Curriculum Proposal

**CSS 20-21 #3**

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**Course Modifications**

| 1.2 GEOL 2110 Mineralogy and Petrology (4 credits); prerequisite change |
| 1.7 GEOL 3600/5600 Stratigraphy and Sedimentation (3 credits); prerequisite change |

*Note: there are no changes to GEOL 5600*

**Program Modifications**

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| 1.15 Signatures     |
BSU Curriculum Forms

Form 1

Curriculum Modification Summary

College: Individual and Community Health
Department: Center for Sustainability Studies/Geology
Proposer: Dr. Carl Isaacson
Proposer’s position: Professor of Environmental Studies and Chair of CSS

Describe the modification(s) you propose, and how it (they) will work to students’ advantage. (This description and explanation will be included in Curriculum Report packets forwarded to the Faculty Senate.):

The total credit for the minor is reduced from 24 to 18-19, the number of classes required as the core are reduced and the number of electives have been increased. Prerequisites have been adjusted on GEOL 2110 and GEOL 3600.

Students advantage: more flexibility and better changes to get the minor

Modifications proposed (specify number of each):

___2___Course Modification(s) (form 2)
_____New Course(s) (form 3)
_____Course Drop(s) (form 4)
___1_Program Modification(s) (form 5)
_____New Program(s) (form 6)
_____Program Drop(s) (form 7)

The modifications affect (check):

___L__Liberal Education
___X_Undergraduate Curriculum
____Graduate Curriculum
___x_Teacher Licensure Program(s)
BSU Curriculum Forms

Course Modification Form

Current Course Number(s):
  Undergraduate: GEOL 2110
  Graduate: 
Proposed Course Number(s), if different:
  Undergraduate: 
  Graduate: 

Current Course Title: Mineralogy and Petrology
Proposed Course Title, if different:

Current Course Description: Identification and occurrence of minerals and igneous, metamorphic and sedimentary rocks. Introduction to diagnostic tests including spectrometer and polarizing microscope. Lecture and laboratory. Prerequisites: GEOL 1110 and GEOL 1120 or consent of instructor.

Proposed Course Description, if different:
Identification and occurrence of minerals and igneous, metamorphic and sedimentary rocks. Introduction to diagnostic tests including spectrometer and polarizing microscope. Lecture and laboratory. Prerequisites: GEOL 1110 or GEOL 1120 or consent of instructor.

Current Credits: 4
Proposed Credits, if different:

Current Prerequisite(s):
  Undergraduate: GEOL 1110 and GEOL 1120 or consent of instructor
  Graduate: 
Proposed Prerequisite(s), if different:
  Undergraduate: GEOL 1110 or GEOL 1120 or consent of instructor
  Graduate:

1) Reason(s) for change(s):
For the streamlining the curriculum and reducing the overall credit required for completion we need to adjust prerequisites to improve flexibility and avoid hidden prerequisites.

2) May this modified course replace the current course for students remaining in the old curriculum? Yes ___x___ No _____ If not, please drop the current course and submit a new course form for the modification.

3) Do these modifications change any of the following? For all Yes answers, please provide updated information on the next page.
   Student Learning Outcomes Yes _____ No ___x___
Major Content Areas  Yes _____ No __x__
Projected Maximum Class Size (Cap) Yes _____ No __x__

4) Current Course fee(s) per student: $
   for:
   Proposed Course fee(s) per student, if different: $
   for:

5) Service Areas:
   This course is a requirement or an elective in the programs/areas listed below. To locate where
   this course appears please search the online catalog, as follows:
   a) go to http://www.bemidjistate.edu/academics/catalog/ and choose the most recent
catalog(s),
   b) click on “Areas of Study, and Course Descriptions,”
   c) click on “PDF of Entire Catalog” in upper right,
   d) press Ctrl F, and enter the prefix and number of the course(s) from this form.

   Non-licensure programs:
   Geography, B.S. major Earth Science emphasis
   Earth Science minor
   Environmental Studies, B.S. major Geohydrology emphasis
   Geology minor
   Space Studies minor

   Teacher Licensure programs:
   Science Education, B.S. major Earth and Science Specialty (Teacher Licensure)

   Liberal Education:

   The above “service area” programs/departments were notified of this modification
   on 10.30.2020 _______ (date) by __email__________________ (mail, email, or phone).

   Please check one of the items below:

   ______  No comments were received from other programs or departments within one week of
   the notification.

   _x_____ Comments were received within one week of the notification, and are attached.
Porter

Thanks for your prompt and positive answer.

