

ACADEMIC AFFAIRS COUNCIL

AGENDA ITEM: 3 – B (4)

DATE: March 31, 2016

SUBJECT: Course Modifications – SDSM&T

South Dakota School of Mines and Technology has submitted the following course requests. These are under review by the System Vice President for Academic Affairs. Upon approval, the proposals will move forward to the Executive Director for consideration and be reported on the Interim Actions report for the May Board meeting.

New Course Requests

- 1) AES 775 Applied Freshwater Science
- 2) AES 788 Master’s Research Projects
- 3) GEOL 450 Fluid and Thermal Diffusion
- 4) GEOL 475/475L 575/575L Vertebrate Fossil Preparation and Conservation
- 5) ME 126L Product Design and Development, Design for Manufacturing Lab
- 6) ME 127L Product Design and Development, Virtual Design for Manufacturing Lab
- 7) ME 291 Independent Study
- 8) ME 292 Topics
- 9) PHYS 786 Nuclear Astrophysics and the Origin of the Elements

Revised Course Request: Common Course

- 1) ENGL 383 Creative Writing I

Revised Course Request: Unique Course

- 1) ME 110/110L Introduction to Mechanical Engineering/Lab
- 2) ME 125L Design for Manufacturing

RECOMMENDED ACTION

Approve and move forward to the Executive Director upon final review and approval by the System Vice President for Academic Affairs.

SOUTH DAKOTA BOARD OF REGENTS
New Course Request

SDSM&T	Atmospheric & Environmental Sciences	Dr. Demitris Kouris	01/22/2016
Institution	Division/Department	Institutional Approval Signature	Date

Section 1. Course Title and Description

If the course contains a lecture and laboratory component, identify both the lecture and laboratory numbers (xxx and xxxL) and credit hours associated with each. Provide the complete description as it will appear in the system common or unique database, including pre-requisites, co-requisites, and registration restrictions.

Prefix & No.	Course Title	Credits
AES 775	Applied Freshwater Science	(3-0) 3

Course Description:

This course will be an advanced course in applied freshwater science. We will be focusing on lake and stream/river ecosystems and cover topics that include abiotic and biotic properties. In addition, we will read and discuss articles from the scientific literature.

Section 2. Review of Course

Will this be a common or unique course? (select the appropriate option below)

This course will be a unique course. (Go to Section 3.)

This course will be a common course. (Complete below, then go to Section 3.)

Indicate universities that are proposing this common course:

BHSU DSU NSU SDSMT SDSU USD

Section 3. Other Course Information

1. Are there instructional staffing impacts?

No. Replacement of _____ which is
(prefix, number, name of course, credits)
being deleted. Effective date of deletion: _____

No, schedule management. Explain: _____

 X Yes. Specify: Dr. Kunza will teach this course every other year.2. Existing program in which course will be offered: M.S. in Atmospheric and Environmental Sciences 3. Proposed instructional method: R– Lecture
(may be found at <http://www.sdbor.edu/services/academics/AAC/guidelines.htm>)

Provide a brief justification:

4. Proposed primary delivery: (001) Face-to-Face
(may be found at <http://www.sdbor.edu/services/academics/AAC/guidelines.htm>)5. Term in which change will be effective: Fall 2016 6. Can this course be repeated for additional credit?
 Yes, total credit limit: X No.7. Will the grade for this course be limited to S/U (pass/fail)? Yes X No8. Will section enrollments be capped?
 Yes, maximum per section X No9. Will this course be equated (i.e. considered the same course for degree completion) with any other unique or common course in the course database? Yes X NoIf yes, indicate the course(s) to which it will be equated.
 10. Is this prefix already approved for your university? X Yes No

If no, provide a brief justification:

Section 4. To be completed by Academic Affairs1. University department code: MATM 2. Proposed CIP code: 40.0401 Is this a new CIP code for this university? Yes X No

NEW COURSE REQUEST
Supporting Justification for On-Campus Review

Lisa A Kunza		01/22/2016
Request Originator	Signature	Date
William J Capehart		01/22/2016
Program Coordinator	Signature	Date
School/College Dean		Date
School/College Dean	Signature	Date

1. Provide specific reasons for the proposal of this course and explain how the changes enhance the curriculum.

This class will be required for the non-thesis MS AES specialization in environmental science.

2. Note whether this course is: X Required _____ Elective

3. In addition to the major/program in which this course is offered, what other majors/programs will be affected by this course?

NONE

4. If this will be a dual listed course, indicate how the distinction between the two levels will be made.

NONE

5. Desired section size N/A

6. Provide qualifications of faculty who will teach this course. List name(s), rank(s), and degree(s).

Kunza, L, Assistant Prof (PhD)

7. Note whether adequate facilities are available and list any special equipment that will be needed for the course.

NONE

8. Note whether adequate library and media support are available for the course
Adequate library and media support are available for the course.

9. Will the new course duplicate courses currently being offered on this campus?

_____ Yes X No

If yes, provide justification.

10. If this course may be offered for variable credit, explain how the amount of credit at each offering is to be determined.

11. Add any additional comments that will aid in the evaluation of this request.

SOUTH DAKOTA SCHOOL OF MINES & TECHNOLOGY
Affected Departments Form

1. Affected Departments

Which departments will the requested change affect? Does the requested change affect the delivery of another course or the requirements of another degree program? Please specify.

None. No.

2. Number of Students Affected

Approximately how many students will be affected annually by the requested change? How was this number determined?

All students will be required to take this course if they are following the AES environmental science non-thesis track. It will also be a good course to qualify for an elective toward the environmental science thesis track.

3. Notification

Please notify all affected department heads and program coordinators, and attach all relevant correspondence and related documents.

This course will not affect other departments.

SOUTH DAKOTA BOARD OF REGENTS
New Course Request

SDSMT	Atmospheric & Environmental Sciences	Dr. Demitris Kouris	01/22/2016
Institution	Division/Department	Institutional Approval Signature	Date

Section 1. Course Title and Description

If the course contains a lecture and laboratory component, identify both the lecture and laboratory numbers (xxx and xxxL) and credit hours associated with each. Provide the complete description as it will appear in the system common or unique database, including pre-requisites, co-requisites, and registration restrictions.

Prefix & No.	Course Title	Credits
AES 788	Master's Research Projects	1 to 3

Course Description: Independent research problems/projects that lead to a research paper but not to a thesis. The plan of study is negotiated by the faculty member and the candidate. Contact between the two may be extensive and intensive. Does not include research courses which are theoretical. Oral defense of the report and research findings are required at conclusion of AES 788 study project for credit to be awarded.

Notes: Open only to students pursuing the AES M.S. non-thesis option

Section 2. Review of Course

Will this be a common or unique course? (select the appropriate option below)

This course will be a unique course. (Go to Section 3.)

This course will be a common course. (Complete below, then go to Section 3.)

