Institutional representatives should provide direct links to PDF documents for each of the curriculum requests represented below. All requests should be posted on the campus Curriculum and Instruction website one week prior to the Academic Affairs Council meeting where the curriculum request is being considered.

### New Course Requests

<table>
<thead>
<tr>
<th>Prefix &amp; Number</th>
<th>Course Title</th>
<th>Approval</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEM 640</td>
<td>Advanced Mine Management</td>
<td>PT</td>
</tr>
<tr>
<td>PHYS 764</td>
<td>Physics of Neutrinos</td>
<td>PT</td>
</tr>
<tr>
<td>CSC 307/307L</td>
<td>Assembly &amp; Introduction to Computer Organization</td>
<td>----</td>
</tr>
<tr>
<td>GEOE 462/462L/562/562L</td>
<td>Well Log Analysis/Laboratory</td>
<td>PT</td>
</tr>
<tr>
<td>PHYS 350</td>
<td>Advanced Physics Laboratory</td>
<td>----</td>
</tr>
</tbody>
</table>

### Revised Course Requests – Common

<table>
<thead>
<tr>
<th>Prefix &amp; Number</th>
<th>Course Title</th>
<th>Approval</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSC 447/547</td>
<td>Artificial Intelligence</td>
<td>----</td>
</tr>
<tr>
<td>CSC 464</td>
<td>Senior Design I</td>
<td>----</td>
</tr>
<tr>
<td>CSC 250</td>
<td>Computer Science II</td>
<td>----</td>
</tr>
<tr>
<td>CSC 300</td>
<td>Data Structures</td>
<td>----</td>
</tr>
<tr>
<td>CSC 463/563</td>
<td>Data Communications</td>
<td>----</td>
</tr>
</tbody>
</table>

Courses referenced above for approval have been reviewed by the Academic Affairs Council and the System Vice President for Academic Affairs and may be advanced forward for entry in Colleague. For those courses listed above that did not receive approval, additional clarification or justification will be necessary and should be re-routed through the curriculum review process on a separate “Institutional Curriculum Requests” form once all issues have been resolved.

Signature: System Vice President for Academic Affairs

3/21/2017

Date

Signature: System Executive Director and CEO

3/21/2017

Date
New Course Request

Use this form to request a new common or unique course. Consult the system database through Colleague or the Course Inventory Report for information about existing courses before submitting this form.

<table>
<thead>
<tr>
<th>Institution</th>
<th>Mining Engineering &amp; Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Demitris Kouris</td>
<td>9/12/2016</td>
</tr>
</tbody>
</table>

### Section 1. Existing 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 you wish it to appear in the system database in Colleague and the Course Inventory Report including pre-requisites, co-requisites, and registration restrictions.

<table>
<thead>
<tr>
<th>Prefix &amp; No.</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEM 640</td>
<td>Advanced Mine Management</td>
<td>(3-0) 3</td>
</tr>
</tbody>
</table>

**NOTE:** The Enrollment Services Center assigns the short, abbreviated course title that appears on transcripts. The short title is limited to 30 characters (including spaces); meaningful but concise titles are encouraged due to space limitations in Colleague.

#### Course Description

This course provides an overview of principles and practices essential to the successful management of a mining company. Topics examined will include business strategy, leadership, human resources, operations management, finance, administration, control, organizational design, corporate governance, strategic planning, and stakeholder relations.

**NOTE:** Course descriptions are short, concise summaries that typically do not exceed 75 words. **DO:** Address the content of the course and write descriptions using active verbs (e.g., explore, learn, develop, etc.). **DO NOT:** Repeat the title of the course, layout the syllabus, use pronouns such as “we” and “you,” or rely on specialized jargon, vague phrases, or clichés.

#### Pre-requisites or Co-requisites (add lines as needed)

<table>
<thead>
<tr>
<th>Prefix &amp; No.</th>
<th>Course Title</th>
<th>Pre-Req/Co-Req?</th>
</tr>
</thead>
</table>

#### Registration Restrictions
Section 2. Review of Course

2.1. Was the course first offered as an experimental course (place an “X” in the appropriate box)?
☐ Yes (if yes, provide the course information below) ☒ No

2.2. Will this be a unique or common course (place an “X” in the appropriate box)?

If the request is for a unique course, verify that you have reviewed the common course catalog via Colleague and the system Course Inventory Report to determine if a comparable common course already exists. List the two closest course matches in the common course catalog and provide a brief narrative explaining why the proposed course differs from those listed. If a search of the common course catalog determines an existing common course exists, complete the Authority to Offer an Existing Course Form.

☒ Unique Course

<table>
<thead>
<tr>
<th>Prefix &amp; No.</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEM 466</td>
<td>Mine Management</td>
<td>3</td>
</tr>
<tr>
<td>MEM 446</td>
<td>Human Resource Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Provide explanation of differences between proposed course and existing system catalog courses below:
Both MEM 400 level courses listed above are designed with the undergraduate in mind. MEM 640 was designed to provide a broad range of management topics for the graduate (and often) working mining engineer that extend the length and depth of the 400 level mining management classes.

☐ Common Course

Indicate universities that are proposing this common course:
☐ BHSU ☐ DSU ☐ NSU ☐ SDSMT ☐ SDSU ☐ USD

Section 3. Other Course Information

3.1. Are there instructional staffing impacts?
☐ No. Replacement of

(course prefix, course number, name of course, credits)

*Attach course deletion form

Effective date of deletion: Click here to enter a date.

☒ No. Schedule Management, explain below: New faculty member to teach- Ivy Allard, Ph.D., Adjunct faculty member
☐ Yes. Specify below:

3.2. **Existing program(s) in which course will be offered:** M.S. in Mining Engineering & Management

3.3. **Proposed instructional method by university:** R- Lecture

3.4. **Proposed delivery method by university:** (015) Internet

3.5. **Term change will be effective:** Fall 2017

3.6. **Can students repeat the course for additional credit?**
   ☐ Yes, total credit limit: __________ ☒ No

3.7. **Will grade for this course be limited to S/U (pass/fail)?**
   ☐ Yes ☒ No

3.8. **Will section enrollment be capped?**
   ☐ Yes, max per section: __________ ☒ No

3.9. **Will this course equate (i.e., be considered the same course for degree completion) with any other unique or common courses in the common course system database in Colleague and the Course Inventory Report?**
   ☐ Yes ☒ No
   *If yes, indicate the course(s) to which the course will equate (add lines as needed):*

<table>
<thead>
<tr>
<th>Prefix &amp; No.</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.10. **Is this prefix approved for your university?**
   ☒ Yes ☐ No
   *If no, provide a brief justification below:*

Section 4. Department and Course Codes (Completed by University Academic Affairs)

4.1. **University Department Code:** MMINE

4.2. **Proposed CIP Code:** 14.2101
   *Is this a new CIP code for the university?* ☐ Yes ☒ No
NEW COURSE REQUEST
Supporting Justification for On-Campus Review

Dr. Puroshotham Tukkaraja
Request Originator

Dr. Lance Roberts
Department Chair

School/College Dean

9/12/2016

9/12/2016

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

Currently no graduate level mine management course exists to extend the management knowledge of the graduate student. Adding this course to the Management Track for the MS student will go a long ways in developing a well-rounded mine manager. This course will also help meet the need for additional 600-level courses in this area for MS students.