Have a great weekend

Sincerely

Miriam

From: Coggins, Porter E <Porter.Coggins@bemidjistate.edu>
Sent: Friday, October 30, 2020 1:01 PM
To: Rios-Sanchez, Miriam <Miriam.Rios-Sanchez@bemidjistate.edu>; Sayer, Ryan T <Ryan.Sayer@bemidjistate.edu>
Subject: RE: Changes to the Geology Minor

dr. rios-sanchez, i did confirm with michael urban in the department of prof ed, and he sees no issues with this change.

in fact, he thinks this change will likely benefit our science ed students.

thank you again for reaching out.

i hope you are able to enjoy the day.

sincerely,
porter coggins

veteran, united states army (for those curious about my email protocol)
"If a man does not keep pace with his companions, perhaps it is because he hears a different drummer. Let him step to the music which he hears, however measured or far away" - Henry David Thoreau
"Give me your tired, your poor, Your huddled masses yearning to breathe free, The wretched refuse of your teeming shore. Send these, the homeless, tempest-tost to me, I lift my lamp beside the golden door!" - Emma Lazarus

Porter E. Coggins III, Ph.D.
Professor and Chair, Department of Professional Education
The Geology Minor is currently being changed. The changes are intended to make the minor more flexible and easier to attain: The number of credits has been reduced to 18, and the core is much smaller. Along with this changes the pre-requisites to the following classes have changed:

OLD

**GEOL 2110: Mineralogy and Petrology:** GEOL 1110 AND GEOL 1120, or consent of the instructor

**GEOL 3600: Stratigraphy and Sedimentation:** GEOL 1110, GEOL 1120, and GEOL 2110

NEW

**GEOL 2110: Mineralogy and Petrology:** GEOL 1110 OR GEOL 1120, or consent of the instructor

**GEOL 3600: Stratigraphy and Sedimentation:** GEOL 1110 OR GEOL 1120, and GEOL 2110 or consent of the instructor

We want to hear from you if you have any feedback on these modifications

Sincerely,

Miriam
From: Sayer, Ryan T <Ryan.Sayer@bemidjistate.edu>
Sent: Friday, October 30, 2020 2:32 PM
To: Rios-Sanchez, Miriam <Miriam.Rios-Sanchez@bemidjistate.edu>
Cc: Gullickson, Robin S <Robin.Gullickson@bemidjistate.edu>
Subject: Re: Changes to the Geology Minor

Miriam,

That change sounds fine to me.

-Ryan

On Oct 30, 2020, at 12:45 PM, Rios-Sanchez, Miriam <Miriam.Rios-Sanchez@bemidjistate.edu> wrote:

Porter and Ryan
The Geology Minor is currently being changed. The changes are intended to make the minor more flexible and easier to attain: The number of credits has been reduced to 18, and the core is much smaller. Along with these changes the pre-requisites to the following classes have changed:

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Sincerely,

Miriam

Miriam Rios-Sanchez
Assistant Professor, Department of Geology
Center for Sustainability Studies
TRIO McNair Scholars Program
NorthStar STEM Alliance Site Coordinator
Bemidji State University
BSU Curriculum Forms

Form 2
Updated 9.19.15

Course Modification Form

Current Course Number(s):
  Undergraduate: GEOL 3600
  Graduate: GEOL 5600 (no change to graduate course)

Proposed Course Number(s), if different:
  Undergraduate:
  Graduate:

Current Course Title: Stratigraphy and Sedimentation
Proposed Course Title, if different:

Current Course Description:
Study of sedimentary rocks. Recognition of the physical and biologic factors affecting deposition. Introduction to stratigraphic principles. Lecture and laboratory. Prerequisites: GEOL 1110, GEOL 1120, and GEOL 2110 (Might not be offered every year.)

NOTE: Prerequisite change only
Proposed Course Description, if different:
  Recognition of the physical and biologic factors affecting deposition. Introduction to stratigraphic principles. Lecture and laboratory. Prerequisites: GEOL 1110 or GEOL 1120, and GEOL 2110.

Current Credits: 3
Proposed Credits, if different:

Current Prerequisite(s):
  Undergraduate: GEOL 1110, GEOL 1120, and GEOL 2110
  Graduate: N/A – no change to graduate level of course

Proposed Prerequisite(s), if different:
  Undergraduate: GEOL 1110 or GEOL 1120, and GEOL 2110
  Graduate: N/A – no change to graduate level of course

1) Reason(s) for change(s):
For the streamlining the curriculum and reducing the overall credit required for completion we need to adjust prerequisites to improve flexibility and avoid hidden prerequisites.

2) May this modified course replace the current course for students remaining in the old curriculum? Yes _X_____ No ______ If not, please drop the current course and submit a new course form for the modification.
3) Do these modifications change any of the following? **For all Yes answers, please provide updated information on the next page.**

- Student Learning Outcomes: Yes _____ No ___X___
- Major Content Areas: Yes _____ No ___X___
- Projected Maximum Class Size (Cap): Yes _____ No ___X___

4) Current Course fee(s) per student: $

for:

Proposed Course fee(s) per student, if different: $

for:

5) Service Areas:

This course is a requirement or an elective in the programs/areas listed below. To locate where this course appears please search the online catalog, as follows:

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Non-licensure programs:
- Geography, B.S. major Earth Science emphasis
- Earth Science minor
- Environmental Studies, B.S. major Geohydrology emphasis
- Geology minor

Teacher Licensure programs:
- Science Education, B.S. major Earth and Space Science specialty (teacher licensure)

Liberal Education:

The above “service area” programs/departments were notified of this modification on _10.30.2020_____ (date) by ___email_________________ (mail, email, or phone).