Indicate universities that are proposing this common course:

BHSU DSU NSU SDSMT SDSU USD

Section 3. Other Course Information

1. Are there instructional staffing impacts?

No. Replacement of _____ which is
(prefix, number, name of course, credits)
being deleted. Effective date of deletion: _____

N No, schedule management. Explain: Class is independent research.

 Yes. Specify:

2. Existing program in which course will be offered: M.S. in Atmospheric and Environmental Sciences

3. Proposed instructional method: J – Design/Research
(may be found at <http://www.sdbor.edu/services/academics/AAC/guidelines.htm>)

Provide a brief justification:

4. Proposed primary delivery: (001) Face-to-Face
(may be found at <http://www.sdbor.edu/services/academics/AAC/guidelines.htm>)

5. Term in which change will be effective: Fall 2016

6. Can this course be repeated for additional credit?
 Yes, total credit limit: X No.

7. Will the grade for this course be limited to S/U (pass/fail)? X Yes No

8. Will section enrollments be capped?
 Yes, maximum per section X No

9. Will this course be equated (i.e. considered the same course for degree completion) with any other unique or common course in the course database? Yes X No

If yes, indicate the course(s) to which it will be equated.

10. Is this prefix already approved for your university? X Yes No

If no, provide a brief justification:

Section 4. To be completed by Academic Affairs

1. University department code: MATM

2. Proposed CIP code: 40.0401

Is this a new CIP code for this university? Yes X No

NEW COURSE REQUEST
Supporting Justification for On-Campus Review

William J Capehart		01/22/2016
Request Originator	Signature	Date
William J Capehart		01/22/2016
Program Coordinator	Signature	Date
School/College Dean	Signature	Date

1. Provide specific reasons for the proposal of this course and explain how the changes enhance the curriculum.

This class the non-thesis analog to AES 798 Thesis and is comparable to CEE 789 (Masters Research Problems/Projects) for the proposed AES Non-Thesis options currently being proposed.

2. Note whether this course is: X Required Elective

3. In addition to the major/program in which this course is offered, what other majors/programs will be affected by this course?

NONE

4. If this will be a dual listed course, indicate how the distinction between the two levels will be made.

NONE

5. Desired section size N/A

6. Provide qualifications of faculty who will teach this course. List name(s), rank(s), and degree(s).

Capehart, W, Assoc Prof (PhD)
French, A, Assistant Prof (PhD)
Kliche, D, Assoc Prof (PhD)
Kunza, L, Assistant Prof (PhD)

7. Note whether adequate facilities are available and list any special equipment that will be needed for the course.

NONE

8. Note whether adequate library and media support are available for the course
Adequate library and media support are available for the course.

9. Will the new course duplicate courses currently being offered on this campus?

 Yes X No

If yes, provide justification.

10. If this course may be offered for variable credit, explain how the amount of credit at each offering is to be determined.

11. Add any additional comments that will aid in the evaluation of this request.

SOUTH DAKOTA SCHOOL OF MINES & TECHNOLOGY
Affected Departments Form

1. Affected Departments

Which departments will the requested change affect? Does the requested change affect the delivery of another course or the requirements of another degree program? Please specify.

None. No.

2. Number of Students Affected

Approximately how many students will be affected annually by the requested change? How was this number determined?

All students in the newly suggested AES non-thesis track will be required to take this course.

3. Notification

Please notify all affected department heads and program coordinators, and attach all relevant correspondence and related documents.

This course will not affect other departments.

SOUTH DAKOTA BOARD OF REGENTS
New Course Request

SDSM&T	Geology & Geological Engineering	Dr. Demitris Kouris	01/28/2016
Institution	Division/Department	Institutional Approval Signature	Date

Section 1. Course Title and Description

If the course contains a lecture and laboratory component, identify both the lecture and laboratory numbers (xxx and xxxL) and credit hours associated with each. Provide the complete description as it will appear in the system common or unique database, including pre-requisites, co-requisites, and registration restrictions.

Prefix & No.	Course Title	Credits
GEOL 450	Fluid and Thermal Diffusion	(3-0) 3

Course Description:

Quantitative techniques to describe the occurrence, flow, and implications of fluids and heat in the crust. Topics include: Characterization of fluid and thermal systems; Derivation of governing equations; Boundary value problems; Poroelastic theory; Earthquake coupling and induced seismicity; Heat transfer, Hydrothermal systems; and Numerical methods including finite difference, finite element, and matrix methods.

Prerequisites are GEOL 201 or GEOE 221, MATH 125 or equivalent, Physics 213 or equivalent, CSC 111 or CSC 170 or equivalent, or permission of instructor.

Section 2. Review of Course

Will this be a common or unique course? (select the appropriate option below)

This course will be a unique course. (Go to Section 3.)

This course will be a common course. (Complete below, then go to Section 3.)

Indicate universities that are proposing this common course:

BHSU DSU NSU SDSMT SDSU USD

Section 3. Other Course Information

1. Are there instructional staffing impacts?

_____ No. Replacement of _____ which is
 (prefix, number, name of course, credits)
 being deleted. Effective date of deletion: _____

X No, schedule management. Explain: The course will be added to the regular teaching rotation of Dr. Masterlark.

_____ Yes. Specify:

2. Existing program in which course will be offered: B.S. in Geology

3. Proposed instructional method: R- Lecture
 (may be found at <http://www.sdbor.edu/services/academics/AAC/guidelines.htm>)

Provide a brief justification:

4. Proposed primary delivery: (001) Face-to-Face
 (may be found at <http://www.sdbor.edu/services/academics/AAC/guidelines.htm>)

5. Term in which change will be effective: Fall 2016

6. Can this course be repeated for additional credit?
 _____ Yes, total credit limit: _____ X No.

7. Will the grade for this course be limited to S/U (pass/fail)? _____ Yes X No

8. Will section enrollments be capped?
X Yes, maximum per section 15 _____ No

9. Will this course be equated (i.e. considered the same course for degree completion) with any other unique or common course in the course database? _____ Yes X No

If yes, indicate the course(s) to which it will be equated.

10. Is this prefix already approved for your university? X Yes _____ No

If no, provide a brief justification:

Section 4. To be completed by Academic Affairs

1. University department code: MGEOL

2. Proposed CIP code: 14.3901

Is this a new CIP code for this university? _____ Yes X No

NEW COURSE REQUEST
Supporting Justification for On-Campus Review

Timothy Masterlark		
Request Originator	Signature	Date
Laurie Anderson		
Department Chair	Signature	Date
School/College Dean	Signature	Date

1. Provide specific reasons for the proposal of this course and explain how the changes enhance the curriculum. The occurrence of fluids in the crust has wide-ranging impacts on geological processes profound implications for tectonic systems. This course provides content that fills a substantial gap in the curriculum for undergraduate students in Geology.

2. Note whether this course is: _____ Required _____ Elective

3. In addition to the major/program in which this course is offered, what other majors/programs will be affected by this course? None.

4. If this will be a dual listed course, indicate how the distinction between the two levels will be made.
N/A

5. Desired section size 15

6. Provide qualifications of faculty who will teach this course. List name(s), rank(s), and degree(s).
Timothy Masterlark, Professor, Ph.D.

