cr

Senior Year

Fall		Spring	
FCS455R Program Planning and Admin	3	EDU495 Student Teaching	12
EDEC4?? P – 3 STEAM	3		
EDSP458 Assessment & Intervention	4		
EDU438 Literacy Assessment, Diagnosis, and	3		
Instruction			
EDU395 Practicum II	3		
	16cr		12cr
		Total credits	120

ITEM 172-2701-R0916

Request for authorization to establish an RN to BSN degree completion program

THAT

Montana State University Billings requests authorization from the Montana Board of Regents to establish a Registered Nurse (RN) to Bachelor of Science in Nursing (BSN) degree completion program.

EXPLANATION

Montana State University Billings seeks to create a new Registered Nurse (RN) to Bachelor of Science in Nursing (BSN) degree completion program. In an effort to address the growing need for professional bachelor prepared nurses, MSU Billings seeks approval to offer a Bachelor of Science in Nursing (BSN) completion degree for registered nurses holding an Associate of Science in Nursing (ASN). This BSN completion program, which will be delivered online, advances nurses' careers by preparing nurses for a range of practice environments, for administrative duties, and for graduate education (including advanced practice nursing to provide access to care in underserved areas of Montana). This BSN completion program adopts all major provisions of the MUS common RN to BSN curriculum recently established by the HealthCARE Montana nursing consortium. The 48 credit hour program of study consists of 33 upper division nursing credits supported by 15 general education credits. An additional objective of the HealthCARE Montana grant met by the RN to BSN completion program is that all coursework can be completed in three full time semesters. This program will be delivered entirely online.

ATTACHMENTS

Academic Proposal Request Form Curriculum Proposal Form Intent to Plan Attachment #1 - Fact Sheet Attachment #2 - Budget Attachment #3 - Letters of Support

ACADEMIC PROPOSAL REQUEST FORM

ITEM	172-2701-R0916	Submission Month or Meeting: September 14-15, 2016			
Institution:	Montana State University Billings	CIP Code: 51.3801			
Program/Center/Institute Title:	RN to BSN degree completion prog	gram			
Includes (please specify below):	Online Offering X Options				
listed in parentheses following	ing the type of request. For more inf	Item Template and any additional materials, including those formation pertaining to the types of requests listed below, how to //mus.edu/che/arsa/preparingacademicproposals.asp .			
A. Level I:					
Campus Approvals					
1a. Placing a po	ostsecondary educational program	into moratorium (Program Termination and Moratorium Form)			
1b. Withdrawi	ng a postsecondary educational pro	ogram from moratorium			
2. Establishing	, re-titling, terminating or revising a	campus certificate of 29 credits or less			
3. Establishing	a B.A.S./A.A./A.S. area of study				
4. Offering an	existing postsecondary educational	program via distance or online delivery			
OCHE Approvals					
5. Re-titling an	existing postsecondary educational	l program			
6. Terminating	an existing postsecondary education	onal program (Program Termination and Moratorium Form)			
7. Consolidatin	ng existing postsecondary education	nal programs (<u>Curriculum Proposal Form</u>)			
8. Establishing	a new minor where there is a majo	r or an option in a major (Curriculum Proposal Form)			
9. Revising a p	ostsecondary educational program	(Curriculum Proposal Form)			
10. Establishin	g a temporary C.A.S. or A.A.S. degro	ee program Approval limited to 2 years			

ACADEMIC PROPOSAL REQUEST FORM

X	<u>B.</u> L	B. Level II:			
	X	1. Establishing a new postsecondary educational program (Curriculum Proposal and Completed Intent to Plan Form			
		2. Exceeding the 120 credit maximum for baccalaureate degrees Exception to policy 301.11			
		3. Forming, eliminating or consolidating an academic, administrative, or research unit (Curriculum or Center/Institute Proposal and Completed Intent to Plan Form, except when eliminating or consolidating)			
		4. Re-titling an academic, administrative, or research unit -			

Specify Request:

Montana State University Billings seeks to create a new Registered Nurse (RN) to Bachelor of Science in Nursing (BSN) degree completion program. In an effort to address the growing need for professional bachelor prepared nurses, MSU-Billings seeks approval to offer a Bachelor of Science in Nursing (BSN) completion degree for registered nurses holding an Associate of Science in Nursing (ASN). This BSN completion program, which will be delivered online, advances nurses' careers by preparing nurses for a range of practice environments, for administrative duties, and for graduate education (including advanced practice nursing to provide access to care in underserved areas of Montana). This BSN completion program adopts all major provisions of the MUS common RN to BSN curriculum recently established by the HealthCARE Montana nursing consortium. The 48 credit hour program of study consists of 33 upper division nursing credits supported by 15 general education credits. An additional objective of the HealthCARE Montana grant met by the RN to BSN completion program is that all coursework can be completed in three full time semesters. This program will be delivered entirely online.

CURRICULUM PROPOSAL FORM

1. Overview

A. Provide a one paragraph description of the proposed program. Be specific about what degree, major, minor or option is sought.

The MSU Billings RN to BSN Completion program will target graduates of MSU Billings City College ASN program and others who hold an unencumbered Registered Nurse license. An RN to BSN Completion program is an efficient bridge for Associate degree nurses to develop stronger clinical reasoning and analytical skills to provide better patient outcomes and to also advance their nursing careers as a bachelor degree nurse. It is not uncommon for registered nurses to complete a two-year degree in a community college before stepping into completion of the last two years of a baccalaureate degree. The program will consist of 49 credits designed to build upon the ASN's evidence based clinical education and practical experience, to strengthen clinical reasoning, to provide a broad integrative understanding of the current healthcare system and apply that knowledge in relevant practice settings – especially in community, public health, and administrative settings. The content and learning will be delivered in an online format with two practice-oriented clinical' in each student's own facility or community as required by American Association of Colleges of Nursing (AACN) White paper for RN-BSN Completion programs. The HealthCARE Montana grant requires that the program be completed in three semesters. A three-semester plan of study has been developed and the 49 credits will be delivered during the fall, spring and summer semesters.

2. Institutional and System Fit

A. What is the connection between the proposed program and existing programs at the institution?

There is no other baccalaureate completion program or similar program available at Montana State University Billings. MSUB's City College offers an Associate of Science Nursing degree (ASN) that follows the state-wide model curriculum. The RN to BSN Completion program will provide a pathway for graduates of the ASN program at MSUB's City College. Having a BSN will expand the nurse's career options. With a bachelor's degree, nurses can advance into specialized practice settings, clinical nurse educator roles, supervision and administration, or enter graduate programs.

B. Will approval of the proposed program require changes to any existing programs at the institution? If so, please describe.

No changes to any program existing at MSUB are required as a result of this program.

C. Describe what differentiates this program from other, closely related programs at the institution (if appropriate).

There are no related programs at the bachelor's level at MSUB. This program is an extension of the ASN at MSUB's City College, providing a pathway to career advancement for graduates.

CURRICULUM PROPOSAL FORM

D. How does the proposed program serve to advance the strategic goals of the institution?

Montana State University Billings' mission is to provide a university experience characterized by excellent teaching, support for individual learning, and engagement in civic responsibility, and community enhancement. The RN to BSN Completion Program advances the MSUB mission by supporting the individual in her or his learning, and engaging in our civic responsibility by providing a program necessary to the healthcare community of Billings and the surrounding area.

The RN to BSN Completion Program also fits within the College of Allied Health Professions' mission to prepare allied health professionals for their chosen field, and to meet the needs of society through education, discovery and service.

City College is a comprehensive community college providing applied technical education. Its mission includes continuing education for all professional majors in the health sciences. City College supports the addition of the proposed RN to BSN Completion Program. Its ASN graduates will benefit from access to the baccalaureate credential, which provides that additional rung in the ladder of lifelong learning and personal and professional development. City College will advise new and current students to consider their professional development through the RN to BSN Completion Program.

MSUB's Strategic Plan Core Theme 2 states that MSUB will identify programs that have room to grow and are in high demand. It has been evidenced that the RN to BSN, as a new program at MSUB, will be in high demand due to the healthcare needs of the region served by MSUB. MSUB is part of the Montana statewide Department of Labor grant, HealthCARE Montana. This grant has funded a collaborative of Montana universities to train, recruit and retain healthcare professionals in rural and frontier Montana by helping prospective students identify and access healthcare pathways, developing an accelerated nursing curriculum to guide healthcare providers toward higher levels practice, ease the nursing shortage in Montana, and build and sustain a rural, home-grown healthcare workforce that serves the smallest communities in the farthest regions of Montana.