Please check one of the items below:

_____ No comments were received from other programs or departments within one week of the notification.

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Porter E. Coggins III, Ph.D.
Professor and Chair, Department of Professional Education
Porter and Ryan

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Miriam

Miriam Rios-Sanchez
Assistant Professor, Department of Geology
Center for Sustainability Studies
TRIO McNair Scholars Program
NorthStar STEM Alliance Site Coordinator
Bemidji State University
BSU Curriculum Forms

Form 5

Program Modification Form

Program to be modified: Geology Minor

List all proposed change(s):

- Revise core to say GEOL 1110 or 1120
- Remove GEOL 3120, GEOL 3400 and GEOL 3600 as one of the electives from the core
- Add GEOL 3600 to the core

Reason(s) for the change(s):

Streamlining the curriculum and reducing the overall credit required for completion. This is part of a larger integrated program with the creation of the Center for Sustainability Studies. The changes also aim to offer more possibilities to students to increase the number of minors they could pursue.

Alert: Attach a copy of the current program showing the marked changes. Please copy the current program from the online catalog (http://www.bemidjistate.edu/academics/catalog/) and paste it into Word. Then use either the Track Changes feature under Tools, or the underline and strikethrough Font feature under Format. (Please note that the Track Changes feature may be easily switched on and off by holding down the Ctrl+Shift+E keys.)
Geology minor

Required Credits: 24 18
Required GPA: 2.00

I REQUIRED COURSES

COMPLETE THE FOLLOWING COURSES:

- GEOL 1110 Physical Geology (4 credits)
  or GEOL 1120 Historical Geology (4 credits)
- GEOL 2110 Mineralogy and Petrology (4 credits)
- GEOL 3600 Stratigraphy and Sedimentation (3 credits)

Select one of the following courses:

- GEOL 3120 Soils (4 credits)
  or BIOL 3120 Soils (4 credits)
- GEOL 3400 Glacial and Pleistocene Geology (3 credits)
- GEOL 3600 Stratigraphy and Sedimentation (3 credits)

II REQUIRED ELECTIVES

SELECT 7-8 9-14 ADDITIONAL CREDITS FROM THE FOLLOWING:

- GEOL 2730 Introduction to Planetary Science (4 credits)
- GEOL 3120 Soils (4 credits)
  or BIOL 3120 Soils (4 credits)
- GEOL 3211 Environmental Hydrology (3 credits)
- GEOL 3212 Hydrogeology (3 credits)
- GEOL 3400 Glacial and Pleistocene Geology (3 credits)
- GEOL 3500 Topics in Paleontology (3 credits)
- GEOL 3600 Stratigraphy and Sedimentation (3 credits)
- GEOL 3700 Environmental Geophysics (3 credits)
- GEOL 4300 Global Environmental Change (3 credits)
- GEOL 4910 Independent Study (3 credits)
- GEOG 3226 Cartography (3 credits)
Geology minor

Required Credits: 18
Required GPA: 2.00

I REQUIRED COURSES

COMPLETE THE FOLLOWING COURSES:

- GEOL 1110 Physical Geology (4 credits)
  or GEOL 1120 Historical Geology (4 credits)
- GEOL 2110 Mineralogy and Petrology (4 credits)
- GEOL 3600 Stratigraphy and Sedimentation (3 credits)

II REQUIRED ELECTIVES

SELECT 7-8 ADDITIONAL CREDITS FROM THE FOLLOWING:

- GEOL 2730 Introduction to Planetary Science (4 credits)
- GEOL 3120 Soils (4 credits)
  or BIOL 3120 Soils (4 credits)
- GEOL 3211 Environmental Hydrology (3 credits)
- GEOL 3212 Hydrogeology (3 credits)
- GEOL 3400 Glacial and Pleistocene Geology (3 credits)
- GEOL 3500 Topics in Paleontology (3 credits)
- GEOL 3700 Environmental Geophysics (3 credits)
- GEOL 4300 Global Environmental Change (3 credits)
- GEOL 4910 Independent Study (3 credits)
- GEOG 3226 Cartography (3 credits)
BSU Curriculum Forms

Form 8  
Updated: 09.18.15

Signatures

_________________________  _____________________________  
Carl Isaacson  Associate Professor 8.11.2020
Proposer / Title / Date

_________________________  _____________________________  
Carl Isaacson  Associate Professor 8.11.2020
Chair or Director / Department or Program / Date

Note: "All departmental recommendations [on curriculum] must be reviewed and approved by the department's faculty."--IFO/MnSCU Master Agreement 2009-2011, 20.A.3 (p. 80).

Note: Geology minor unanimously approved by CSS faculty at Center meeting 12-3-18

At this point, packet goes to Records Office/Curriculum Coordinator to be logged in to the Curriculum Proposal Progress Grid.

_________________________  _____________________________  
Dr. Jim White / Individual and Community Health / 9.14.20
Dean / College / Date

Note: If proposal is sent back to the Proposer, please notify the Curriculum Coordinator. If approved, packet goes to Academic Affairs Office.