7. Note whether adequate facilities are available and list any special equipment that will be needed for the course. Current facilities are sufficient.

8. Note whether adequate library and media support are available for the course.
Current library and media support are sufficient.

9. Will the new course duplicate courses currently being offered on this campus?
_____ Yes _____ No

If yes, provide justification.

10. If this course may be offered for variable credit, explain how the amount of credit at each offering is to be determined. N/A

11. Add any additional comments that will aid in the evaluation of this request.

SOUTH DAKOTA SCHOOL OF MINES & TECHNOLOGY
Affected Departments Form

1. Affected Departments

Which departments will the requested change affect? Does the requested change affect the delivery of another course or the requirements of another degree program? Please specify.

The proposed course will affect the Department of Geology and Geological Engineering, and more specifically, the Geology BS degree program. The proposed course affects neither the delivery of another course nor the requirements of another degree program.

2. Number of Students Affected

Approximately how many students will be affected annually by the requested change? How was this number determined?

This course will serve approximately 12 students each offering. This number was determined via an informal email poll.

3. Notification

Please notify all affected department heads and program coordinators, and attach all relevant correspondence and related documents.

NA.

SOUTH DAKOTA BOARD OF REGENTS
New Course Request

SDSM&T	Geology & Geological Engineering	Dr. Demitris Kouris	01/21/2016
Institution	Division/Department	Institutional Approval Signature	Date

Section 1. Course Title and Description

If the course contains a lecture and laboratory component, identify both the lecture and laboratory numbers (xxx and xxxL) and credit hours associated with each. Provide the complete description as it will appear in the system common or unique database, including pre-requisites, co-requisites, and registration restrictions.

Prefix & No.	Course Title	Credits
GEOL 475/475L/575/575L	Vertebrate Fossil Preparation and Conservation	(2-1) 3

Course Description: In this course, students will learn the basic techniques, tools, and equipment maintenance needed for preparation of vertebrate fossil material and develop a thorough understanding of the importance of fossil conservation. The laboratory portion of the course will enable students to have hands-on experience applying various conservation methods and techniques to fossil specimens.

Section 2. Review of Course

Will this be a common or unique course? (select the appropriate option below)

This course will be a unique course. (Go to Section 3.)

This course will be a common course. (Complete below, then go to Section 3.)

Indicate universities that are proposing this common course:

BHSU DSU NSU SDSMT SDSU USD

Section 3. Other Course Information

1. Are there instructional staffing impacts?

No. Replacement of _____ which is
 (prefix, number, name of course, credits)
 being deleted. Effective date of deletion: _____

No, schedule management. Explain: Museum Preparator Kelsie Abrams will teach this course as part of her assigned duties.

Yes. Specify:

2. Existing program in which course will be offered: B.S. and M.S. Geology, Paleontology

3. Proposed instructional method: R – Lecture and L- Laboratory
(may be found at <http://www.sdbor.edu/services/academics/AAC/guidelines.htm>)

Provide a brief justification: Lecture sessions will cover concepts, materials, and topics within conservation; the lab session will provide hands-on experience and preparation.

4. Proposed primary delivery: (001) Face-to-Face
(may be found at <http://www.sdbor.edu/services/academics/AAC/guidelines.htm>)

5. Term in which change will be effective: Fall 2016

6. Can this course be repeated for additional credit?
 Yes, total credit limit: _____ No.

7. Will the grade for this course be limited to S/U (pass/fail)? Yes No

8. Will section enrollments be capped?
 Yes, maximum per section 20 No

9. Will this course be equated (i.e. considered the same course for degree completion) with any other unique or common course in the course database? Yes No

If yes, indicate the course(s) to which it will be equated. _____

10. Is this prefix already approved for your university? Yes No

If no, provide a brief justification:

Section 4. To be completed by Academic Affairs

1. University department code: MGEOL

2. Proposed CIP code: 40.0604

Is this a new CIP code for this university? Yes No

NEW COURSE REQUEST
Supporting Justification for On-Campus Review

Kelsie D. Abrams		11/24/2015
Request Originator	Signature	Date
Dr. Laurie Anderson		01/21/2016
Department Chair	Signature	Date
School/College Dean	Signature	Date

1. Provide specific reasons for the proposal of this course and explain how the changes enhance the curriculum.

Vertebrate fossil preparation is a necessary component for the advancement of paleontological science. This field is becoming increasingly more specialized and most job and intern experiences provide little to no fossil preparation education. This course will emphasize the vital role a fossil preparator plays within natural sciences, and will provide students with the knowledge of current conservation methods and techniques, as well as allow students to have adequate hands-on practice with these methods and techniques.

2. Note whether this course is: _____ Required _____ Elective

3. In addition to the major/program in which this course is offered, what other majors/programs will be affected by this course? None

4. If this will be a dual listed course, indicate how the distinction between the two levels will be made. Graduate students will be held to a higher standard of effort and performance.

5. Desired section size 15

6. Provide qualifications of faculty who will teach this course. List name(s), rank(s), and degree(s).

Kelsie D. Abrams, B.A Anthropology, M.S. Geoscience (Expected Spring 2016)
 Kelsie has taught five graduate and undergraduate laboratory courses for Fort Hays State University. This included the design and implementation of curricula and materials for FHSU's GSCI 202 Historical Geology Laboratory and GSCI 605 Geomorphology Laboratory. Kelsie is also the vertebrate fossil preparatory and laboratory manager for the Museum of Geology's Paleontology Research Laboratory.

7. Note whether adequate facilities are available and list any special equipment that will be needed for the course.

PRL Foster Preparation Laboratory is available for the laboratory portion of this course. No addition or special equipment is needed.

8. Note whether adequate library and media support are available for the course.

Yes

9. Will the new course duplicate courses currently being offered on this campus?
_____ Yes X No

If yes, provide justification.

10. If this course may be offered for variable credit, explain how the amount of credit at each offering is to be determined.

11. Add any additional comments that will aid in the evaluation of this request.

SOUTH DAKOTA SCHOOL OF MINES & TECHNOLOGY
Affected Departments Form

1. Affected Departments

Which departments will the requested change affect? Does the requested change affect the delivery of another course or the requirements of another degree program? Please specify.

No departments outside GGE will be affected. This course will not affect the delivery of another course or requirements of another degree program.

2. Number of Students Affected

Approximately how many students will be affected annually by the requested change? How was this number determined?

About 20 students that want to learn vertebrate preparation as an elective in the BS Geology and the MS Paleontology programs will be affected. This is the number of students allowed to enroll in the course per year.

3. Notification

Please notify all affected department heads and program coordinators, and attach all relevant correspondence and related documents.

Not applicable.