The RN to BSN Completion Program, delivered entirely online, will meet the goals of the HealthCARE Montana collaborative through the three semester curriculum, the healthcare pathway from CNA to LPN to ASN to BSN, and by serving the smallest communities in all regions of Montana via distance delivery of the program.

E. Describe the relationship between the proposed program and any similar programs within the Montana University System. In cases of substantial duplication, explain the need for the proposed program at an additional institution. Describe any efforts that were made to collaborate with these similar programs; and if no efforts were made, explain why. If articulation or transfer agreements have been developed for the substantially duplicated programs, please include the agreement(s) as part of the documentation.

CURRICULUM PROPOSAL FORM

The proposed RN to BSN completion degree was developed under the current HealthCARE Montana grant as part of the redesign of the practical nurse (PN), associate degree nurse (ASN), and bachelor of science nurse (BSN) educational programs in the nursing career pathway. This grant funds a 15-college consortium of Montana universities that is led by Missoula College, UM. The grant aims to train, recruit and retain healthcare professionals in rural and frontier Montana by recruiting students into healthcare pathways, developing an accelerated nursing curriculum to raise education attainment and levels of practice, ease the nursing shortage in Montana, and sustain a rural, home-grown healthcare workforce that serves the smallest communities in the farthest regions of Montana.

This proposed RN to BSN program fully collaborated in the grant's curriculum review process, and the proposed degree plan follows the common RN to BSN completion curriculum developed. Like the HealthCARE Montana curriculum, this BSN includes 33 nursing credits and 16 credits of MUS general education requirements.

Among the 15 institutions participating in HealthCARE Montana, only three (Montana Tech, Montana State University Northern, and Salish Kootenai) currently offer the RN to BSN degree completion. Participating consortium schools also deliver ten ASN degree programs and six practical nursing (PN) programs.

The MSUB proposed RN to BSN program complements the other two RN to BSN completion degrees in the MUS system, increasing the system's baccalaureate nursing capacity, and increasing academic nursing options for career advancement and lifelong education for Montana nurses. The BSN degree provides the foundation for masters and doctoral level nursing education, and is the basis for advanced practice education to provide access to care in underserved areas of the state.

CURRICULUM PROPOSAL FORM

3. Program Details

A. Provide a detailed description of the proposed curriculum. Where possible, present the information in the form intended to appear in the catalog or other publications. NOTE: In the case of two-year degree programs and certificates of applied science, the curriculum should include enough detail to determine if the characteristics set out in Regents' Policy 301.12 have been met.

	Table 1- RN to BSN Completion De Curriculum		
	Semester 1: 16 credits		
Course Number	Course Name	Credits	
NRSG 320	Nursing Informatics	3	
NRSG 322	Health Promotion and	3	
	Education		
NRSG 325	Advanced Health Assessment	3	
STAT 216	Intro to Statistics	4	
WRIT	Upper division Writing	3	
		16 semester credits	
	Semester 2: 18 credits		
NURS 301 Nursing in the Community		5	
NURS 302	Nursing in the Community -	1 (45 hours)	
	Clinical		
NRSG 424	Nursing Research and	3	
	Evidence Based Practice		
NRSG 326 Complex Healthcare Needs		3	
PHL 326	HL 326 Medical Ethics		
PSYX 230	Developmental Psychology	3	
		18 semester credits	
	Semester 3: 15 credits		
NRSG 344	RSG 344 Family Nursing		
NRSG 463	Leadership and Management	5	
	for the RN		
NRSG 464	Leadership and Management	1 (45 hours)	
	for the RN – Clinical		
NRSG 361	RSG 361 Global Nursing		
Xxxx	Humanities Elective	3	
		15 semester credits	

49 total credits (72 credit ASN + 49 credit BSN completion = 121 credits)

CURRICULUM PROPOSAL FORM

B. Describe the planned implementation of the proposed program, including estimates of numbers of students at each stage.

If the program is approved, applications will be reviewed and admission decisions made for the RN to BSN completion program in the spring 2016 semester. Students will begin coursework in the fall 2017 semester.

It is anticipated the initial cohort of students (Fall 2017) will be 30. Each cohort will begin in the fall semester with 16 credits delivered in a combination of 16-week courses and 8-week courses. The spring semester will include 18 credits also delivered in a combination of 16 and 8 week courses. The summer semester will include 15 credits delivered in a combination of 8- week and the full semester. The next cohort of 30 students will begin in the fall 2018 semester and follow the same delivery schedule for courses as the previous cohort.

MSUB will work closely with the area medical facilities to identify nurses in need of securing a BSN. Area medical institutions may help by incentivize participation of their ASN employees through offering tuition assistance. MSUB will work closely with the human resource departments of these facilities to identify potential students. In addition, announcements of the program will be made through normal networks including traditional and social media marketing, the Billings Chamber of Commerce, Big Sky Economic Development, BillingsWorks Workforce Council and the Downtown Billings Association.

4. Need

A. To what specific need is the institution responding in developing the proposed program?

The need to raise the educational attainment of the nursing workforce and increase the number of BSN-prepared nurses has been widely endorsed at the national level. Over the last few years, there have been significant research and initiatives that underscore the importance of all registered nurses attaining a baccalaureate education. In 2003, a large-scale study produced by Dr. Linda Aiken and colleagues demonstrated the positive impact of baccalaureate nurses on patient outcomes in hospital settings, especially surgical patient mortality. This study and others that followed validated these findings. Based on these findings, the Institute of Medicine (IOM) in 2010 published a report titled "The Future of Nursing: Leading Change, Advancing Health." The IOM set the following national goal for nursing education:

"Recommendation 4: Increase the proportion of nurses with a baccalaureate degree to 80 percent by 2020. Academic nurse leaders across all schools of nursing should work together to increase the proportion of nurses with a baccalaureate degree from 50 to 80 percent by 2020. These leaders should partner with education accrediting bodies, private and public funders, and employers to ensure funding, monitor progress, and increase the diversity of

CURRICULUM PROPOSAL FORM

students to create a workforce prepared to meet the demands of diverse populations across the lifespan" (IOM, 2010,p.281).

Implementing the proposed RN to BSN Completion Program at MSUB comes at a critical juncture: complex healthcare reform changes require baccalaureate-educated nurses to lead change and advance healthcare. (Attachment 1 summarizes the value of and need to raise the educational attainment of the nursing workforce. http://www.aacn.nche.edu/media-relations/edImpact.pdf.)

There is little hard data on the proportion of BSN qualified nurses in Montana's workforce. A long-term national study estimated that 51% of urban nurses were BSN prepared while 36% of rural nurses held a BSN in 2004 (Skillman et al, 2007). While urban and rural nurse educational attainment continue to increase, rural states like Montana are likely to take longer to reach the 2020 target for 80% of the nursing workforce to hold a BSN.

In the Billings area the need for BSNs is strong. Billings Clinic is a Magnet facility and St. Vincent Healthcare is also striving for this status. One of the standards for obtaining and maintaining the Magnet credential is employing a high percentage of bachelor prepared nurses.

There are two RN to BSN programs associated with public universities in Montana; one at Montana Tech, Butte and one at Montana State University-Northern. The College of Nursing, at MSU in Bozeman started an ASN to MSN program in Spring 2016. There is also an RN to BSN program at one of the tribal colleges (Salish — Kootenai, Pablo, MT). The proposed RN to BSN program at MSUB will increase the number of four-year nursing graduates by creating a net increase in the number of BS degree nursing "slots" available.

B. How will students and any other affected constituencies be served by the proposed program?

The proposed program will directly serve two Montana constituencies: 1) associate degree registered nurses, and 2) health care institutions. The RN to BSN program will meet the needs of registered nurses who are prepared with an associate degree and seek to elevate their education. The 2010 report, "The Future of Nursing: Leading Change, Advancing Health" (Institute of Medicine, IOM), called for transformation of the nursing profession and nursing education so nurses attain higher levels of education and competencies that address changes in patient needs, practice innovation, and delivery systems.

The program will also meet the needs of Montana's healthcare institutions. The current national goal is that 80% of the nursing workforce attains a BSN by 2020, and that new associate degree (AD) nurses will obtain a BSN within 10 years of initial licensure.