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? The course could be of interest as an elective M.S. in Construction Engineering & Management and M.S. in Engineering Management.

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

5. Desired section size 10-20

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

Ivy Allard, Adjunct faculty member, Ph.D.

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

Adequate, no additional resources necessary.

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

Library resources are adequate

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. Many MS MEM students are interested in mining management. This course will help meet the need for additional 600-level courses in this area for MS students.
Use this form to request a new common or unique course. Consult the system database through Colleague or the Course Inventory Report for information about existing courses before submitting this form.

SDSM&T   Physics
Institution   Division/Department

Dr. Demitris Kouris  
Institutional Approval Signature  

9/21/2016  
Date

Section 1. Existing 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 you wish it to appear in the system database in Colleague and the Course Inventory Report including pre-requisites, co-requisites, and registration restrictions.

<table>
<thead>
<tr>
<th>Prefix &amp; No.</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 764</td>
<td>Physics of Neutrinos</td>
<td>(3-0) 3</td>
</tr>
</tbody>
</table>

NOTE: The Enrollment Services Center assigns the short, abbreviated course title that appears on transcripts. The short title is limited to 30 characters (including spaces); meaningful but concise titles are encouraged due to space limitations in Colleague.

Course Description
This one-semester course is aimed at bridging the gap between standard textbook material and research frontlines in neutrino physics and neutrino astronomy. The last couple of decades have witnessed a revolution in neutrino physics. Neutrinos are also one of the most important probes for new physics beyond the particle physics Standard Model and a powerful tool to explore new astronomical and cosmological frontiers. The course introduces advanced theoretical and experimental aspects in modern neutrino physics and neutrino astronomy. It provides a comprehensive understanding of the progress in neutrino physics and a concise outline of modern experiments that study neutrino properties and probe nature with neutrinos.

NOTE: Course descriptions are short, concise summaries that typically do not exceed 75 words. DO: Address the content of the course and write descriptions using active verbs (e.g., explore, learn, develop, etc.). DO NOT: Repeat the title of the course, layout the syllabus, use pronouns such as “we” and “you,” or rely on specialized jargon, vague phrases, or clichés.

Pre-requisites or Co-requisites (add lines as needed)

<table>
<thead>
<tr>
<th>Prefix &amp; No.</th>
<th>Course Title</th>
<th>Pre-Req/Co-Req?</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 433/533</td>
<td>Nuclear and Particle Physics</td>
<td>Pre-req</td>
</tr>
<tr>
<td>PHYS 773</td>
<td>Quantum Mechanics II</td>
<td>Pre-req</td>
</tr>
</tbody>
</table>

Registration Restrictions
Section 2. Review of Course

2.1. Was the course first offered as an experimental course (place an “X” in the appropriate box)?
☐ Yes (if yes, provide the course information below) ☒ No

2.2. Will this be a unique or common course (place an “X” in the appropriate box)?
If the request is for a unique course, verify that you have reviewed the common course catalog via Colleague and the system Course Inventory Report to determine if a comparable common course already exists. List the two closest course matches in the common course catalog and provide a brief narrative explaining why the proposed course differs from those listed. If a search of the common course catalog determines an existing common course exists, complete the Authority to Offer an Existing Course Form.

☐ Unique Course

<table>
<thead>
<tr>
<th>Prefix &amp; No.</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Provide explanation of differences between proposed course and existing system catalog courses below:

☒ Common Course Indicate universities that are proposing this common course:
☐ BHSU ☐ DSU ☐ NSU ☒ SDSMT ☐ SDSU ☒ USD

Section 3. Other Course Information

3.1. Are there instructional staffing impacts?

☐ No. Replacement of (course prefix, course number, name of course, credits)
*Attach course deletion form

Effective date of deletion:  Click here to enter a date.

☒ No. Schedule Management, explain below: Department have filled multiple faculty positions, and anticipates rotating this course among them.

☐ Yes. Specify below:

3.2. Existing program(s) in which course will be offered: Ph.D. in Physics

Curriculum Forms, New Course Request (last revised 09/2016)
3.3. Proposed instructional method by university: R- Lecture

3.4. Proposed delivery method by university: (025) DDN Host/Send Site

3.5. Term change will be effective: Fall 2017

3.6. Can students repeat the course for additional credit?
   □ Yes, total credit limit: __________   ☒ No

3.7. Will grade for this course be limited to S/U (pass/fail)?
   □ Yes   ☒ No

3.8. Will section enrollment be capped?
   □ Yes, max per section: __________   ☒ No

3.9. Will this course equate (i.e., be considered the same course for degree completion) with any other unique or common courses in the common course system database in Colleague and the Course Inventory Report?
   □ Yes   ☒ No
   If yes, indicate the course(s) to which the course will equate (add lines as needed):

<table>
<thead>
<tr>
<th>Prefix &amp; No.</th>
<th>Course Title</th>
</tr>
</thead>
</table>

3.10. Is this prefix approved for your university?
   ☒ Yes   □ No
   If no, provide a brief justification below:

Section 4. Department and Course Codes (Completed by University Academic Affairs)

4.1. University Department Code: MPHYS

4.2. Proposed CIP Code: 40.0801
   Is this a new CIP code for the university? □ Yes   ☒ No
NEW COURSE REQUEST
Supporting Justification for On-Campus Review

Dr. Xinhua Bai  
Request Originator  
Signature  
Date  

Dr. 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.

   This one-semester course is aimed at bridging the gap between standard textbook material and research frontlines in neutrino physics and neutrino astronomy. The last couple of decades have witnessed a revolution in neutrino physics. Neutrinos are also one of the most important probes for new physics beyond the particle physics Standard Model and a powerful tool to explore new astronomical and cosmological frontiers. The course introduces advanced theoretical and experimental aspects in modern neutrino physics and neutrino astronomy. It provides a comprehensive understanding of the progress in neutrino physics and a concise outline of modern experiments that study neutrino properties and probe nature with neutrinos.