SOUTH DAKOTA BOARD OF REGENTS
New Course Request

SDSM&T	Mechanical Engineering	Dr. Demitris Kouris	10/30/2015
Institution	Division/Department	Institutional Approval Signature	Date

Section 1. Course Title and Description

If the course contains a lecture and laboratory component, identify both the lecture and laboratory numbers (xxx and xxxL) and credit hours associated with each. Provide the complete description as it will appear in the system common or unique database, including pre-requisites, co-requisites, and registration restrictions.

Prefix & No.	Course Title	Credits
ME126L	Product Design and Development, Design for Manufacturing Lab	(0-1)1

Course Description: The “hands on” companion to ME125 Design for Manufacturing. Initial 4 lab series includes woods, conventional machine shop, manual mill and manual lathe. Student will complete an individual design project and a group design project.

Section 2. Review of Course

Will this be a common or unique course? (select the appropriate option below)

This course will be a unique course. (Go to Section 3.)

This course will be a common course. (Complete below, then go to Section 3.)

Indicate universities that are proposing this common course:

BHSU DSU NSU SDSMT SDSU USD

Section 3. Other Course Information

1. Are there instructional staffing impacts?

No. Replacement of _____ which is
(prefix, number, name of course, credits)
being deleted. Effective date of deletion: _____

No, schedule management. Explain: this content has been part of ME125L

_____ Yes. Specify:

2. Existing program in which course will be offered: B.S. in Mechanical Engineering

3. Proposed instructional method: L- Laboratory
(may be found at <http://www.sdbor.edu/services/academics/AAC/guidelines.htm>)

Provide a brief justification:

4. Proposed primary delivery: (001) Face-to-face
(may be found at <http://www.sdbor.edu/services/academics/AAC/guidelines.htm>)

5. Term in which change will be effective: Fall 2016

6. Can this course be repeated for additional credit?
_____ Yes, total credit limit: _____ X No.

7. Will the grade for this course be limited to S/U (pass/fail)? _____ Yes _____ X No

8. Will section enrollments be capped?
_____ X Yes, maximum per section 10 _____ No

9. Will this course be equated (i.e. considered the same course for degree completion) with any other unique or common course in the course database? _____ Yes _____ X No

If yes, indicate the course(s) to which it will be equated.

10. Is this prefix already approved for your university? _____ X Yes _____ No

If no, provide a brief justification:

Section 4. To be completed by Academic Affairs

1. University department code: MME

2. Proposed CIP code: 14.1901

Is this a new CIP code for this university? _____ Yes _____ X No

NEW COURSE REQUEST
Supporting Justification for On-Campus Review

Aaron Lalley		10/30/2015
Request Originator	Signature	Date
Dr. Michael Langerman		10/30/2015
Department Chair	Signature	Date
School/College Dean	Signature	Date

1. Provide specific reasons for the proposal of this course and explain how the changes enhance the curriculum. Creation of this course will improve scheduling of lab sections and balance credit allocation

2. Note whether this course is: X Required Elective

3. In addition to the major/program in which this course is offered, what other majors/programs will be affected by this course?

4. If this will be a dual listed course, indicate how the distinction between the two levels will be made.

5. Desired section size 10

6. Provide qualifications of faculty who will teach this course. List name(s), rank(s), and degree(s).
 Aaron Lalley – instructor, MSME, BSME

7. Note whether adequate facilities are available and list any special equipment that will be needed for the course. This class requires 3d printers, a VMC and a design studio. All are in place.

8. Note whether adequate library and media support are available for the course.
 In place

9. Will the new course duplicate courses currently being offered on this campus?
 Yes X No

If yes, provide justification.

10. If this course may be offered for variable credit, explain how the amount of credit at each offering is to be determined.

11. Add any additional comments that will aid in the evaluation of this request.
 This course will have a co-requisite of ME 125

SOUTH DAKOTA SCHOOL OF MINES & TECHNOLOGY
Affected Departments Form

1. Affected Departments

Which departments will the requested change affect? Mechanical engineering

Does the requested change affect the delivery of another course or the requirements of another degree program? No

Please specify.

2. Number of Students Affected

Approximately how many students will be affected annually by the requested change? 150

How was this number determined? This change affects all mechanical engineering freshman

3. Notification

Please notify all affected department heads and program coordinators, and attach all relevant correspondence and related documents. This only affects mechanical engineering and The department head is required to approve the change.

SOUTH DAKOTA BOARD OF REGENTS

New Course Request

SDSM&T	Mechanical Engineering	Dr. Demitris Kouris	10/30/2016
Institution	Division/Department	Institutional Approval Signature	Date

Section 1. Course Title and Description

If the course contains a lecture and laboratory component, identify both the lecture and laboratory numbers (xxx and xxxL) and credit hours associated with each. Provide the complete description as it will appear in the system common or unique database, including pre-requisites, co-requisites, and registration restrictions.

Prefix & No.	Course Title	Credits
ME 127L	Product Design and Development, Virtual Design for Manufacturing Lab	(0-1) 1

Course Description: The “hands off” companion to ME125 Design for Manufacturing. Initial 4 lab series includes 3D printing, CNC machining, 2D graphic design and 3D graphic design. Student will complete an individual design project and a group design project.

Section 2. Review of Course

Will this be a common or unique course? (select the appropriate option below)

This course will be a unique course. (Go to Section 3.)

This course will be a common course. (Complete below, then go to Section 3.)

Indicate universities that are proposing this common course:

BHSU DSU NSU SDSMT SDSU USD

Section 3. Other Course Information

1. Are there instructional staffing impacts?

No. Replacement of _____ which is
(prefix, number, name of course, credits)
 being deleted. Effective date of deletion: _____

No, schedule management. Explain: this content has been part of ME125L

_____ Yes. Specify:

2. Existing program in which course will be offered: B.S. in Mechanical Engineering

3. Proposed instructional method: L- Laboratory
(may be found at <http://www.sdbor.edu/services/academics/AAC/guidelines.htm>)

Provide a brief justification:

4. Proposed primary delivery: (001) Face-to-face
(may be found at <http://www.sdbor.edu/services/academics/AAC/guidelines.htm>)

5. Term in which change will be effective: Fall 2016

6. Can this course be repeated for additional credit?
_____ Yes, total credit limit: _____ No.

7. Will the grade for this course be limited to S/U (pass/fail)? _____ Yes No

8. Will section enrollments be capped?
 Yes, maximum per section 10 _____ No

9. Will this course be equated (i.e. considered the same course for degree completion) with any other unique or common course in the course database? _____ Yes No

If yes, indicate the course(s) to which it will be equated.

10. Is this prefix already approved for your university? Yes _____ No

If no, provide a brief justification:

Section 4. To be completed by Academic Affairs

1. University department code: MME

2. Proposed CIP code: 14.1901

Is this a new CIP code for this university? _____ Yes No

NEW COURSE REQUEST
Supporting Justification for On-Campus Review

Aaron Lalley		10/30/2016
Request Originator	Signature	Date
Dr. Michael Langerman		10/30/2016
Department Chair	Signature	Date
School/College Dean	Signature	Date

1. Provide specific reasons for the proposal of this course and explain how the changes enhance the curriculum. Creation of this course will improve scheduling of lab sections and balance credit allocation

2. Note whether this course is: X Required Elective

3. In addition to the major/program in which this course is offered, what other majors/programs will be affected by this course?