Approximately 45% of the nation's nursing workforce is BSN prepared, and 43% of Montana's nursing workforce is BSN-prepared. A BSN qualified workforce improves patient outcomes, reduces

CURRICULUM PROPOSAL FORM

readmissions and increases patient safety. Studies show that a 10% increase in the proportion of BSN-prepared hospital nurses correlates with a 4% reduced risk of death (Aiken, Clark, Cheung, Sloane & Silber, 2003).

The knowledge and competencies developed in the RN to BSN Completion Program deepens critical thinking, increases knowledge of patient safety, develops inter-professional teamwork skills, and examines how to use research in nursing practice and the theory behind community and population health.

C. What is the anticipated demand for the program? How was this determined?

Over a decade of research is behind the current national goal for 80% of the nursing workforce to attain a BSN by 2020, and for new associate degree nurses (ADN) to obtain a BSN within 10 years of initial licensure. Employers and ASN graduates are heeding this call. Regional employer demand for BSNs is expected to be strong. Billings is home to Montana's largest medical hub with two major medical centers serving an extensive region that covers much of Montana, northern Wyoming and the western Dakotas. Billings Clinic is a Magnet facility and St. Vincent Healthcare is striving for this status.

Two recent workforce studies have identified the need for a RN to BSN Completion program as high priority. A study for MSUB Extended Campus conducted by the Consulting and Research Center (CRC) of the University Professional and Continuing Education Association recently interviewed key decisions makers in the Billings healthcare community. All fifteen individuals identified and RN to BSN Completion program as their top need. Similarly, the 2015 State of the Workforce Report prepared for the BillingsWorks Workforce Council, reported that "...there is a great need from the healthcare organizations for registered nurses who have earned a Bachelor's of Science in Nursing (BSN) due to changes in the healthcare system. This is severely hindering healthcare employers' talent pipeline" (p. 65).

In particular, St. Vincent Healthcare has reported the need for approximately 200 AS-prepared nurses that the organization will be asking to work towards their BSN over the next 3-5 years. In addition, this organization hires about 40 ASNs per year. The presumption is that these new hires will be asked to pursue a BSN within a prescribed timeframe as well.

Additionally, MSUB's ASN program at City College has graduated an average of 40 nursing students per year for the past six years. It is anticipated that approximately two-thirds of MSUB's ASN-prepared nurses will want to continue on their healthcare pathway and pursue a BSN.

CURRICULUM PROPOSAL FORM

5. Process Leading to Submission

A. Describe the process of developing and approving the proposed program. Indicate, where appropriate, involvement by faculty, students, community members, potential employers, accrediting agencies, etc.

The development and offering of the RN to BSN completion program has been under discussion both internally and externally for the past twelve months. In addition to various discussion sessions with the Deans of City College and the College of Allied Health Professions, the Provost and the Chancellor, discussion sessions were also held with the Director of Nursing at City College, the City College Nursing, Health and Public Safety Department Chair and the Director of Extended Campus. As the program became more of a reality discussion meetings were held with the Vice Chancellor for Student Services, the Registrar and the Director of Financial Aid.

Input and support was also sought from Billings Clinic, St. Vincent Healthcare and RiverStone Health through focus groups and individual meetings. Their continued support and input is critical for success of the program therefore biannual meetings with the initial focus group will be planned. Internally, an Intent to Plan was filed with MSU Bozeman. Concerns raised by MSU Bozeman were addressed. With MSUB the Academic Senate was briefed on the proposal prior to the full document coming forward. The curriculum, which was the result of the HealthCARE Montana grant, was submitted to the College of Allied Health Professions Curriculum Committee. Curriculum then was approved by the University Curriculum Committee. The curriculum and full proposal was further approved by the MSUB Academic Senate.

Montana State Board of Nursing approval is not required for this proposal, as they do not regulate post-licensure nursing education. The Dean of the College of Allied Health Professions did have a conversation with the Executive Director of the Montana Board of Nursing as a courtesy and to seek her input on elements of the proposal. Program directors of nursing programs throughout Montana have been kept informed of MSUB's intent through Curriculum Subcommittee meetings of the HealthCARE Montana grant.

6. Resources

A. Will additional faculty resources be required to implement this program? If yes, please describe the need and indicate the plan for meeting this need.

Yes, additional faculty and staff resources will be needed to implement this program. The RN to BSN completion program will require new undergraduate nursing courses (33 credits) and one new undergraduate upper division writing course (3 credits). Accreditation standards for nursing programs stipulate RN licensure and educational credentials for teaching and clinical faculty members.

CURRICULUM PROPOSAL FORM

Initially a program coordinator will need to be hired. This will be a tenure-track faculty member with a projected annual salary of \$80,520 (\$108,549 including benefits). An additional tenure-track faculty member will be hired beginning with academic year 2017-2018. It is anticipated with changes in the ASN curriculum City College nursing faculty will be able to teach the remaining nursing credits.

RN to BSN Completion Program Projected Staffing				
	FY '17	FY '18	FY '19	FY '20 & beyond
Program Coordinator (salary & benefits	\$45,267	\$108,549	\$108,549	\$108,549
One TT faculty (salary & benefits; 6 months)		\$78,153	\$78,153	\$78,153
Part-Time Faculty Teaching 18 credits		\$14,400	\$14,400	\$14,400
0.5 FTE Staff Support (with benefits)	\$13,915	\$13,915	\$13,915	\$13,915
Total Staffing Support	\$59,182	\$215,017	\$215,017	\$215,017

On the revenue side, additional tuition dollars will be generated by the increased number of students (and associated student credit hour generation).

Table 3: Projected Tuition (Fees Excluded) Revenue and Program Fee						
Generated by RN to BSN degree completion Program						
Tuition Revenue with 30 students/cohort						
	Sem 1	Sem 2	Sem 3	Sem 4 –	Sem 5 –	Sem 6 –
	Fall 2017	Spring 2018	Summer 2018	Fall 2018	Spring 2019	Summer 2019
Cohort 1	\$89,880	\$89,880	\$89,880			
Cohort 2				\$89,880	\$89,880	\$89,880

CURRICULUM PROPOSAL FORM

B. Are other, additional resources required to ensure the success of the proposed program? If yes, please describe the need and indicate the plan for meeting this need.

Yes, there will be a need for additional 0.5 staff support with an estimated cost of \$13,915 annually. This additional staff support will be a resource for the RN to BSN completion program.

To meet the demands placed on the Department of Health Care Services, new RN to BSN Completion program, the nursing students and Clinical Instructors serving our program, and to ensure the best possible learning environment for students, a program fee of \$800 per semester to support the costs of the academic program is being requested. (Attachment 2 is a one-year budget.)

The proposed program relies heavily on program fees to minimize the out-of-pocket expenses for students as they go through the program. The program fee will pay for any medical equipment and supplies needed by the student as part of the clinical courses, travel by the program director or faculty across the state and region to clinical sites to meet accreditation standards, supervision in clinical sites and accreditation expenses of the program.

7. Assessment

A. How will the success of the program be measured?

The RN to BSN completion program will move toward accreditation by the Commission on Collegiate Nursing Education (CCNE), the accreditation arm of the American Association of Colleges of Nursing. The CCNE has a set of Standards for Accreditation of Baccalaureate and Graduate Nursing Programs. CCNE's four standards include:

- 1) Mission and Governance;
- 2) Institutional Commitment and Resources;
- 3) Curriculum and Teaching-Learning Practices; and
- 4) Assessment and Achievement of Program Outcomes. Specifically, Standard IV requires the program is effective in fulfilling its mission and goals as evidenced by achieving expected program outcomes. Program outcomes include student outcomes, faculty outcomes, and other outcomes identified by the program. Data on program effectiveness are used to foster ongoing program improvement. Data on program effectiveness includes completion rates, employment rates, student learning outcomes, faculty outcomes and analysis of outcome data for ongoing program improvement.

CURRICULUM PROPOSAL FORM

References

- 1. L.H. Aiken, S.P. Clark, R.B. Cheung, D.M. Sloane, J.H. Silber (2003). Educational levels of hospital nurses and surgical patient mortality. <u>JAMA</u>, 290, pp. 1617-1623.
- 2. Institute of Medicine (2011). <u>The Future of Nursing, Leading Change, Advancing Health</u>. National Academies Press, Washington, DC.
- 3. BillingsWorks Workforce Council (2015). State of the Workforce Report. Billings, MT. Accessed at http://www.bigskyeconomicdevelopment.org/wp-content/uploads/BillingsWorks-Workforce-Council-State-of-the-Workforce-Report-Appendices.pdf

Montana University System

NOTICE OF INTENT TO PLAN

Program/Institute Title: RN to BSN Completion Program

Campus, School/Department: MSU-Bill, College of Allied Health Professions, MSUB

Contact Name/Info: Diane K. Duin, Ph.D., MHA, dduin@msubillings.edu

Expected Submission Date: SEP 2016

Mode of Delivery: Online

To increase communication, collaboration, and problem solving opportunities throughout the MUS in the program/center/institute development process, please complete this form not more than 18 months in advance of the anticipated date of submission of the proposed program/center/institute to the Board of Regents for approval.