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?  
   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.

5. Desired section size  
   10

6. Provide qualifications of faculty who will teach this course. List name(s), rank(s), and degree(s).  
   SDSMT: Xinhua Bai, Associate professor, PhD; Luke Corwin, Assistant professor, PhD; Juergen Reichenbacher, Assistant professor, PhD  
   USD: Dongming Mei, Associate professor, PhD; Joel Sander, Assistant professor, PhD; PhD; Ryan MacLellan, Assistant professor, PhD

7. Note whether adequate facilities are available and list any special equipment needed for the course.  
   Existing classrooms with computers, internet connection and video conference system are adequate to accommodate this course.

Curriculum Forms, New Course Request (last revised 09/2016)
Page 4 of 5
8. Note whether adequate library and media support are available for the course.  
   Support is adequate

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.  
    The course may:  
    (1) Strengthen the Ph.D. program in physics by preparing graduate students for the important  
        research projects at SURF and nation wide.  
    (2) Create potential human resource for the development of underground science at SURF.
SOUTH DAKOTA BOARD OF REGENTS
ACADEMIC AFFAIRS FORMS

New Course Request

Use this form to request a new common or unique course. Consult the system database through Colleague or the Course Inventory Report for information about existing courses before submitting this form.

SDSM&T Math & Computer Science

Dr. Demitris Kouris

1/26/2017

Institutional Approval Signature

Section 1. Existing 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 you wish it to appear in the system database in Colleague and the Course Inventory Report including pre-requisites, co-requisites, and registration restrictions.

<table>
<thead>
<tr>
<th>Prefix &amp; No.</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSC 307/307L</td>
<td>Assembly &amp; Introduction to Computer Organization</td>
<td>4 (3-1)</td>
</tr>
</tbody>
</table>

NOTE: The Enrollment Services Center assigns the short, abbreviated course title that appears on transcripts. The short title is limited to 30 characters (including spaces); meaningful but concise titles are encouraged due to space limitations in Colleague.

Course Description

This course has a strong focus on assembly language programming and includes an introduction to computer organization. The course also includes programming techniques and concepts, addressing techniques, parameter passing and linking to high-level languages, programming of input and output devices, data structures, and ethical considerations. The major emphasis is on structured programming in assembly language, including pre-test and post-test loops, functions and procedures, if-then-else constructs, and data structures.

NOTE: Course descriptions are short, concise summaries that typically do not exceed 75 words. DO: Address the content of the course and write descriptions using active verbs (e.g., explore, learn, develop, etc.). DO NOT: Repeat the title of the course, layout the syllabus, use pronouns such as “we” and “you,” or rely on specialized jargon, vague phrases, or clichés.

Pre-requisites or Co-requisites (add lines as needed)

| Prefix & No. | Course Title               | Pre-Req/Co-Req? |
|--------------|----------------------------|-----------------
| CSC 215      | Programming Techniques     | Pre-Req of C or better |
| CSC 307L     | Assembly & Intro to Comp Org Lab | Co-Req |

Registration Restrictions
Section 2. Review of Course

2.1. Was the course first offered as an experimental course (place an “X” in the appropriate box)?
☐ Yes (if yes, provide the course information below) ☒ No

2.2. Will this be a unique or common course (place an “X” in the appropriate box)?
If the request is for a unique course, verify that you have reviewed the common course catalog via Colleague and the system Course Inventory Report to determine if a comparable common course already exists. List the two closest course matches in the common course catalog and provide a brief narrative explaining why the proposed course differs from those listed. If a search of the common course catalog determines an existing common course exists, complete the Authority to Offer an Existing Course Form.

☒ Unique Course

<table>
<thead>
<tr>
<th>Prefix &amp; No.</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSC 314/314L</td>
<td>Assembly Language</td>
<td>4 (3-1)</td>
</tr>
</tbody>
</table>

Provide explanation of differences between proposed course and existing system catalog courses below:

This course includes a significant amount of Computer Organization that is different from the traditional Assembly Language classes that are available at other institutions. This course entails a significant amount of content related to best practices in programming and includes more content since it is 4 credits rather than the common 3 credits at other universities in the system. In addition, this course has a unique prerequisite that is not available at other universities.

☐ Common Course

Indicate universities that are proposing this common course:
☐ BHSU ☐ DSU ☐ NSU ☐ SDSMT ☐ SDSU ☐ USD

Section 3. Other Course Information

3.1. Are there instructional staffing impacts?
☐ No. Replacement of

(course prefix, course number, name of course, credits)

*Attach course deletion form

Effective date of deletion: Click here to enter a date.
☒ No. Schedule Management, explain below: This course will replace CSC 314/314L. We plan to phase out CSC 314/314L since we have students in the old program that still require the old course and have completed the old prerequisite.

☐ Yes. Specify below:

3.2. Existing program(s) in which course will be offered: B.S. in Computer Science

3.3. Proposed instructional method by university: R- Lecture; L- Laboratory

3.4. Proposed delivery method by university: (001) Face-to-Face

3.5. Term change will be effective: Spring 2018

3.6. Can students repeat the course for additional credit?
   ☐ Yes, total credit limit: ____________  ☒ No

3.7. Will grade for this course be limited to S/U (pass/fail)?
   ☐ Yes  ☒ No

3.8. Will section enrollment be capped?
   ☒ Yes, max per section: ____________  ☐ No

3.9. Will this course equate (i.e., be considered the same course for degree completion) with any other unique or common courses in the common course system database in Colleague and the Course Inventory Report?
   ☐ Yes  ☒ No

   *If yes, indicate the course(s) to which the course will equate (add lines as needed):

<table>
<thead>
<tr>
<th>Prefix &amp; No.</th>
<th>Course Title</th>
</tr>
</thead>
</table>

3.10. Is this prefix approved for your university?
   ☒ Yes  ☐ No

   *If no, provide a brief justification below:

Section 4. Department and Course Codes (Completed by University Academic Affairs)

4.1. University Department Code: MMATH

4.2. Proposed CIP Code: 11.0201

   *Is this a new CIP code for the university?  ☐ Yes  ☒ No
NEW COURSE REQUEST
Supporting Justification for On-Campus Review

Dr. Larry Pyeatt 1/26/2017
Request Originator

Dr. Kyle Riley 1/26/2017
Department Chair

School/College Dean

1. Provide specific reasons for the proposal of this course and explain how the changes enhance the curriculum. This course is built to align with a three course sequence that has subsequent courses of Computer Organization and Architecture along with Operating Systems. This class is also design to cover the contemporary ARM architecture, which is utilized in the other courses. The renewed emphasis on programming and computer organization matches the strengths of our Computer Science program and also provides valuable course options for students in Computer Engineering.