4. If this will be a dual listed course, indicate how the distinction between the two levels will be made.

5. Desired section size 10

6. Provide qualifications of faculty who will teach this course. List name(s), rank(s), and degree(s).
 Aaron Lalley – instructor, MSME, BSME

7. Note whether adequate facilities are available and list any special equipment that will be needed for the course. This class requires 3d printers, a VMC and a design studio. All are in place.

8. Note whether adequate library and media support are available for the course.
 In place

9. Will the new course duplicate courses currently being offered on this campus?
 Yes X No

If yes, provide justification.

10. If this course may be offered for variable credit, explain how the amount of credit at each offering is to be determined.

11. Add any additional comments that will aid in the evaluation of this request.
 This course will have a co-requisite of ME 125

SOUTH DAKOTA SCHOOL OF MINES & TECHNOLOGY
Affected Departments Form

1. Affected Departments

Which departments will the requested change affect? Mechanical engineering

Does the requested change affect the delivery of another course or the requirements of another degree program? No

Please specify.

2. Number of Students Affected

Approximately how many students will be affected annually by the requested change? 150

How was this number determined? This change affects all mechanical engineering freshmen

3. Notification

Please notify all affected department heads and program coordinators, and attach all relevant correspondence and related documents. This only affects mechanical engineering and The department head is required to approve the change.

SOUTH DAKOTA BOARD OF REGENTS
New Course Request

SDSM&T	Mechanical Engineering	Dr. Demitris Kouris	02/11/2016
Institution	Division/Department	Institutional Approval Signature	Date

Section 1. Course Title and Description

If the course contains a lecture and laboratory component, identify both the lecture and laboratory numbers (xxx and xxxL) and credit hours associated with each. Provide the complete description as it will appear in the system common or unique database, including pre-requisites, co-requisites, and registration restrictions.

Prefix & No.	Course Title	Credits
ME 291	Independent Study	1 to 3

Course Description including prerequisites and co-requisites, and registration restrictions:

Course Description:

Includes directed study, problems, readings, directed readings, special problems and special projects. Students complete individualized plans of study which include significant one-on-one student-teacher involvement. The faculty member and students negotiate the details of the study plans. Meetings frequency depend on the requirements of the topic.

Prerequisites: Permission of instructor

Section 2. Review of Course

Will this be a common or unique course? (select the appropriate option below)

This course will be a unique course. (Go to Section 3.)

This course will be a common course. (Complete below, then go to Section 3.)

Indicate universities that are proposing this common course:

BHSU DSU NSU SDSMT SDSU USD

Section 3. Other Course Information

1. Are there instructional staffing impacts?

_____ No. Replacement of _____ which is
(prefix, number, name of course, credits)
being deleted. Effective date of deletion: _____

X No, schedule management. Explain:
This will only be allowed by permission of instructor, which requires approval of the faculty member and department head. As such, it will only be offered when it has a minimum impact on the faculty member's schedule.

_____ Yes. Specify:

2. Existing program in which course will be offered: B.S. in Mechanical Engineering

3. Proposed instructional method: I- Independent Study
(may be found at <http://www.sdbor.edu/services/academics/AAC/guidelines.htm>)

Provide a brief justification: Concepts will be taught using a lecture format. The lab time will be used to practice those concepts in active learning activities and to apply them in the semester-long project.

4. Proposed primary delivery: (001) Face-to-Face
(may be found at <http://www.sdbor.edu/services/academics/AAC/guidelines.htm>)

5. Term in which change will be effective: Fall 2016

6. Can this course be repeated for additional credit?

X Yes, total credit limit: See next line. _____ No.
Based on approval of department head.

7. Will the grade for this course be limited to S/U (pass/fail)? _____ Yes X No

8. Will section enrollments be capped?

X Yes, maximum per section 3 students _____ No

9. Will this course be equated (i.e. considered the same course for degree completion) with any other unique or common course in the course database? X Yes _____ No

If yes, indicate the course(s) to which it will be equated. ME 2XX courses

10. Is this prefix already approved for your university? X Yes _____ No

If no, provide a brief justification:

Section 4. To be completed by Academic Affairs

1. University department code: MME

2. Proposed CIP code: 14.1901

Is this a new CIP code for this university? Yes X No

NEW COURSE REQUEST
Supporting Justification for On-Campus Review

Jason T. Ash		2-11-16
Request Originator	Signature	Date
Michael Langerman		2/11/16
Department Chair	Signature	Date
School/College Dean	Signature	Date

1. Provide specific reasons for the proposal of this course and explain how the changes enhance the curriculum.

We have both ME 391/491 and would like to add this option for ME 291 at the sophomore level.

2. Note whether this course is: _____ Required X Elective

This course may be taken to replace a ME 2XX required course based on approval of the ME department head.

3. In addition to the major/program in which this course is offered, what other majors/programs will be affected by this course?

None.

4. If this will be a dual listed course, indicate how the distinction between the two levels will be made.
Not applicable.

5. Desired section size 3 or fewer

6. Provide qualifications of faculty who will teach this course. List name(s), rank(s), and degree(s).
Faculty member and department head would authorize the initiation of a course section.

7. Note whether adequate facilities are available and list any special equipment that will be needed for the course.

Adequate facilities are available.

8. Note whether adequate library and media support are available for the course.

Adequate library and media support are available.

9. Will the new course duplicate courses currently being offered on this campus?

 Yes X No

If yes, provide justification.

10. If this course may be offered for variable credit, explain how the amount of credit at each offering is to be determined.

Credit determined by faculty member and department head when approving independent study.

11. Add any additional comments that will aid in the evaluation of this request.

SOUTH DAKOTA SCHOOL OF MINES & TECHNOLOGY
Affected Departments Form

1. Affected Departments

Which departments will the requested change affect? Does the requested change affect the delivery of another course or the requirements of another degree program? Please specify.

Only Mechanical Engineering is affected. It does not impact another course or degree program.

2. Number of Students Affected

Approximately how many students will be affected annually by the requested change? How was this number determined?

~30 students maximum assuming 10 independent studies offered total between Fall, Spring, and Summer semesters

3. Notification

Please notify all affected department heads and program coordinators, and attach all relevant correspondence and related documents.

The ME department head is cc'd on this new course request and initiated the process

SOUTH DAKOTA BOARD OF REGENTS
New Course Request

SDSM&T	Mechanical Engineering	Dr. Demitris Kouris	02/11/2016
Institution	Division/Department	Institutional Approval Signature	Date

Section 1. Course Title and Description

If the course contains a lecture and laboratory component, identify both the lecture and laboratory numbers (xxx and xxxL) and credit hours associated with each. Provide the complete description as it will appear in the system common or unique database, including pre-requisites, co-requisites, and registration restrictions.