For more information regarding the Intent to Plan process, please visit the Academic and Student Affairs Handbook.

1) Provide a description of the program/center/institute.

In order to address the growing need for professional bachelor prepared nurses, MSU Billings seeks to develop an RN to BSN Degree Completion Program. Billings is home to Montana's largest medical hub with two major medical centers serving an extensive region that covers much of Montana, northern Wyoming and the western Dakotas.

There is currently no baccalaureate completion for Associate degree registered nurses available at MSU Billings. City College of MSU Billings offers an Associate of Nursing (ASN) that follows a state wide model curriculum. The only choice for graduates of the ASN program at City College and other RNs in the community to obtain a BS in Nursing through an online program is provided by schools outside of Billings.

The MSU Billings RN to BSN Completion Program will target graduates of MSU Billings City College ASN program and others who hold unencumbered Registered Nurse license. The program will consist of 48 credits, following the curriculum model set by the Montana HealthCARE grant. This curriculum is designed to introduce research and evidence-based practice, expand upon leadership and management principles and provide theoretical and practical learning experiences in community health.

A face-to-face seminar will kick-off the program to help students get to know their fellow cohort members, build comradery, and be introduced to online learning. The vast majority of content and learning will take place in an online format without a traditional clinical component other that what is required by American Association of Colleges of Nursing (AACN) White Paper for RN-BSN Completion programs.

The Montana HealthCARE grant requires the program be completed in three semesters. This plan of study will be called the "Fast Track" schedule. Another plan of study will be developed that can be completed in six semesters.

2) Describe the need for the program/center/institute. Specifically, how the program/center/institute meets current student and workforce demands. (Please cite sources).

City College offers an Associate of Science degree in Nursing (ASN). Over the last few years, there have been significant research and initiatives that speak to the importance of all registered nurses be prepared at the baccalaureate level. In 20031, a large scale study produced by Dr. Linda Aiken and colleagues illustrated the positive impact of baccalaureate nurses on patient outcomes in hospital settings, especially surgical patient mortality. This study and others that followed by Dr. Aikin and colleagues validated these findings. Based on these findings, the Institute of Medicine (IOM) in 2011 published a report titled "The Future of Nursing: Leading Change, Advancing Health2. One of the initiatives included that by 2020, 80% of Registered nurses have a baccalaureate degree. Implementing this program at this time comes at a critical juncture as complex healthcare reform changes will require baccalaureate prepared nurses in place across the continuum of care.

In the Billings area the need for BSNs is strong. Billings Clinic is a Magnet facility and St. Vincent Healthcare is striving for this status. One of the principles of obtaining and maintaining this credential is a strong percentage of bachelor prepared nurses. Two recent workforce studies have identified the need for a RN to BSN Completion program as high priority. Among "key decision makers" identified and interviewed in a study conducted by the Consulting and Research Center (CRC) of the University Professional and Continuing Education Association for MSU Billings Extended Campus, all fifteen individuals identified an RN to BSN Completion Program as the top need. Similarly, the 2015 State of the Workforce Report prepared for the BillingsWorks Workforce Council, reported that "...there is a great need from the healthcare organizations for Registered Nurses who have earned a Bachelor's of Science in Nursing (BSN) due to changes in the healthcare system.

In particular, St. Vincent Healthcare has reported the need for approximately 200 AS prepared nurses that the organization will be asking to work towards their BSN over the next 3-5 years. In addition, this organization hires about 40 ASNs per year. The presumption is that these new hires will be asked to pursue a BSN within a prescribed timeframe as well.

Additionally, at MSUB's City College the ASN program has graduated an average of 40 nursing students per year for the past six years. We anticipate approximately two-thirds of MSUB's ASN prepared nurses

will want to continue on their healthcare pathway and pursue a BSN.

3) Describe how the program/center/institute fits with the institutional mission, strategic plan, and existing institutional program array.

Montana State University Billings' mission is to provide a university experience characterized by excellent teaching, support for individual learning, engagement in civic responsibility, and intellectual, cultural, social and economic community enhancement.

The RN to BSN program supports the MSUB mission by supporting the individual in her or his learning, and engaging in our civic responsibility by providing a program necessary to the healthcare community of Billings and the surrounding area.

The RN to BSN program also fits within the College of Allied Health Professions' mission which is to prepare allied health professionals for their chosen field, and to meet the needs of society through education, discover and service.

MSUB's Strategic Plan Core Theme 2 states that MSUB will identify programs which have room to grow and are in high demand. It has been evidenced that the RN to BSN, as a new program at MSUB, will be in high demand due to the healthcare needs of the region served by MSUB.

4) How does the proposed program/center/institute fit within the MUS system?

MSUB is part of the Montana statewide Department of Labor grant, HealthCARE Montana. This grant has funded a collaborative of Montana universities to train, recruit and retain healthcare professionals in rural and frontier Montana by helping prospective students identify and access healthcare pathways, developing an accelerated nursing curriculum to guide healthcare providers toward higher levels practice, ease the nursing shortage in Montana, and build and sustain a rural, home-grown healthcare workforce that serves the smallest communities in the farthest regions of Montana.

The RN to BSN Completion program, delivered online, will meet the goals of the HealthCare Montana collaborative through the accelerated curriculum, the healthcare pathway from CNA to LPN to ASN to BSN, and serving the smallest communities in all regions of Montana.

Signatures

Intent to Plan

Program/Institute/Center Title: RN to BSN Completion Program

Campus: MSU-Bill

Expected Submission Date: SEP 2016

Signature/Date	CocuSigned by:		
Associate Provost: (procedural, not approval)	Por Larsen E987047DE1CA414	5/19/2016	
College/School Dean:	DocuSigned by: Diane Duin 99847BCEA130460	5/20/2016	
Chief Academic Officer:	DocuSigned by: R. Horr C64992F2C7B8445	5/20/2016	
Chief Executive Officer:	DocuSigned by: Mark Nook D1E7BA1B075D4C5	5/20/2016	
Flagship Provost:	Docusigned by: Martha l. Potwin 43A1A78D200F474	5/20/2016	
Flagship President:	DocuSigned by: 7D6A4CE96C3F415	5/20/2016	
	July 19, 2016		
Data of Final Davious	July 12, 2010		

When submitting the proposal to the BOR, include this signed form with the Level II request.

Date of Final Review:



American Association of Colleges of Nursing

CONTA CT: Robert J. Rosseter (202) 463-6930, x23 l, rrosseter@aacn.nche.edu

Fact Sheet:

The Impact of Education on Nursing Practice

The American Association of Colleges of Nursing (AACN), the national voice for baccalaureate and graduate nursing programs, believes that education has a significant impact on the knowledge and competencies of the nurse clinician, as it does for all health care providers. Clinicians with Bachelor of Science in Nursing (BSN) degrees are well-prepared to meet the demands placed on today's nurse. BSN nurses are prized for their skills in critical thinking, leadership, case management, and health promotion, and for their ability to practice across a variety of inpatient and outpatient settings. Nurse executives, federal agencies, the military, leading nursing organizations, health care foundations, magnet hospitals, and minority nurse advocacy groups all recognize the unique value that baccalaureate-prepared nurses bring to the practice setting.

AACN encourages employers to foster practice environments that embrace lifelong learning and offer incentives for registered nurses (RNs) seeking to advance their education to the baccalaureate and higher degree levels. We also encourage BSN graduates to seek out employers who value their level of education and distinct competencies.

Different Approaches to Nursing Education

There are three routes to becoming a registered nurse: a 3-year diploma program typically administered in hospitals; a 3-year associate degree usually offered at community colleges; and the 4-year baccalaureate degree offered at senior colleges and universities. Graduates of all three programs sit for the same NCLEX-RN © licensing examination.

Baccalaureate nursing programs encompass all of the course work taught in associate degree and diploma programs plus a more in-depth treatment of the physical and social sciences, nursing research, public and community health, nursing management, and the humanities. The additional course work enhances the student's professional development, prepares the new nurse for a broader scope of practice, and provides the nurse with a better understanding of the cultural, political, economic, and social issues that affect patients and influence healthcare delivery. For more than a decade, policymakers, healthcare authorities,

and practice leaders have recognized that education makes a difference when it comes to nursing practice.