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? Computer Engineering majors might take 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 30

6. Provide qualifications of faculty who will teach this course. List name(s), rank(s), and degree(s).
   Larry Pyeatt, Associate Professor, PhD
   Paul Hinker, Assistant Professor, PhD
   Christer Karlsson, Assistant Professor, PhD

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

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

Curriculum Forms, New Course Request (last revised 09/2016)
9. Will the new course duplicate courses currently being offered on this campus?
   ☒ No
   ☐ Yes
   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.

    This course is a good addition to the curriculum that focuses more attention to the fundamentals of programming and hardware at crucial point in the Computer Science curriculum. This adjustment is foundational to a three course sequence pillar in the curriculum.
**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 you wish it to appear in the system database in Colleague and the Course Inventory Report including pre-requisites, co-requisites, and registration restrictions.

<table>
<thead>
<tr>
<th>Prefix &amp; No.</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOE 462/462L/562/562L</td>
<td>Well Log Analysis/ Laboratory</td>
<td>3 (2-1)</td>
</tr>
</tbody>
</table>

**Course Description**

Introduction to well logging techniques for the petroleum industry. Topics include basic and advanced logging tools and petrophysical analysis. Laboratory includes log analyses, calculation of reservoir parameters, multi-log analysis, and fundamental reservoir rock analyses. Techniques and instrumentation use may include thin sections, XRD, SEM, and CT. Industry standard software will be used for log digitization and well section compilations. NOTES: Students enrolled in GEOE 562/562L will be held to a higher standard than those enrolled in GEOE 462/462L.

**Pre-requisites or Co-requisites (add lines as needed)**

<table>
<thead>
<tr>
<th>Prefix &amp; No.</th>
<th>Course Title</th>
<th>Pre-Req/Co-Req?</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOE 462L/562L</td>
<td>Well Log Analysis Laboratory</td>
<td>Co-Req</td>
</tr>
</tbody>
</table>

**Registration Restrictions**

Junior level standing at time of enrollment.

**Section 2. Review of Course**
2.1. Was the course first offered as an experimental course (if yes, provide the course information)?
2.2. Will this be a common or unique course (place an “X” in the appropriate box)?

Unique Course

If the request is for a unique course, verify that you have reviewed the common course catalog via Colleague and the system Course Inventory Report to determine if a comparable common course already exists. List the two closest course matches in the common course catalog and provide a brief narrative explaining why the proposed course differs from those listed. If a search of the common course catalog determines an existing common course exists, complete the Authority to Offer an Existing Course Form.

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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Provide explanation of differences between proposed course and existing system catalog courses below

There are no unique or common courses currently being offered on the topic of well logging analysis.

Common Course

Indicate universities that are proposing this common course:

______ BHSU ______ DSU ______ NSU ______ SDSMT ______ SDSU ______ USD

Section 3. Other Course Information

3.1. Are there instructional staffing impacts?

______ No. Replacement of ___________________________ (deletion form attached)

Effective date of deletion: ________________________________

X ______ No. Schedule Management, explain: Offered Fall odd years

______ Yes. Specify: ________________________________

3.2. Existing program(s) in which course will be offered: B.S. in Geological Engineering

3.3. Proposed instructional method by university:  

R- Lecture

L- Laboratory

3.4. Proposed delivery method by university: (001) Face-to-face

3.5. Term change will be effective: Summer 2017
3.6. Can students repeat the course for additional credit?

☐ Yes, total credit limit: ____________  X No

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

3.8. Will section enrollment be capped?

X Yes, max per section: _______ 20  ☐ No

3.9. Will this course equate (i.e., be considered the same course for degree completion) with any other unique or common courses in the common course system database in Colleague and the Course Inventory Report?

☐ Yes  X No

If yes, indicate the course(s) to which the course will equate (add lines as needed):

<table>
<thead>
<tr>
<th>Prefix &amp; No.</th>
<th>Course Title</th>
</tr>
</thead>
</table>

3.10. Is this prefix approved for your university?  X Yes  ☐ No

If no, provide a brief justification below:

Section 4. Department and Course Codes (Completed by University Academic Affairs)

4.1. University Department Code:  MGEOL

4.2. Proposed CIP Code:

☐ Is this a new CIP code the university?  No

14.3901
NEW COURSE REQUEST
Supporting Justification for On-Campus Review

LD Stetler
Request Originator  09/08/2016

Laurie Anderson
Department Chair  11/02/2016

1. Provide specific reasons for the proposal of this course and explain how the changes enhance the curriculum.
In recent years the growth of the geology and geological engineering BS programs have resulted in the development of the Petroleum Systems minor and the Energy Resources Initiative. This course will fill a current gap in the teaching of critical technology tools that will be beneficial to people working in the petroleum industry.

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?
This course will become an elective in the Petroleum Systems Minor. This course will become a Professional Elective in the BS GEOE program.

4. If this will be a dual listed course, indicate how the distinction between the two levels will be made.
Students enrolled in the 500 level will be held to a higher standard than those in the 400 level.

5. Desired section size ___20____, based on the computers that have the necessary software.

6. Provide qualifications of faculty who will teach this course. List name(s), rank(s), and degree(s).
Larry D. Stetler, Professor of Geological Engineering, PhD

7. Note whether adequate facilities are available and list any special equipment that will be needed for the course.
Facilities have been developed over the past few years to allow this course to become effective. Software donations of Petrel (Schlumberger), Neuralog (Neuralog), and JewelSuite (Baker-Hughes) are available on computers in the GIS/Maptek Laboratories and on newly donated workstations.

8. Note whether adequate library and media support are available for the course.
Adequate library (electronic catalogs) are satisfactory to support this 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.
The course is not offered for variable credit and will be 2-1 credit hours.

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

Use this form to request a new common or unique course. Consult the system database through Colleague or the Course Inventory Report for information about existing courses before submitting this form.

SDSM&T  
Institution

Physics  
Division/Department

Dr. Demitris Kouris  9/20/2016
Institutional Approval Signature  Date

Section 1. Existing 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 you wish it to appear in the system database in Colleague and the Course Inventory Report including pre-requisites, co-requisites, and registration restrictions.

<table>
<thead>
<tr>
<th>Prefix &amp; No.</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 350</td>
<td>Advanced Physics Laboratory</td>
<td>(0-3) 3</td>
</tr>
</tbody>
</table>

NOTE: The Enrollment Services Center assigns the short, abbreviated course title that appears on transcripts. The short title is limited to 30 characters (including spaces); meaningful but concise titles are encouraged due to space limitations in Colleague.