Prefix & No.	Course Title	Credits
ME 292	Topics	1 to 3

Course Description including prerequisites and co-requisites, and registration restrictions:

Course Description:

Includes current topics, advanced topics and special topics. A course devoted to a particular issue in a specified field. Course content is not wholly included in the regular curriculum. Guest artists or experts may serve as instructors.

Section 2. Review of Course

Will this be a common or unique course? (select the appropriate option below)

This course will be a unique course. (Go to Section 3.)

This course will be a common course. (Complete below, then go to Section 3.)

Indicate universities that are proposing this common course:

BHSU DSU NSU SDSMT SDSU USD

Section 3. Other Course Information

1. Are there instructional staffing impacts?

No. Replacement of _____ which is
(prefix, number, name of course, credits)
being deleted. Effective date of deletion: _____

No, schedule management. Explain:
 This will only be offered by approval of the ME department head and will be planned into the schedule if needed.

Yes. Specify:

2. Existing program in which course will be offered: B.S. in Mechanical Engineering

3. Proposed instructional method: X- Special Topics
 (may be found at <http://www.sdbor.edu/services/academics/AAC/guidelines.htm>)

Provide a brief justification: Concepts will be taught using a lecture format. The lab time will be used to practice those concepts in active learning activities and to apply them in the semester-long project.

4. Proposed primary delivery: (001) Face-to-Face
 (may be found at <http://www.sdbor.edu/services/academics/AAC/guidelines.htm>)

5. Term in which change will be effective: Fall 2016

6. Can this course be repeated for additional credit?
 Yes, total credit limit: See next line. No.

7. Will the grade for this course be limited to S/U (pass/fail)? Yes No

8. Will section enrollments be capped?
 Yes, maximum per section 30 students or fewer No

9. Will this course be equated (i.e. considered the same course for degree completion) with any other unique or common course in the course database? Yes No

If yes, indicate the course(s) to which it will be equated. ME 2XX courses

10. Is this prefix already approved for your university? Yes No

If no, provide a brief justification:

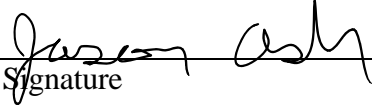

Section 4. To be completed by Academic Affairs

1. University department code: MME

2. Proposed CIP code: 14.1901

Is this a new CIP code for this university? Yes No

NEW COURSE REQUEST
Supporting Justification for On-Campus Review

<u>Jason T. Ash</u>		2-11-16
Request Originator	Signature	Date
<u>Michael Langerman</u>		2/11/16
Department Chair	Signature	Date
School/College Dean	Signature	Date

1. Provide specific reasons for the proposal of this course and explain how the changes enhance the curriculum.

We have both ME 391/491 and would like to add this option for ME 291 at the sophomore level.

2. Note whether this course is: _____ Required _____ Elective

This course may be taken to replace a ME 2XX required course based on approval of the ME department head.

3. In addition to the major/program in which this course is offered, what other majors/programs will be affected by this course?

None.

4. If this will be a dual listed course, indicate how the distinction between the two levels will be made.

Not applicable.

5. Desired section size 30 or fewer

6. Provide qualifications of faculty who will teach this course. List name(s), rank(s), and degree(s).

Faculty member and department head would authorize the initiation of a course section.

7. Note whether adequate facilities are available and list any special equipment that will be needed for the course.

Adequate facilities are available.

8. Note whether adequate library and media support are available for the course.

Adequate library and media support are available.

9. Will the new course duplicate courses currently being offered on this campus?

_____ Yes _____ No

If yes, provide justification.

10. If this course may be offered for variable credit, explain how the amount of credit at each offering is to be determined.

Credit determined by faculty member and department head when approving topics course.

11. Add any additional comments that will aid in the evaluation of this request.

SOUTH DAKOTA SCHOOL OF MINES & TECHNOLOGY
Affected Departments Form

1. Affected Departments

Which departments will the requested change affect? Does the requested change affect the delivery of another course or the requirements of another degree program? Please specify.

Only Mechanical Engineering is affected. It does not impact another course or degree program.

2. Number of Students Affected

Approximately how many students will be affected annually by the requested change? How was this number determined?

~90 students maximum assuming 3 topic courses offered total between Fall, Spring, and Summer semesters

3. Notification

Please notify all affected department heads and program coordinators, and attach all relevant correspondence and related documents.

The ME department head is cc'd on this new course request and initiated the process

SOUTH DAKOTA BOARD OF REGENTS

New Course Request

SDSM&T	Physics	Dr. Demitris Kouris	11/20/2015
Institution	Division/Department	Institutional Approval Signature	Date

Section 1. Course Title and Description

If the course contains a lecture and laboratory component, identify both the lecture and laboratory numbers (xxx and xxxL) and credit hours associated with each. Provide the complete description as it will appear in the system common or unique database, including pre-requisites, co-requisites, and registration restrictions.

Prefix & No.	Course Title	Credits
PHYS 786	Nuclear Astrophysics and the Origin of the Elements	(3-0) 3

Course Description: This one-semester course is aimed at bridging the gap between standard nuclear physics textbooks and state-of-the-art research literature. It will be illustrated how the field of nuclear astrophysics, at the intersection of nuclear physics, astrophysics, and observational astronomy, explores the chemical evolution of our universe, determines the energetics of astrophysical objects, and identifies their observational signatures. Participants will be guided through four major directions: nucleosynthesis processes in stars studied with very low energy accelerator experiments; explosive nucleosynthesis processes requiring measurements far off of stability with radioactive beams; neutron-induced nucleosynthesis in late stellar evolution pursued at reactor and neutron spallation facilities; and finally neutrino-induced nucleosynthesis, still mostly confined to theoretical prediction and observation. It provides necessary training for those who intend to work in a discipline where nuclear science plays an important role.

Prerequisite: PHYS 771 – Quantum Mechanics I or instructor permission

Section 2. Review of Course

Will this be a common or unique course? (select the appropriate option below)

This course will be a unique course. (Go to Section 3.)

This course will be a common course. (Complete below, then go to Section 3.)

Indicate universities that are proposing this common course:

BHSU DSU NSU SDSMT SDSU USD

Section 3. Other Course Information

1. Are there instructional staffing impacts?

_____ No. Replacement of _____ which is
(prefix, number, name of course, credits)
being deleted. Effective date of deletion: _____

 X No, schedule management. Explain: We have enough faculty to be able to add this course.

_____ Yes. Specify:

2. Existing program in which course will be offered: Ph.D. in Physics

3. Proposed instructional method: R-Lecture
(may be found at <http://www.sdbor.edu/services/academics/AAC/guidelines.htm>)

Theoretical nature of the material for this class is most efficiently conveyed in lecture presentations.