- In September 2013, the Robert Wood Johnson Foundation (RWJF) released an issue of its Charting Nursings Future newsletter titled "The Case for Academic Progression," which outlined how patients, employers, and the profession benefits when nurses advance their education. Articles focus on the evidence linking better outcomes to baccalaureate and higher degree nurses, educational pathways, and promising strategies for facilitating academic progression at the school, state, and national levels. See www.rwjf.org/content/dam/farm/reports/issue_briefs/2013/rwjf407597.
- In September 2012, the Joint Statement on Academic Progression for Nursing Students and Graduates was endorsed by the American Association of Colleges of Nursing, American Association of Community Colleges, Association of Community Colleges Trustees, National League for Nursing, and the National Organization for Associate Degree Nursing. This historic agreement represents the first time leaders from the major national organizations representing community college presidents, boards, and program administrators have joined with representatives from nursing education associations to promote academic progression in nursing. With the common goal of preparing a well- educated, diverse nursing workforce, this statement represents the shared view that nursing students and practicing nurses should be supported in their efforts to pursue higher levels of education. Read the statement at www.aacn.nche.ed u/aacn-publications/position/joint-statement-academic-progression.
- In October 2010, the Institute of Medicine released its landmark report on *The Future of Nursing: Leading Change, Advancing Health,* initiated by the Robert Wood Johnson Foundation, which called for increasing the number of baccalaureate-prepared nurses in the workforce to 80% by 2020. The expert committee charged with preparing the evidence-based recommendations in this report state that to respond "to the demands of an evolving health care system and meet the changing needs of patients, nurses must achieve higher levels of education."
- In May 2010, the Tri-Council for Nursing (AACN, ANA, AONE, and NLN) issued a consensus statement calling for all RNs to advance their education in the interest of enhancing quality and safety across healthcare settings. In the statement titled Education Advancement of Registered Nurses, the Tri-Council organization's present a united view that a more highly educated nursing workforce is critical to meeting the nation's nursing needs and delivering safe,

effective patient care. In the policy statement, the Tri-Council finds that "without a more educated nursing workforce, the nation's health will be further at risk."

- In December 2009, Dr. Patricia Benner and her team at the Carnegie Foundation for the Advancement of Teaching released a new study titled *Educating Nurses: A Call for Radical Transformation*, which recommended preparing all entry-level registered nurses at the baccalaureate level and requiring all RNs to earn a Master's degree within IO years of initial licensure. The authors found that many of today's new nurses are "undereducated" to meet practice demands across settings. Their strong support for high quality baccalaureate degree programs as the appropriate pathway for RNs entering the profession is consistent with the views of many leading nursing organizations, including AACN.

 www.carnegiefoundation.org/elibrary/educating-nurses-highlights
- On September 30, 2008, the Foundation for California Community Colleges and Kaiser Permanente announced grant funding for a new program aimed at creating a better-educated nursing workforce in California through collaboration between two-year and four-year nursing programs. Funding will be used to develop demonstration models of collegiate partnerships that seamlessly provide a baccalaureate degree to nurses educated in two-year programs. The grants are an outcome of a study conducted by California Institute for Nursing & Health Care (CINHC) that called for transforming California's nursing education system. Study director Dr. Jan Boller said: "Recent studies clearly demonstrate that a higher prevalence of baccalaureate- and masters-prepared RNs at the bedside positively impact patient outcomes."
 www.cinhc.org/programsleducational.html
- In February 2007, the Council on Physician and Nurse Supply released a statement calling for a national effort to substantially expand baccalaureate nursing programs. Chaired by Richard "Buz" Cooper, MD and Linda Aiken, PhD, RN, the Council is based at the University of Pennsylvania. In the statement, the Council noted that a growing body of research supports the relationship between the level of nursing education and both the quality and safety of patient care. Consequently, the group is calling on policymakers to shift federal funding priorities in favor of supporting more baccalaureate nursing programs. This call was reaffirmed in a new statement released in March 2008. www.physiciannursesupply.com/Articleslcouncil-meeting-release.pdf
- In March 2005, the American Organization of Nurse Executives (AONE) released a statement calling for all RNs to be educated in baccalaureate programs in an

effort to adequately prepare clinicians for their challenging, complex roles. AON E's statement, titled Practice and Education Partnership for the Future, represents the view of nursing's practice leaders and a desire to create a more highly educated nursing workforce in the interest of improving patient safety and nursing care.

- The National Advisory Council on Nurse Education and Practice (NACNEP), policy advisors to Congress and the Secretary for Health and Human Services on nursing issues, has urged that at least two-thirds of the nurse workforce hold baccalaureate or higher degrees in nursing. Currently, only 55 percent of nurses hold degrees at the baccalaureate level and above according to HRSA's 2013 report on The U.S. Nursing Workforce: Trends in Supply and Education
- NACNEP found that nursing's role calls for RNs to manage care along a continuum, to work as peers in interdisciplinary teams, and to integrate clinical expertise with knowledge of community resources. The increased complexity of the scope of practice for RNs requires a workforce that has the capacity to adapt to change. It requires critical thinking and problem solving skills; a sound foundation in a broad range of basic sciences; knowledge of behavioral, social and management sciences; and the ability to analyze and communicate data. Among the three types of entry-level nursing education programs, NACNEP found that baccalaureate education with its broader and stronger scientific curriculum best fulfills these requirements and provides a sound foundation for addressing the complex health care needs of today in a variety of nursing positions.
 Baccalaureate education provides a base from which nurses move into graduate education and advanced nursing roles.
- There is a growing consensus in the higher education community that a liberal
 arts education should be embedded in all the professional disciplines.
 Graduates with a liberal education are prized by employers for their analytical
 and creative capacities and demonstrate stronger skills in the areas of
 communication, assessment, cultural sensitivity, resourcefulness, the ability to
 apply knowledge, and scientific reasoning. Though some arts and science
 courses are included in ADN programs, the BSN provides a much stronger base
 in the humanities and sciences.
- There are 692 RN-to-BSN and 159 RN-to-MSN programs that build on the
 education provided in diploma and associate degree programs and prepare
 graduates for a broader base of practice. In addition to hundreds of individual
 agreements between community colleges and four-year schools, state-wide
 articulation agreements exist in many areas including Florida, Connecticut,

Texas, Iowa, Maryland, South Carolina, Idaho, Alabama, and Nevada to facilitate advancement to the baccalaureate. These programs further validate the unique competencies gained in BSN programs.

- Registered nurses today work as a part of an interdisciplinary team with colleagues educated at the master's degree or higher level. These health professionals, including physicians, pharmacists, and speech pathologists, recognize the complexity involved in providing patient care and understand the value and need for higher education. For example, Occupational Therapists (OT) require education at the masters level, while OT Assistants are prepared at the associate degree level. Since nurses are primarily responsible for direct patient care and care coordination, these clinicians should not be the least educated members of the healthcare team.
- According to a study published by Dr. Betty Rambur and her colleagues in the
 July/August 2003 issue of Nursing Outlook, increasing the proportion of
 baccalaureate prepared nurses in the registered nursing population may be
 essential to stabilizing the nursing workforce. Nurses prepared at the BSN level
 were found to have higher levels of job satisfaction, which is key to nurse
 retention.

Recognizing Differences Among Nursing Program Graduates

There is a growing body of evidence that shows that BSN graduates bring unique skills to their work as nursing clinicians and play an important role in the delivery of safe patient care.

- In an article published in the March 2013 issue of Health Affairs, nurse researcher Ann Kutney-Lee and colleagues found that a IO-point increase in the percentage of nurses holding a BSN within a hospital was associated with an average reduction of 2.12 deaths for every 1,000 patients-and for a subset of patients with complications, an average reduction of 7.47 deaths per 1,000 patients. The study is titled "An Increase in the Number of Nurses with Baccalaureate Degrees is Linked to Lower Rates of Post-surgery Mortality."
- In the February 2013 issue of the Journal of Nursing Administration, Mary Blegen and colleagues published findings from a cross-sectional study of 21 University Healthsystem Consortium hospitals to analyze the association between RN education and patient outcomes. The researchers found that hospitals with a higher percentage of RNs with baccalaureate or higher degrees had lower congestive heart failure mortality, decubitus ulcers, failure to rescue, and postoperative deep vein thrombosis or pulmonary embolism and shorter length of stay. This study is titled "Baccalaureate Education in

Nursing and Patient Outcomes."