Lab Description

Laboratory projects emphasizing understanding and practical skills for nuclear and particle physics, including minimization of systematic effects in measurement. Experiments include muon lifetime, and Compton scattering.

NOTE: Course descriptions are short, concise summaries that typically do not exceed 75 words. DO: Address the content of the course and write descriptions using active verbs (e.g., explore, learn, develop, etc.). DO NOT: Repeat the title of the course, layout the syllabus, use pronouns such as “we” and “you,” or rely on specialized jargon, vague phrases, or clichés.

Pre-requisites or Co-requisites (add lines as needed)

<table>
<thead>
<tr>
<th>Prefix &amp; No.</th>
<th>Course Title</th>
<th>Pre-Req/Co-Req?</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 331</td>
<td>Introduction to Modern Physics</td>
<td>Pre-req</td>
</tr>
</tbody>
</table>

Registration Restrictions
Section 2. Review of Course

2.1. Was the course first offered as an experimental course (place an “X” in the appropriate box)?
☐ Yes (if yes, provide the course information below) ☒ No

2.2. Will this be a unique or common course (place an “X” in the appropriate box)?
If the request is for a unique course, verify that you have reviewed the common course catalog via Colleague and the system Course Inventory Report to determine if a comparable common course already exists. List the two closest course matches in the common course catalog and provide a brief narrative explaining why the proposed course differs from those listed. If a search of the common course catalog determines an existing common course exists, complete the Authority to Offer an Existing Course Form.

☒ Unique Course

<table>
<thead>
<tr>
<th>Prefix &amp; No.</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 316</td>
<td>Measurement Theory and Experimental Design</td>
<td>2</td>
</tr>
<tr>
<td>PHYS 316L</td>
<td>Measurement Theory and Experimental Design Lab</td>
<td>0</td>
</tr>
</tbody>
</table>

Provide explanation of differences between proposed course and existing system catalog courses below:
The Course Inventory Report contained no comparable common course but did contain a somewhat comparable unique course, PHYS 316/316L at SDSU. PHYS 316 is a course and lab on accuracy, precision and uncertainty and how these quantities propagate as experimental laboratory measurements are converted to experimental results. The specificity related to the proposed PHYS 350 experiments warrant the creation of a new course. SDSU’s PHYS 316 involves a handful of traditional classical and modern physics experiments and the related traditional standards of data analysis. Our course is concerned with elementary particle detection, counting, and the analysis of the large data sets that result from the specific detection and counting technologies used. The proposed new course, PHYS 350, will focus specifically on particle detection and counting technologies used in experimental particle and nuclear astrophysics and the statistical analysis of the data sets that result from the use of such technologies.

☐ Common Course

Indicate universities that are proposing this common course:
☐ BHSU ☐ DSU ☐ NSU ☐ SDSMT ☐ SDSU ☐ USD

Section 3. Other Course Information

3.1. Are there instructional staffing impacts?
☐ No. Replacement of

(courses prefix, course number, name of course, credits)

*Attach course deletion form

Curriculum Forms, New Course Request (last revised 09/2016)
Effective date of deletion:  

☐ No. Schedule Management, explain below: We have enough faculty to be able to add this course.

☐ Yes. Specify below:

3.2. **Existing program(s) in which course will be offered:** B.S. in Physics

3.3. **Proposed instructional method by university:** L- Laboratory

3.4. **Proposed delivery method by university:** (001) Face-to-Face

3.5. **Term change will be effective:** Fall 2017

3.6. **Can students repeat the course for additional credit?**

☐ Yes, total credit limit: __________  ☒ No

3.7. **Will grade for this course be limited to S/U (pass/fail)?**

☐ Yes  ☒ No

3.8. **Will section enrollment be capped?**

☒ Yes, max per section: 20  ☐ No

3.9. **Will this course equate (i.e., be considered the same course for degree completion) with any other unique or common courses in the common course system database in Colleague and the Course Inventory Report?**

☐ Yes  ☒ No

*If yes, indicate the course(s) to which the course will equate (add lines as needed):*

<table>
<thead>
<tr>
<th>Prefix &amp; No.</th>
<th>Course Title</th>
</tr>
</thead>
</table>

3.10. **Is this prefix approved for your university?**

☒ Yes  ☐ No

*If no, provide a brief justification below:*

Section 4. **Department and Course Codes (Completed by University Academic Affairs)**

4.1. **University Department Code:** MPHYS

4.2. **Proposed CIP Code:** 40.0801

*Is this a new CIP code for the university?*  ☒ Yes  ☐ No

*Curriculum Forms, New Course Request (last revised 09/2016)*

Page 3 of 5
NEW COURSE REQUEST
Supporting Justification for On-Campus Review

Dr. Richard Schnee  
Request Originator

Dr. Vladimir Sobolev  
Department Chair

School/College Dean

9/20/2016
Date

9/20/2016
Date

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

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?
It can be considered as elective for engineering majors.

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

5. Desired section size 12

6. Provide qualifications of faculty who will teach this course. List name(s), rank(s), and degree(s).
   Richard Schnee, Associate Professor, Ph.D.
   Frank Strieder, Associate Professor, Ph.D.
   Xinhua Bai, Associate Professor, Ph.D.
   Luke Corwin, Assistant Professor, Ph.D.
   Juergen Reichenbacher, Assistant Professor, Ph.D.
   Doug Wells, Professor, Ph.D.

7. Note whether adequate facilities are available and list any special equipment needed for the course.
   Adequate facilities are available. Minimal equipment required for this course has been acquired.

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 ☒ 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. Faculty members Schnee and Reichenbacher have taught versions of this course previously at other universities.
Use this form to request a substantive change to an existing 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 the Academic Affairs Council (AAC). Consult the system database in Colleague and the Course Inventory Report for information about existing courses. If the course revision is for an approved General Education course, please see the Revision to General Education Requirements Form.

<table>
<thead>
<tr>
<th>Institution</th>
<th>Form Initiator</th>
<th>Dean’s Approval Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDSM&amp;T</td>
<td>Dr. John Weiss</td>
<td></td>
<td>10/12/2016</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Institution</th>
<th>Division/Department</th>
<th>Institutional Approval Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDSM&amp;T</td>
<td>Math &amp; Computer Science</td>
<td>Dr. Demitris Kouris</td>
<td>10/12/2016</td>
</tr>
</tbody>
</table>

Indicate universities that currently offer the common course:

☐ BHSU  ☒ DSU  ☐ NSU  ☒ SDSMT  ☒ SDSU  ☒ USD

**Section 1. Existing 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. Provide the complete description as it appears in the system database in Colleague and the Course Inventory Report including pre-requisites, co-requisites, and registration restrictions.