4. Proposed primary delivery: (001) Face-to-Face
(may be found at <http://www.sdbor.edu/services/academics/AAC/guidelines.htm>)

5. Term in which change will be effective: Summer 2016

6. Can this course be repeated for additional credit?
_____ Yes, total credit limit: _____ X No.

7. Will the grade for this course be limited to S/U (pass/fail)? _____ Yes X No

8. Will section enrollments be capped?
_____ Yes, maximum per section _____ X No

9. Will this course be equated (i.e. considered the same course for degree completion) with any other unique or common course in the course database? _____ Yes X No

If yes, indicate the course(s) to which it will be equated.

10. Is this prefix already approved for your university? X Yes _____ No

If no, provide a brief justification:

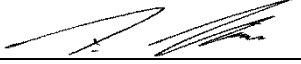
Section 4. To be completed by Academic Affairs

1. University department code: MPHYS

2. Proposed CIP code: 40.0801

Is this a new CIP code for this university? Yes X No

NEW COURSE REQUEST
Supporting Justification for On-Campus Review

Frank Strieder		10/26/2015
Request Originator	Signature	Date
Vladimir Sobolev		
Department Chair	Signature	Date
School/College Dean	Signature	Date

1. Provide specific reasons for the proposal of this course and explain how the changes enhance the curriculum.

The course provides necessary training of applying nuclear physics introduced in text books to practical uses in a wide range of fields. It will benefit students who want to pursue careers in those fields.

2. Note whether this course is: Required X Elective

3. In addition to the major/program in which this course is offered, what other majors/programs will be affected by this course?

No other majors will be affected.

4. If this will be a dual listed course, indicate how the distinction between the two levels will be made.

Not applicable.

5. Desired section size 10

6. Provide qualifications of faculty who will teach this course. List name(s), rank(s), and degree(s).
Frank Strieder, Associate professor, PhD

7. Note whether adequate facilities are available and list any special equipment that will be needed for the course.

Adequate facilities are available.

8. Note whether adequate library and media support are available for the course.

No additional support is needed.

9. Will the new course duplicate courses currently being offered on this campus?

 Yes X No

If yes, provide justification.

10. If this course may be offered for variable credit, explain how the amount of credit at each offering is to be determined.

Not applicable.

11. Add any additional comments that will aid in the evaluation of this request.

The course may create potential human resource for the development of underground science at SURF.

SOUTH DAKOTA SCHOOL OF MINES & TECHNOLOGY
Affected Departments Form

1. Affected Departments

Which departments will the requested change affect? Does the requested change affect the delivery of another course or the requirements of another degree program? Please specify.

The new course will affect the curriculum of the Physics Department. The requested change will not affect the delivery of any other courses or the requirements of another degree program.

2. Number of Students Affected

Approximately how many students will be affected annually by the requested change? How was this number determined?

Physics Department expect that this new course will affect up to 20 students in a PhD Physics program.

3. Notification

Please notify all affected department heads and program coordinators, and attach all relevant correspondence and related documents.

There is no affected departments to notify.

SOUTH DAKOTA BOARD OF REGENTS
Revised Course Request: Common Course

This form is to be used to request a substantive change in a common course. Representatives from all institutions offering the common course must participate in developing the proposed revisions to a common course. Signatures from all institutions offering the common course must be included on the final form submitted to AAC.

SDSM&T	Humanities & Social Sciences	Dr. Demitris Kouris	11/16/2016
Institution	Division/Department	Institutional Approval Signature	Date
SDSM&T	Dr. Sue Shirley		11/16/2016
Institution	Form Initiator	Dean's Approval Signature	Date
Institution	Division/Department	Institutional Approval Signature	Date

Indicate (X) the universities that offer the common course.

 BHSU X DSU NSU X SDSMT X SDSU USD

Section 1. Course Title and Description

If changing from a course that previously had only a lecture or laboratory component to a composite course, identify both the course and laboratory numbers (xxx and xxxL) and credit hours associated with each.

Prefix & No.	Course Title	Credits
ENGL 383	Creative Writing I	(3-0) 3

Course Description as it currently appears in the system common course database:

Description:

Study and practice in the techniques of writing fiction, poetry, and/or drama.

Co-Requisites:

1. None

Pre-Requisites:

1. None

University Pre-Requisites:

1. DSU-ENGL-201 OR ENGL-283;
2. SDSMT-None
3. SDSU-ENGL-201 OR ENGL-283

Section 2. Modification(s) Requested

Check all revisions that apply and provide detailed information in the Current and Revised fields below. Provide the complete course description as it currently appears in the system common course database. If changing a course that previously had only a lecture or laboratory component to a composite course, identify both the course and laboratory numbers (xxx and xxxL) and credit hours associated with each.

	<u>Current</u>	<u>New</u>
_____ Prefix Change from _____ to _____ Indicate any universities for which this must be added as a new prefix: _____ BHSU _____ DSU _____ NSU _____ SDSMT _____ SDSU _____ USD		
_____ Course Number change from _____ to _____		
_____ Course Title change from _____ to _____		
_____ Credit Hours change from _____ to _____		
_____ Course content/description change to:		

_____ Prerequisites _____ to _____
 _____ Corequisites _____ to _____
 _____ Registration Restriction _____ to _____
 X Course deletion _____ to _____
 Indicate the universities which will be deleting the course:
 _____ BHSU _____ DSU _____ NSU X SDSMT _____ SDSU _____ USD

Justification for all changes noted above:

The course has not been offered at SDSM&T since 2004. There has been no student demand for the course since then. The new pre-reqs (ENGL 201/283) are not required by any B.S. degree program. At Dr. Paul Turman's suggestion, we have opted to delete the course from our inventory. Students who transfer in ENGL 383 can use it as an upper division Humanities.

Section 3. Other Course Information

1. Will this course be equated (considered the same course for degree completion) with any other unique or common course in the course database? _____ Yes _____ No

If yes, indicate the course(s) to which it will be equated.

Section 4. To Be Completed by Academic Affairs

	<u>Current</u>		<u>New</u>
_____ Change in University Dept Code	_____	to	_____
_____ Change in CIP Code	_____	to	_____

SOUTH DAKOTA SCHOOL OF MINES & TECHNOLOGY
Affected Departments Form

1. Affected Departments

Which departments will the requested change affect? Does the requested change affect the delivery of another course or the requirements of another degree program? Please specify.

No effect. The course is not required or recommended by any degree programs at SDSM&T.

2. Number of Students Affected

Approximately how many students will be affected annually by the requested change? How was this number determined?

No students. The course has not been offered at SDSM&T since 2004. There has been no student demand for it since then.

3. Notification

Please notify all affected department heads and program coordinators, and attach all relevant correspondence and related documents.

SOUTH DAKOTA BOARD OF REGENTS Revised Course Request: Unique Course

This form is to be used to request a substantive change in a unique course.

SDSM&T Institution	Mechanical Engineering Division/Department	Dr. Demitris Kouris Institutional Approval Signature	02/12/2016 Date
Jason T. Ash Form Initiator		Dean's Approval Signature	02/12/2016 Date

Section 1. Current Course Title and Description

If changing from a course that previously had only a lecture or laboratory component to a composite course, identify both the course and laboratory numbers (xxx and xxxL) and credit hours associated with each.