- In the October 2012 issue of Medical Care, researchers from the University of Pennsylvania found that surgical patients in Magnet hospitals had 14% lower odds of inpatient death within 30 days and 12% lower odds of failure-torescue compared with patients cared for in non-Magnet hospitals. The study authors conclude that these better outcomes were attributed in large part to investments in highly qualified and educated nurses, including a higher proportion of baccalaureate prepared nurses.
- In a January 2011 article published in the Journal of Nursing Scholarship, Drs. Deborah Kendall- Gallagher, Linda Aiken, and colleagues released the findings of an extensive study of the impact nurse specialty certification has on lowering patient mortality and failure to rescue rates in hospital settings. The researchers found that certification was associated with better patient outcomes, but only when care was provided by nurses with baccalaureate level education. The authors concluded that "no effect of specialization was seen in the absence of baccalaureate education."
- In an article published in Health Services Research in August 2008 that examined the effect of nursing practice environments on outcomes of hospitalized cancer patients undergoing surgery, Dr. Christopher Friese and colleagues found that nursing education level was significantly associated with patient outcomes. Nurses prepared at the baccalaureate-level were linked with lower mortality and failure-to-rescue rates. The authors conclude that "moving to a nurse workforce in which a higher proportion of staff nurses have at least a baccalaureate-level education would result in substantially fewer adverse outcomes for patients."
- In a study released in the May 2008 issue of the Journal of Nursing Administration, Dr. Linda Aiken and her colleagues confirmed the findings from her landmark 2003 study (see below) that show a strong link between RN education level and patient outcomes. Titled "Effects of Hospital Care Environment on Patient Mortality and Nurse Outcomes," these leading nurse researchers found that every I0% increase in the proportion of BSN nurses on the hospital staff was associated with a 4% decrease in the risk of death.
- In the January 2007 Journal of Advanced Nursing, a study on the "Impact of Hospital Nursing Care on 30-day Mortality for Acute Medical Patients" found that BSN-prepared nurses have a positive impact on lowering mortality rates.
 Led by Dr. Ann E. Tourangeau, researchers from the University of Toronto and the Institute for Clinical Evaluative Sciences in Ontario studied 46,993 patients admitted to the hospital with heart attacks, strokes, pneumonia and blood

poisoning. The authors found that: "Hospitals with higher proportions of baccalaureate-prepared nurses tended to have lower 30-day mortality rates. Our findings indicated that a 10% increase in the proportion of baccalaureate prepared nurses was associated with 9 fewer deaths for every 1,000 discharged patients."

- In a study published in the March/April 2005 issue of Nursing Research, Dr. Carole Estabrooks and her colleagues at the University of Alberta found that baccalaureate prepared nurses have a positive impact on mortality rates following an examination of more than 18,000 patient outcomes at 49 Canadian hospitals. This study, titled The Impact of Hospital Nursing Characteristics on 30-Day Mortality, confirms the findings from Dr. Linda Aiken's landmark study in September 2003.
- In a study published in the September 24, 2003 issue of the *Journal of the American Medical Association* (JAMA), Dr. Linda Aiken and her colleagues at the University of Pennsylvania identified a clear link between higher levels of nursing education and better patient outcomes. This extensive study found that surgical patients have a "substantial survival advantage" if treated in hospitals with higher proportions of nurses educated at the baccalaureate or higher degree level. In hospitals, a 10 percent increase in the proportion of nurses holding BSN degrees decreased the risk of patient death and failure to rescue by 5 percent. The study authors further recommend that public financing of nursing education should aim at shaping a workforce best prepared to meet the needs of the population. They also call for renewed support and incentives from nurse employers to encourage registered nurses to pursue education at the baccalaureate and higher degree levels.
- Evidence shows that nursing education level is a factor in patient safety and quality of care. As cited in the report When Care Becomes a Burden released by the Millbank Memorial Fund in 2001, two separate studies conducted in 1996 one by the state of New York and one by the state of Texas-clearly show that significantly higher levels of medication errors and procedural violations are committed by nurses prepared at the associate degree and diploma levels as compared with the baccalaureate level. These findings are consistent with findings published in the July/August 2002 issue of Nurse Educator magazine that references studies conducted in Arizona, Colorado, Louisiana, Ohio and Tennessee that also found that nurses prepared at the associate degree and diploma levels make the majority of practice-related violations.
- Chief Nurse Officers (CNO) in university hospitals prefer to hire nurses who have baccalaureate degrees, and nurse administrators recognize distinct

differences in competencies based on education. In a 2001 survey published in the *Journal of Nursing Administration*, 72% of these directors identified differences in practice between BSN-prepared nurses and those who have an associate degree or hospital diploma, citing stronger critical thinking and leadership skills.

- Studies have also found that nurses prepared at the baccalaureate level have stronger communication and problem solving skills (Johnson, 1988) and a higher proficiency in their ability to make nursing diagnoses and evaluate nursing interventions (Giger & Davidhizar, 1990).
- Research shows that RNs prepared at the associate degree and diploma levels develop stronger professional-level skills after completing a BSN program. In a study of RN-to-BSN graduates from 1995 to 1998 (Phillips, et al., 2002), these students demonstrated higher competency in nursing practice, communication, leadership, professional integration, and research/evaluation.
- Data show that health care facilities with higher percentages of BSN nurses enjoy better patient outcomes and significantly lower mortality rates. Magnet hospitals are model patient care facilities that typically employ a higher proportion of baccalaureate prepared nurses, 59% BSN as compared to 34% BSN at other hospitals. In several research studies, Marlene Kramer, Linda Aiken and others have found a strong relationship between organizational characteristics and patient outcomes.
- The fact that passing rates for the NCLEX-RN©, the national licensing exam for RNs, are essentially the same for all three types of graduates is not proof that there are no differences among graduates. The NCLEX-RN© is a multiple-choice test that measures the *minimum technical competency* for safe entry into basic nursing practice. Passing rates *should* be high across all programs preparing new nurses. This exam does not test for differences between graduates of different entry-level programs. The NCLEX-RN© is only one indicator of competency, and it does not measure performance over time or test for all of the knowledge and skills developed through a BSN program.

Pu blic and Private Support for BSN-Prepared Nurses

The federal government, the military, nurse executives, healthcare foundations, nursing organizations, and practice settings acknowledge the unique value of baccalaureate-prepared nurses and advocate for an increase in the number of BSN nurses across clinical settings.

- The nation's Magnet hospitals, which are recognized for nursing excellence and superior patient outcomes, have moved to require all nurse managers and nurse leaders to hold a baccalaureate or graduate degree in nursing. Settings applying for Magnet designation must also show what plans are in place to achieve the IOM recommendation of having an 80% baccalaureate prepared RN workforce by 2020. www.nursecredentialing.org
- The National Advisory Council on Nurse Education and Practice (NACNEP) calls
 for at least two-thirds of the nurse workforce to hold baccalaureate or higher
 degrees in nursing. Currently, only 55 percent of nurses hold degrees at the
 baccalaureate level and above.
- New "BSN-in-10" proposals in New York and New Jersey have been introduced by state nursing associations to require the baccal aureate degree for all registered nurses with 10 years of graduation from an entry-level RN program. Other states are considering similar proposals in the interest of ensuring a better educated workforce. See www.aacn.nche.edu/Media/pdf/NJSNALetter.pdf and www.aacn.nclte.edu/Government/Archives/NYSBONProposal.htm.
- In the interest of providing the best patient care and leadership by its nurse corps officers, the U.S. Army, U.S. Navy and U.S. Air Force all require the baccalaureate degree to practice as an active duty Registered Nurse.
 Commissioned officers within the U.S. Public Health Service must also be baccalaureate-prepared.
- The **Veteran's Administration** (VA), the nation's largest employer of registered nurses, has established the baccalaureate degree as the minimum preparation its nurses must have for promotion beyond the entry-level.
- Minority nurse organizations, including the National Black Nurses
 Association, Hispanic Association of Colleges and Universities, and National
 Association of Hispanic Nurses, are committed to increasing the number of minority nurses with baccalaureate and higher degrees.
- Based on a nationwide Harris Poll conducted in June 1999, an overwhelming percentage of the public 76% -believes that nurses should have four years of education or more past high school to perform their duties.
- The **Pew Health Professions Commission** in a 1998 report called for a more concentrated production of baccalaureate and higher degree nurses. This commission was an interdisciplinary group of health care leaders, legislators, academics,

corporate leaders, and consumer advocates created to help policy-makers and educators produce health care professionals able to meet the changing needs of the American health care system.