<table>
<thead>
<tr>
<th>Prefix &amp; No.</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSC 447/547</td>
<td>Artificial Intelligence</td>
<td>(3-0) 3</td>
</tr>
</tbody>
</table>

**Course Description**

Concepts in Artificial intelligence: programming in languages such as Prolog or LISP; knowledge representation; search algorithms.

**Pre-requisites or Co-requisites (add lines as needed, make sure to copy and paste format)**

<table>
<thead>
<tr>
<th>Prefix &amp; No.</th>
<th>Course Title</th>
<th>Pre-Req/Co-Req?</th>
</tr>
</thead>
</table>

Curriculum Forms, Revised Course Request: Common Course Substantive Modifications (last revised 08/2016)
CSC 300 with grade of “C” or better | Data Structures | Pre-Req

Registration Restrictions

Section 2. Modification(s) Requested
Check all revisions that apply and provide detailed information in the Current and New fields below. 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.

2.1. This modification will include (place an “X” in the box for all that apply):

- Prefix change from _______________ to _______________

  Indicate any university for which this must be added as new prefix:

  ☐ BHSU ☐ DSU ☐ NSU ☐ SDSMT ☐ SDSU ☐ USD

- Course Number change from _______________ to _______________

- Course Title change from _______________ to _______________

- Credit Hours change from _______________ to _______________

- Pre-Requisites SDSM&T-specific only
  CSC 300 with a grade of “C” or better to CSC 315 with a “C” or better and CSC 340 with a “C” or better

  Note: University specific pre-requisites are inconsistent with the system common course guidelines and receive approval only in rare circumstances.

- Co-Requisites _______________ to _______________

- Registration Restriction _______________ to _______________

- Addition/deletion of a lab/lecture component

If the addition of a lab/lecture component requires a change in pre-requisites or co-requisites, indicate below (add lines as needed, make sure to copy and paste format)
Prefix & No. | Course Title | Pre-Req/Co-Req?
--- | --- | ---

☐ Course Content/Description change (write proposed new content/description below)

Note: Course descriptions are short, concise summaries that typically do not exceed 75 words. DO: Address the content of the course and write descriptions using active verbs (e.g., explore, learn, develop, etc.). DO NOT: Repeat the title of the course, layout the syllabus, use pronouns such as “we” and “you,” or rely on specialized jargon, vague phrases, or clichés.

☐ Course Deletion

Indicate the universities deleting the course:

☐ BHSU ☐ DSU ☐ NSU ☐ SDSMT ☐ SDSU ☐ USD

2.2. Add justification for all changes noted above:

The Computer Science program is moving to focus more on design and efficiency, which means this course will require an understanding of software engineering, data structures, and algorithms. The changes in the course prerequisites reflect this change in focus, and SDSM&T will no longer teach CSC 300.

Section 3. Other Course Information

Will this course equate (i.e., be considered the same course for degree completion) with any other unique or common courses in the common course database (Course Inventory Report)?

☐ Yes ☒ No

If yes, indicate the course(s) to which the course will equate (add lines as needed):

<table>
<thead>
<tr>
<th>Prefix &amp; No.</th>
<th>Course Title</th>
</tr>
</thead>
</table>

Section 4. Department and Course Codes (Completed by University Academic Affairs)

☐ Change in University Department Code

Current: ____________

New: ____________

☐ Change in CIP Code

Current: ____________

New: ____________

Curriculum Forms, Revised Course Request: Common Course Substantive Modifications (last revised 08/2016)
Curriculum Request CSC 447

From: Hamer, George
Sent: Tuesday, October 11, 2016 2:46 PM
To: Riley, Kyle L.; Hietpas, Steven
Subject: RE: curriculum requests

Kyle,

We have no problems here, good luck with the paperwork!

George

George Hamer, Ph.D.
Associate Professor and Assistant Department Head
Electrical Engineering and Computer Science
Jerome J. Lohr College of Engineering
Box 2222, SDEH 121
South Dakota State University
Brookings, SD 57007
605-688-5721

From: Riley, Kyle L. [mailto:Kyle.Riley@sdsmt.edu]
Sent: Tuesday, October 11, 2016 3:44 PM
To: Hietpas, Steven <Steven.Hietpas@SDSTATE.EDU>
Cc: Hamer, George <George.Hamer@SDSTATE.EDU>
Subject: curriculum requests

Hello,

I hope the semester is off to a great start for you and your department. I have a couple of curriculum requests to ask you about:

CSC 464 (Senior Design I) – We are interested in changing the prerequisite for the SDSM&T campus. We would like to change the prerequisite to our new Software Engineering and Design class (CSC 340) and also keep the prerequisite of CSC 484. This is only for the School of Mines campus and we have no desire to change your prerequisite structure.

CSC 447 (AI) – We would like to change the prerequisite for the SDSM&T campus only to our Data Structures/Algorithms class) CSC 315 and (or new Soft Eng/Design class) CSC 340. This is for our campus only and we have no desire to change your prerequisite structure.

As you may know, I need your response to further this request along in the curriculum request process. Thank you

Kyle Riley
Dept. Head / Math & Computer Science
South Dakota School of Mines & Technology

==-----------------------------DSU

From: Halverson, Tom
Sent: Tuesday, October 11, 2016 8:22 PM
To: Riley, Kyle L.
Hi Kyle,

Great to hear from you and work with you again.

We have no issue with you adjusting the local SDSM&T prerequisites on the CSC 447 course.

Thanks

Tom

From: Olson, Christopher J.
Sent: Tuesday, October 11, 2016 5:02 PM
To: Riley, Kyle <Kyle.Riley@sdsmt.edu>
Cc: Halverson, Tom <Tom.Halverson@dsu.edu>; Hanson, Richard <Richard.Hanson@dsu.edu>
Subject: RE: curriculum request

I have moved over to Information Systems, so I am including the Interim Dean for the College of Computing, Dr. Richard Hanson, and the coordinator of computer science, Dr. Tom Halverson, in this reply.

Thanks.

Chris

From: Riley, Kyle
Sent: Tuesday, October 11, 2016 4:21 PM
To: Olson, Christopher J. <Chris.Olson@dsu.edu>
Subject: RE: curriculum request

Hello,

I just went through the previous email and noticed it was a mess. I attempted to clean up the communication and apologize for the poor communication earlier.