Prefix & No.	Course Title	Credits
ME 110/110L	Introduction to Mechanical Engineering/Lab	(3-0) 3

Course Description as it currently appears in the system course database:

ME 110/110L Introduction to Mechanical Engineering/Lab **Credits: (3-0) 3**

A course for first-year mechanical engineering students that will provide an introduction to the mechanical engineering profession. Topics to be covered include: Problem solving, mechanical engineering fundamentals, engineering design, solid modeling, CAD, professional development, technical communication, and academic success skills.

Prerequisite: Math 102

Corequisites: ME 110L

Section 2. Modification(s) Requested

1. This modification will include (check all that apply):

A change in course description/subject matter content (including pre- and/or co-requisites and/or registration restrictions)

Revised Course Description:

ME 110/110L Introduction to Mechanical Engineering/Lab

Credits: (2-0) 2

A course for first-year mechanical engineering students that will provide an introduction to the mechanical engineering profession. Topics to be covered include: Problem solving, mechanical engineering fundamentals, engineering design, professional development, technical communication, and academic success skills.

Pre or Corequisite: MATH 120 completed or concurrent

Corequisites: ME 110L

A change in instructional method

Current _____ *Revised* _____

May be found at: <http://www.sdbor.edu/services/academics/AAC/guidelines.htm>

Move from a unique course to this common course

<u>Prefix & No.</u>	<u>Course Title</u>	<u>Credits</u>
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Term change will be effective: Fall 2016
academic year/term

Indicate (X) the universities that offer the common course.

BHSU DSU NSU SDSMT SDSU USD

Additional minor changes also proposed at this time (enumerate below):

For a list of minor course modifications, see <http://www.sdbor.edu/services/academics/AAC/guidelines.htm>

This unique courses revision also entails a decrease in credit hours from 3 to 2 credits. A minor program modification will also be submitted to adjust credits between ME 110 and ME 125.

2. Provide a justification for all of the changes noted.

We are shifting the solid modeling and CAD content over to the ME 125/126L/127L courses as it fits well with the design for manufacturing content. Less time is required in ME 110/110L, which allows a reduction from 3 to 2 credits. A unique course revision is also being submitted to request

the change in content. Additionally, we want to make sure students have completed or are taking Math 120 concurrently with ME 110/110L.

We want Math 120 to be a pre or corequisite for ME 110/110L. To do this in Colleague, Math 120 should only appear under the Corequisite Course field with a “No” under Concurrent Enrollment Required. It should not appear in the Course Prerequisite field. ME 110L will remain a corequisite as shown in unique course revision.

Section 3. To be Completed by Academic Affairs

	<u>Current</u>		<u>New</u>
_____ Change in University Dept Code	_____	to	_____
_____ Change in CIP Code	_____	to	_____

SOUTH DAKOTA SCHOOL OF MINES & TECHNOLOGY
Affected Departments Form

1. Affected Departments

Which departments will the requested change affect? Does the requested change affect the delivery of another course or the requirements of another degree program? Please specify.

Only Mechanical Engineering is affected and the CAD content is shifted to the ME 125/126L/127L course where it fits better with the course content.

2. Number of Students Affected

Approximately how many students will be affected annually by the requested change? How was this number determined?

~200 students take this course per year.

3. Notification

Please notify all affected department heads and program coordinators, and attach all relevant correspondence and related documents.

The ME department head is cc'd on this change request and was involved with discussions on the changes.

SOUTH DAKOTA BOARD OF REGENTS
Revised Course Request: Unique Course

This form is to be used to request a substantive change in a unique course.

SDSM&T	Mechanical Eng.		
Institution	Division/Department	Institutional Approval Signature	Date
Aaron Lalley			
Form Initiator		Dean's Approval Signature	Date

Section 1. Current Course Title and Description

If changing from a course that previously had only a lecture or laboratory component to a composite course, identify both the course and laboratory numbers (xxx and xxxL) and credit hours associated with each.

Prefix & No.	Course Title	Credits
ME125L	Design for Manufacturing	(0-1) 1

Course Description as it currently appears in the system course database:

ME 125L Design for Manufacturing

Credits:(0-1)1

Design for Manufacturability will teach design skills to improve the interface with manufacturing as well as the manufacturing skills required for departmental project builds. There is a strong emphasis on the connection between the design process and manufacturing with an end goal of concurrent engineering. Additionally there is exposure to corporate policy with an emphasis on safety.

Section 2. Modification(s) Requested**1. This modification will include (check all that apply):**

A change in course description/subject matter content (including pre- and/or co-requisites and/or registration restrictions)

Revised Course Description:

ME 125 Product Design and Development, Design for Manufacturing

Credits: (1-0) 1 (convert to lecture)

Design for Manufacturability will teach design skills (solid modeling CAD and CAM) to improve the interface with manufacturing as well as the manufacturing skills required for departmental project builds. There is a strong emphasis on the connection between the design process and manufacturing with an end goal of concurrent engineering. Additionally there is exposure to corporate policy with an emphasis on safety.

Corequisites: ME 126L or ME127L

A change in instructional method
Current L- Laboratory *Revised* R- Lecture
 May be found at: <http://www.sdbor.edu/services/academics/AAC/guidelines.htm>

Move from a unique course to this common course

<u>Prefix & No.</u>	<u>Course Title</u>	<u>Credits</u>
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Term change will be effective: Fall 2016
academic year/term

Indicate (X) the universities that offer the common course.

BHSU DSU NSU SDSMT SDSU USD

Additional minor changes also proposed at this time (enumerate below):
 For a list of minor course modifications, see <http://www.sdbor.edu/services/academics/AAC/guidelines.htm>

1. The Lab portion for ME 125L is broken out into ME126L or ME127L, while ME 125 will maintain the lecture portion.
2. The course title will be updated to reflect the emphasis on design throughout the curriculum.
3. A minor program modification will also be submitted to adjust credits between ME 110 and ME 125, ME126L and ME127L.

2. Provide a justification for all of the changes noted.

We are shifting the solid modeling and CAD content over to the ME 125 course as it fits well with the design for manufacturing content.

Section 3. To be Completed by Academic Affairs

	<u>Current</u>		<u>New</u>
_____ Change in University Dept Code	_____	to	_____
_____ Change in CIP Code	_____	to	_____

SOUTH DAKOTA SCHOOL OF MINES & TECHNOLOGY
Affected Departments Form

1. Affected Departments

Which departments will the requested change affect? **Mechanical engineering**

Does the requested change affect the delivery of another course or the requirements of another degree program? **No**

Please specify.

2. Number of Students Affected

Approximately how many students will be affected annually by the requested change? **150**

How was this number determined? **This change affects all mechanical engineering freshman**

3. Notification

Please notify all affected department heads and program coordinators, and attach all relevant correspondence and related documents. **This only affects mechanical engineering and The department head is required to approve the change.**