 Countries around the world are moving to create a more highly educated nursing workforce. Canada, Sweden, Portugal, Brazil, Iceland, Korea, Greece and the Philippines are just some of the countries that require a four-year undergraduate degree to practice as a registered nurse.

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RN to BSN Degree Completion Cohort Program 3 semesters (fall, spring, summer) 49 credits

Number of Stude	ents	30		
Number of credits per stu	dent	49		
Tuition cost per ci	edit \$	183	Subje	ect to Plateau
Program fee per seme	ster\$	800		
Program cost/stud	ent \$	8,994		
Mandatory Fees 3 @ \$71	4.7 \$	2,144		
D2L fee (\$20/cre	edit) \$	720		
Library fee (3 semesters @ \$42	.80) Inclu	ıded		
Graduation	fee \$	50	_	
Total Cost per Stud	ent \$	11,908	•	
State Support @ \$5,000 per	FTE \$	245,000		
Total Revenue			\$	602,243
Expenses (Support)				
Non-instructional Support (50% of Tuition and State Support	rt) \$	257,410		
Revenue after OH			\$	344,833
Operating Expenses				
Travel	\$	2,000		
Marketing	\$ \$ \$	1,500		
Program Supplies	\$	1,500		
Total Operating Expenses	\$	5,000	i	
Pass-through Expenses				
D2L fee pass-through	\$	21,600		
Library fee pass-through	\$			
Mandatory fees pass-through	\$ \$ \$	64,323		
Graduation fee pass-through		1,500	ı	
Total Pass-through Expenses	\$	87,423	_	
Revenue after Support. Operating & Pass-through Expense	s	,	\$	252,410

Salary Expenses

Program Director (teach 10 credits, recruit, coordinate, advise,		
Etc.) \$80,520 annual (\$66K base + 22% summer)	\$	80,520
Faculty position (teach 21 credits)	\$	55,000
Benefits (19.106%)	\$	25,892
Medical Insurance (\$12,645 each)	\$	25,290
PT Faculty Comp @ EC scale (18 @ \$800/credit)	\$	14,400
Benefits (19.106 %)		2,797
Administrative Assistant .5 FTE		13,000
Benefits (16.8 %)	\$	2,184
Medical Insurance	\$	12,645
Total Salary Expenses	\$	231,728
Net Surplus after Support, Operating and Salary Expenses	\$	20,682



April 7th, 2016

Montana Board of Regents,

This letter is to serve as our support of MSU-Billings in the pursuit of an Associate of Science in Nursing (ASN) to Bachelor of Science in Nursing (BSN) Degree Completion program. As a major healthcare institution in the Billings market and an employer of ASN employees this program will have a significant impact on our ability to provide the highest level of nursing care to our patients.

We currently employ approximately 200-225 ASN nurses. We believe this number will remain steady as we will continue to hire and employ ASN nurses that come from the existing nursing education programs. The SCL Health System is currently on a "Magnet" nursing journey, which requires us to have the appropriate ratio of BSN to ASN nurses. The proposed ASN to BSN program will allow our organization meet those established ratios without losing our nurses.

Currently, nurses who want to go back and get their BSN are faced with tough choices as they have to enroll in programs that are not currently in the Billings market. This often causes hardship as they are faced with sacrificing time away from their work, family, and other personal commitments. These tough choices often prohibit an ASN nurse from going back to school and progressing academically in their profession. As one of the major health care hubs in Montana we must have education programs available to the individuals in our local community.

We believe that this ASN to BSN program will have a positive impact on our community, patients, and employees. It demonstrates a collaborative partnership between the education and business communities. It shows a commitment of the Montana Higher Education System investing positively in the lives of Montanans, especially those in Billings, Yellowstone County and surrounding communities.

We thank you for your consideration and support of this program!

Best Regards,

Darren K. Walker

VP Human Resources - SCL Health

St. Vincent Healthcare Holy Rosary Healthcare



March 22, 2016

Montana Board of Regents PO Box 203201 Helena, MT 59620-320

Dear Regents:

It is my distinct pleasure and privilege to offer RiverStone Health's unqualified support for the accelerated ADN-to-BSN program proposed by Montana State University-Billings.

RiverStone Health is, along with the two regional hospital systems based in Billings, one of the three primary healthcare providers in our community. In addition to being the local public health agency for Yellowstone County, MT we operate a community health center providing comprehensive primary and preventive healthcare services to some 20,000 primarily low-income and uninsured patients, a home health agency, a hospice agency including an inpatient facility, a variety of maternal-child health services, a family medicine residency program, and a variety of other healthcare workforce development programs through which more than 350 students per year spend time with our organization to gain valuable clinical experience.

RiverStone Health employs registered nurses in many of our service areas. The nature of our work requires a workforce of nurses marked by a well-rounded and comprehensive clinical knowledge base, outstanding clinical skills, comfort with independent clinical decision making within the scope of Montana's Nurse Practice Act, and well-developed critical thinking skills. In short, it is clearly our preference to employ BSN-prepared registered nurses, even though market conditions militate against that objective due to the limited number of BSN graduates entering the workforce each year and the very high demand for those graduates arising from the regional healthcare services based in Billings. While we love and respect our ADN-prepared nurses for their clinical acumen and commitment to serving the safety net mission taken up by RiverStone Health, we have found that the incremental benefit of the BSN credential meaningfully adds to the skill set that best serves our patients and clients across the spectrum of services we offer.

Lest anyone believe that our BSN preference represents only the opinion of the organization, recent data make clear that our nurses themselves share that opinion! Our RN workforce includes about 70 registered nurses, roughly 20% of the total workforce. In a recent survey related the proposed MSU-B program, 50% of the respondents currently hold BSN degrees, 40% are ADN-prepared, and 10% hold advanced nursing degrees...this distribution clearly demonstrates RiverStone Health's preference for bachelor-prepared nurses, as well as our reality that we remain significantly dependent on graduates of two-year nursing programs to care for our patients...I would note that most management positions for nurses do require a four-year degree. 80% of respondent nurses without a BSN indicate a preference to obtain a four-year nursing degree and 65% of respondents stated a preference for an accelerated program.

RiverStone Health has tuition assistance programs in place to provide our employees with financial assistance in pursuing higher education degrees. I am confident that a number of our staff would access those resources and enroll in an accelerated ADN-to-BSN program if one was locally available, especially a distance learning program like the one MSU-B proposes so that staff could continue working as they complete their undergraduate nursing degree.

Healthcare will only get more complex and demanding as systems evolve and demands on provider groups grow. Nursing is an integral part of what we do, and I am convinced that the BSN degree will become an even more critical success factor as that evolution proceeds. I strongly encourage the Regents to support MSU-B's proposal for an accelerated ADN-to-BSN program for the good of our community and the many thousands of patients who depend on our local healthcare providers for their well-being.

Respectfully,

John Felton, MPH, MBA, FACHE President & CEO / Health Officer



2800 Tenth Avenue North P.O. Box 37000 Billings, Montana 59107-7000

June 3, 2016

Montana Board of Regents PO Box 203201 Helena, MT 59620-320

Dear Regents:

We are writing this letter to support Montana State University Billings (MSUB) College of Allied Health Professions (CAHP) in their pursuit of a Registered Nurse (RN) to Bachelor of Science in Nursing (BSN) degree completion program.

Billings Clinic is acutely aware of the need for bachelor's prepared nurses in Montana. We recognize the national initiatives that underscore the importance of baccalaureate education for all registered nurses. BSN education is a foundation for creating nurse leaders that lead change and advance health care.

To support advancing education for all nurses in our region, we endorse offering the proposed program at MSUB via distance education. The ability to retain our current nursing workforce while nurses are "in" the classroom is critical. This program will allow associate degree nurses to obtain their bachelor's degree while maintaining their commitments at both work and home.

Billings Clinic currently employs 331 associate degree prepared nurses (ASN) and we have an appropriate BSN to ASN ratio that meets the required guidelines for our Magnet designated status. We support professional advancement for our employees and this new program will provide local and regional access to the necessary education for nurses seeking professional growth and development.

We believe the MSUB RN to BSN Degree Completion program will have a positive impact on health care across Montana. We strongly encourage the Regents to support MSUB's proposal for an accelerated RN to BSN program.