I wanted to ask you about a curriculum request we have for AI:

CSC 447 (AI) – We would like to change the prerequisite, for the SDSM&T campus only, to our Data Structures/Algorithms class (CSC 315) and our new Soft Eng/Design class (CSC 340). This is for our campus only and we have no desire to change your prerequisite structure.

As you may know, I need your response to further this request along in the curriculum request process. Thank you

Kyle Riley
Dept. Head / Math & Computer Science
South Dakota School of Mines & Technology

From: Riley, Kyle L.
Sent: Tuesday, October 11, 2016 3:12 PM
To: Olson, Christopher J.
Subject: curriculum request

Hello,

I hope the semester is off to a great start for you and your department. I have a curriculum request to ask you about:
CSC 447 (AI) – We would like to change the prerequisite for the SDSM&T campus only to our Data Structures/Algorithms class) CSC 315 and (or new Soft Eng/Design class) CSC 340. This is for our campus only and we have no desire to change your prerequisite structure.

As you may know, I need your response to further this request along in the curriculum request process. Thank you

Kyle Riley
Dept. Head / Math & Computer Science
South Dakota School of Mines & Technology

---

---Original Message-----
From: Tran, QuocNam
Sent: Wednesday, October 12, 2016 8:01 AM
To: Riley, Kyle L.
Subject: Re: curriculum request

Hello Kyle,

Thank you very much for hosting me at SDSMT and for the info about CSC- 456. It was very helpful for us when we review the contents of the course.

Regarding the CSC 447, I support your proposal to change the prerequisite for the SM&T campus only.

Best
QuocNam
--

QuocNam Tran, PhD. (Prize)
Professor & Chair of Computer Science

The University of South Dakota
414 E. Clark St. Vermillion SD 57069
Tel: 605-677-8832 Fax: 605-677-6662

On Tue, 2016-10-11 at 21:19 +0000, Riley, Kyle L. wrote:
> Hello,
> 
> I hope you enjoyed the weekend and I hope the information on our OS class helped you in your evaluation of the common course of CSC 456.
> It is now my turn to contact you about a curriculum request.
>
> CSC 447 (AI) – We would like to change the prerequisite, for the SDSM&T campus only, to our Data Structures/Algorithms class (CSC 315) and our new Soft Eng/Design class (CSC 340). This is for our campus only and we have no desire to change your prerequisite structure.
>
> We have no plans on offering AI online and this prerequisite would not
> significantly change the course outcomes or objectives we currently
> have tied to the current course.
>
> > As you may know, I need your response to further this request along in
> > the curriculum request process. Thank you
> >
> > Kyle Riley
> > Dept. Head / Math & Computer Science
> > South Dakota School of Mines & Technology
SOUTH DAKOTA BOARD OF REGENTS
ACADEMIC AFFAIRS FORMS

Revised Course Request: Common Course
(Substantive Modifications)

Use this form to request a substantive change to an existing 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 the Academic Affairs Council (AAC). Consult the system database in Colleague and the Course Inventory Report for information about existing courses. If the course revision is for an approved General Education course, please see the Revision to General Education Requirements Form.

SDSM&T  
Institution

Dr. Jeff McGough  
Form Initiator

10/12/2016  
Date

SDSM&T  
Institution

Math & Computer Science  
Division/Department

Dr. Demitris Kouris  
Institutional Approval Signature

10/12/2016  
Date

Choose an item.  

Click here to enter a date.

Choose an item.

Institution

Division/Department

Institutional Approval Signature

Date

Indicate universities that currently offer the common course:

☐ BHSU  ☐ DSU  ☐ NSU  ☒ SDSMT  ☒ SDSU  ☐ USD

Section 1. Existing 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. Provide the complete description as it appears in the system database in Colleague and the Course Inventory Report including pre-requisites, co-requisites, and registration restrictions.

<table>
<thead>
<tr>
<th>Prefix &amp; No.</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSC 464</td>
<td>Senior Design I</td>
<td>(2-0) 2</td>
</tr>
</tbody>
</table>

**Course Description**

This is a team-based project-design course. This course will focus on the design process and culminate with the faculty approval of design projects. Typical topics included are the development of a design document; identification of customer needs; development of specifications; consideration of alternate designs using a decision matrix; project management techniques; and legal, global, and ethical issues.
Pre-requisites or Co-requisites (add lines as needed, make sure to copy and paste format)

<table>
<thead>
<tr>
<th>Prefix &amp; No.</th>
<th>Course Title</th>
<th>Pre-Req/Co-Req?</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSC 470</td>
<td>Software Engineering</td>
<td>Pre-req</td>
</tr>
<tr>
<td>CSC 484</td>
<td>Database Management Systems</td>
<td>Pre-req</td>
</tr>
</tbody>
</table>

Registration Restrictions

Section 2. Modification(s) Requested

Check all revisions that apply and provide detailed information in the Current and New fields below. 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.

2.1. This modification will include (place an “X” in the box for all that apply):

☐ Prefix change from _______________ to _______________

*Indicate any university for which this must be added as new prefix:

☐ BHSU  ☐ DSU  ☐ NSU  ☐ SDSMT  ☐ SDSU  ☐ USD

☐ Course Number change from _______________ to _______________

☐ Course Title change from _______________ to _______________

☐ Credit Hours change from _______________ to _______________

☒ Pre-Requisites SDSM&T-specific only

<table>
<thead>
<tr>
<th>Current</th>
<th>New</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSC 470 and CSC 484</td>
<td>CSC 340 and CSC 484</td>
</tr>
</tbody>
</table>

Note: University specific pre-requisites are inconsistent with the system common course guidelines and receive approval only in rare circumstances.

☐ Co-Requisites _______________ to _______________

☐ Registration Restriction _______________ to _______________

☐ Addition/deletion of a lab/lecture component

If the addition of a lab/lecture component requires a change in pre-requisites or co-requisites, indicate below (add lines as needed, make sure to copy and paste format)

<table>
<thead>
<tr>
<th>Prefix &amp; No.</th>
<th>Course Title</th>
<th>Pre-Req/Co-Req?</th>
</tr>
</thead>
</table>
☐ Course Content/Description change (write proposed new content/description below)

Note: Course descriptions are short, concise summaries that typically do not exceed 75 words. DO: Address the content of the course and write descriptions using active verbs (e.g., explore, learn, develop, etc.). DO NOT: Repeat the title of the course, layout the syllabus, use pronouns such as “we” and “you,” or rely on specialized jargon, vague phrases, or clichés.