Respectfully,

Nicholas Wolter, M.D. Chief Executive Officer

hickolas holter

Laurie L. Smith, MSN, RN, NEA-BC Chief Nursing Officer Vice President Hospital Operations

Jaurie Link

www.billingsclinic.com



EDA - EDC CREATING MONTANA BUSINESS OPPORTUNITIES

Montana University System, Office of the Commissioner of Higher Education 2500 Broadway Street, P.O. Box 203201 Helena, MT 59620-3201

Attention: MUS Board of Regents

Dear Montana University System Board of Regents:

RE: MSU Billings Request for RN to BSN Program

On April 14, 2016 the Board of Directors of Big Sky Economic Development voted unanimously to send this letter of encouragement and support for the proposed RN to BSN program at MSU-Billings. The Big Sky Economic Development Board respectfully requests the Board of Regents' approval of the MSU Billings program proposal.

Big Sky Economic Development is the organization charged with the responsibility to provide leadership and resources for the economic and community development of Billings and Yellowstone County. We recognize firsthand how important this program is to our healthcare industry as well as to our healthcare workforce. We view this program as a must-have toward developing a strong healthcare education infrastructure that will support a growing demand for a highly educated and clinically trained healthcare workforce.

Through our dialogue with Billings Clinic, St. Vincent Healthcare and RiverStone Health, we fully understand the need to transition RN's to BSN's for their continued magnate status as well as the very high need for excellent patient care. This program is also essential for retaining and attracting quality nurses. While supporting the needs of our healthcare employers, this proposed program will equally meet the needs and career goals of nursing professionals throughout the region and strengthen the community's status as a regional hub for world-class healthcare.

Big Sky Economic Development works closely with MSU Billings. They have been an integral partner in our workforce development initiatives. We appreciate their responsiveness to this critical need in our community. This RN to BSN program proposal is a great example of MSU Billings' leadership and the strength of their alignment and partnership with our healthcare industry. In order to build momentum towards a strong and growing MSU Billings, it is essential for the Board of Regents to consider additional capital investments and program offerings.

Thank you for your consideration of this crucial program.

Respectfully Submitted on Behalf of the BSED Board of Directors,

Steve Arveschoug, Executive Director Big Sky Economic Development

cc: BSED Board of Directors

GREN TE TOWER
222 NORTH 3/190 3" 501TC 200
SHLINGS MT 50101-1848

P 406 255 56/1 F 406,256 6877



May 9, 2016

Montana Board of Regents PO Box 203201 Helena, MT 59620-320

Dear Regents:

This letter is to serve as our support of Montana State University Billings (MSUB) College of Allied Health Professions (CAHP) in the pursuit of an Registered Nurse (RN) to Bachelor of Science in Nursing (BSN) Degree Completion.

The Montana Hospital Association (MHA) is an association whose members provide the full spectrum of health care services, including hospital inpatient and outpatient, skilled nursing facility, home health, hospice, assisted living, senior housing, and physician service. Nearly every hospital in the state is a member, ranging from the smallest critical access hospitals providing primary care services in Montana's rural communities to the largest tertiary care hospitals in the state. MHA is the principal advocate for the interests of members in their efforts to improve the health status of the communities they serve.

MHA is acutely aware of the need for bachelor's prepared nurses in Montana. We understand the national initiatives that underscore the importance of all registered nurses attaining a baccalaureate education. These nurses will be called upon member facilities to lead change and advance health care.

We are also pleased to understand the proposed program at MSUB will be delivered via distance education. The ability of our member facilities to retain their current nursing workforce while those nurses are "in" the classroom is critical. Associate degree nurses who wish to go back to school to obtain their bachelor's degree will be able to do so without sacrificing time away from work or family.

We believe the MSUB RN to BSN Degree Completion program will have a positive impact on health care across Montana. We strongly encourage you to support this new program.

Respectfully,

Dick Brown President

OFFICE OF THE GOVERNOR

STATE OF MONTANA

Steve Bullock
GOVERNOR



Mike Cooney
Lt. Governor

June 10, 2016

Montana Board of Regents of Higher Education 2500 Broadway Street Helena, Montana 59620-3201

Dear Members of the Montana Board of Regents:

I write to encourage you to approve the Montana State University Billings' (MSU Billings) online Registered Nurse (RN) to Bachelor of Science in Nursing (BSN) degree completion program.

I applaud the efforts of MSU-Billings to provide Montana students and nurses with additional opportunities to advance their careers within the high-demand and high-paying field of nursing. This is a particularly important effort as healthcare providers struggle to keep up with workforce needs.

The healthcare industry already employs more Montanans than any other industry in the state, and economists at the Montana Department of Labor and Industry anticipate the industry will add as many as 1300 jobs each year through 2024. Nurses will be in particularly high demand, with over 700 openings per year projected for registered nurses, nursing assistants, licensed practical nurses, and licensed vocational nurses.

Students in healthcare are more likely to stay in Montana than their peers, and they report the highest wages upon graduation. In Montana, the average annual salary for a registered nurse is over \$61,000 per year. This is good news for Montana and good news for students, but only if our schools and health care providers continue to work together to make sure that we are providing adequate educational and training opportunities to fill the industry's current and future workforce needs.

In May, I held a roundtable discussion in Billings with local healthcare industry and educational leaders to discuss healthcare workforce opportunities and challenges in the Billings area and throughout Montana. I was impressed by the local efforts taking place in Billings to increase and improve the opportunities for students and workers to prepare for these high-demand, high-paying jobs. I also heard loud and clear that we must all continue to do more.

I am proud of the movement we have already made and the unprecedented collaboration taking place between my administration, higher education, and the private industry. Through the HealthCARE (Creating Access to Rural Education) Montana program, the Montana Department of Labor and Industry, the Office of the Commissioner of Higher Education, and 15 two-year colleges are working together to train, recruit, and retain healthcare professionals throughout the state. As part of that effort, nearly 100 nursing and allied health faculty from Montana's two-year and four-year colleges came together with Montana's healthcare industry employers to redesign Montana's nursing curriculum. The new curriculum will allow for seamless transitions for students to stack degrees as they progress through their careers and will allow students to seek additional credentials while they continue to work.

The online RN to BSN completion program being proposed by MSU Billings is a critical component of this redesign, allowing nurses and nursing students to complete their BSN in just three semesters, from their home communities and facilities. Demand for BSN registered nurses is increasing nationwide and throughout Montana. The MSU Billings proposal recognizes that nurses in all corners of this state should have access to opportunities to advance their careers and to better serve their patients and local healthcare facilities.

I'm grateful to the College of Allied Health Professionals at MSU Billings and all of their partners for their tireless work on this proposal. By quickly vetting and approving the program, the Montana Board of Regents will be helping to ensure that our students of today are prepared for our highest demand jobs in the future and that we have the trained workforce we need to care for our friends, neighbors, parents, and grandparents as they age.

Sincerely,

STEVE BULLOCK

Governor

Duin, Diane

From:

Floyd, Susan

Sent:

Wednesday, March 16, 2016 9:16 AM

To:

Duin, Diane

Subject:

RE: RN to BSN Nursing Courses

RE: ASN to BSN Program and HealthCare Montana Grant

As the director of the nursing programs at City College at Montana State University Billings I have been involved with redesigning and developing the curriculum for the practical nursing, registered nursing, and ASN to BSN programs.

I have worked on a committee with Diane Duin to implement the ASN to BSN program through the College of Allied Health.

The current ASN Registered Nursing program at City College has had an average of 40 graduates a year since 2009. The national trend is for registered nurses to have a BSN degree to work in any specialty areas and in leadership roles. Currently there is limited availability for our graduates to get this degree. Many do online programs out of state to complete the BSN degree. Having a program here at Montana State University Billings will be a great asset to our graduates and is greatly needed.

Susan Floyd, RN, MSN
Nursing Program Director
City College at MSU-B
3803 Central Avenue
Billings, MT 59102
sfloyd@msubillings.edu, 247-3073

Duin, Diane

From: Vandaveer, Karen < KVandaveer@mtech.edu>

Sent: Thursday, April 28, 2016 3:07 PM

To: Duin, Diane

Subject: BSN-Completion Degree

Good afternoon, Diane. The nursing program at Montana Tech supports your application to the Montana Board of Regents to start an RN to BSN Degree Completion program. There is enough of a need in Montana to support the success of both the Montana Tech and the MSUB program.

Regards, Karen VanDaveer Director of Nursing Montana Tech

Montana Tech of The University of Montana Director of Nursing kvandaveer@mtech.edu 406-496-4392