☐ Course Deletion

Indicate the universities deleting the course:

☐ BHSU ☐ DSU ☐ NSU ☐ SDSMT ☐ SDSU ☐ USD

2.2. Add justification for all changes noted above:

Changes in the curriculum and course offerings necessitate a change in prerequisites for this class. CSC 340 focus on software engineering tools will provide a better alignment for students taking our Senior Design sequence.

Section 3. Other Course Information

Will this course equate (i.e., be considered the same course for degree completion) with any other unique or common courses in the common course database (Course Inventory Report)?

☐ Yes ☒ No

If yes, indicate the course(s) to which the course will equate (add lines as needed):

<table>
<thead>
<tr>
<th>Prefix &amp; No.</th>
<th>Course Title</th>
</tr>
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Section 4. Department and Course Codes (Completed by University Academic Affairs)

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Curriculum Request CSC 464

**SDSU**

**From:** Hamer, George  
**Sent:** Tuesday, October 11, 2016 2:46 PM  
**To:** Riley, Kyle L.; Hietpas, Steven  
**Subject:** RE: curriculum requests

Kyle,

We have no problems here, good luck with the paperwork!

George

George Hamer, Ph.D.  
Associate Professor and Assistant Department Head  
Electrical Engineering and Computer Science  
Jerome J. Lohr College of Engineering  
Box 2222, SDEH 121  
South Dakota State University  
Brookings, SD 57007  
605-688-5721

**From:** Riley, Kyle L.  
**Sent:** Tuesday, October 11, 2016 3:44 PM  
**To:** Hietpas, Steven  
**Cc:** Hamer, George  
**Subject:** curriculum requests

Hello,

I hope the semester is off to a great start for you and your department. I have a couple of curriculum requests to ask you about:

CSC 464 (Senior Design I) – We are interested in changing the prerequisite for the SDSM&T campus. We would like to change the prerequisite to our new Software Engineering and Design class (CSC 340) and also keep the prerequisite of CSC 484. This is only for the School of Mines campus and we have no desire to change your prerequisite structure.

CSC 447 (AI) – We would like to change the prerequisite for the SDSM&T campus only to our Data Structures/Algorithms class) CSC 315 and (or new Soft Eng/Design class) CSC 340. This is for our campus only and we have no desire to change your prerequisite structure.

As you may know, I need your response to further this request along in the curriculum request process. Thank you

Kyle Riley  
Dept. Head / Math & Computer Science  
South Dakota School of Mines & Technology
Revised Course Request: Common Course
(Substantive Modifications)

Use this form to request a substantive change to an existing 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 the Academic Affairs Council (AAC). Consult the system database in Colleague and the Course Inventory Report for information about existing courses. If the course revision is for an approved General Education course, please see the Revision to General Education Requirements Form.

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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. Provide the complete description as it appears in the system database in Colleague and the Course Inventory Report including pre-requisites, co-requisites, and registration restrictions.

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<tr>
<td>CSC 250</td>
<td>Computer Science II</td>
<td>(4-0) 4</td>
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Course Description
Problem solving, algorithm design, standards of program style, debugging and testing. Extension of the control structures and data structures of the high-level language introduced in CSC 150/150L. Elementary data structures and basic algorithms that include sorting and searching. Topics include more advanced treatment of functions, data types such as arrays and structures, and files.

Pre-requisites or Co-requisites (add lines as needed)

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Indicate universities that currently offer the common course:

Registration Restrictions

Section 2. Modification(s) Requested
Check all revisions that apply and provide detailed information in the Current and New fields below. 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.

2.1. This modification will include (place an “X” in the box for all that apply):

- [ ] Prefix change from __________________________ to __________________________
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  _____ BHSU  _____ DSU  _____ NSU  _____ SDSMT  _____ SDSU  _____ USD

- [ ] Course Number change from __________________________ to __________________________

- [ ] Course Title change from __________________________ to __________________________

- [ ] Credit Hours change from __________________________ to __________________________

- [ ] Pre-Requisites __________________________ to __________________________
  Note: University specific pre-requisites are inconsistent with the system common course guidelines and receive approval only in rare circumstances.

- [ ] Co-Requisites __________________________ to __________________________

- [ ] Registration Restriction __________________________ to __________________________

- [ ] Addition/deletion of a lab/lecture component

If the addition of a lab/lecture component requires a change in pre-requisites or co-requisites, indicate below (add lines as needed)

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X Course Deletion

Indicate the universities deleting the course:

_____ BHSU _____ DSU _____ NSU _____ SDSMT _____ SDSU _____ USD

2.2. Add justification for all changes noted above:

We plan to replace CSC 250 with CSC 215 in our curriculum.

Section 3. Other Course Information

Will this course equate (i.e., be considered the same course for degree completion) with any other unique or common courses in the common course database (Course Inventory Report)?

☐ Yes ☐ No

If yes, indicate the course(s) to which the course will equate (add lines as needed):

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<td>CSC 300</td>
<td>Data Structures</td>
<td>(4-0)</td>
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Course Description
A systematic study of data structures and the accompanying algorithms used in computing problems; structure and use of storage; methods of representing data; techniques for implementing data structures; linear lists; stacks; queue; trees and tree traversal; linked lists; and other structures.

Pre-requisites or Co-requisites (add lines as needed)

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<td>Computer Science 2</td>
<td>Pre-req</td>
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X Course Deletion

Indicate the universities deleting the course:

BHSU DSU NSU X SDSMT SDSU USD

2.2. Add justification for all changes noted above:

We plan to replace CSC 300 with CSC 315 in our curriculum.

Section 3. Other Course Information

Will this course equate (i.e., be considered the same course for degree completion) with any other unique or common courses in the common course database (Course Inventory Report)?

Yes No

If yes, indicate the course(s) to which the course will equate (add lines as needed):

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SOUTH DAKOTA BOARD OF REGENTS
ACADEMIC AFFAIRS FORMS

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<tr>
<td>SDSM&amp;T</td>
<td>Dr. Kyle Riley</td>
<td>11/8/2016</td>
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<tr>
<td>Math &amp; Computer Science</td>
<td>Dr. Demitris Kouris</td>
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<td>CSC 463/563</td>
<td>Data Communications</td>
<td>(4-0) 4</td>
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Course Description

A study of the principles of data communications, computer networks, and open systems, following the outline provided by the ISO/OSI model.

Pre-requisites or Co-requisites (add lines as needed)

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Course Deletion

Indicate the universities deleting the course:

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2.2. Add justification for all changes noted above:

We intended to delete this course when we created CSC 441/541. We would like to delete this course now since we will not be offering it again.

Section 3. Other Course Information

Will this course equate (i.e., be considered the same course for degree completion) with any other unique or common courses in the common course database (Course Inventory Report)?

- Yes
- No

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