### Section 1. Course Title and Description

<table>
<thead>
<tr>
<th>Prefix &amp; No.</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 213</td>
<td>University Physics II</td>
<td>4</td>
</tr>
</tbody>
</table>

**Course Description as it currently appears in the system common course database:**
This is the first course in a two semester calculus-level sequence, covering fundamental concepts of physics. This is the preferred sequence for students majoring in physical science or engineering. Topics include classical mechanics and thermodynamics.

### Section 2. Modification(s) Requested

| X | Pre-requisite change PHYS 211 (completed) to PHYS 211 and MATH-123 (completed) and MATH 125 (completed or concurrent) |

**Justification for all changes noted above:**
This is a companion request related to the prerequisite change for PHYS 211. It is necessary that students maintain their calculus sequence while taking the calculus based introductory physics course as PHYS 213 requires additional mathematics covered in MATH 125 as a corequisite. Most schools list the continuation of the calculus sequence as prerequisite/corequisite for the physics sequence. This request is specifically for the SDSU campus, however, similar to the PHYS 211 request, BHSU and NSU have indicated their desire to be included in this change and therefore we wish to include them (but do not consider their participation as necessary to the request). SDSM&T, USD, DSU have no objections to the change, but desire to keep the prerequisites as currently configured on their campuses.

### Section 3. Other Course Information

1. Will this course be equated with any other unique or common course in the course database? No

### Section 4. To Be Completed by Academic Affairs

<table>
<thead>
<tr>
<th>University Dept Code</th>
<th>SPHYS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIP Code</td>
<td>40.0801</td>
</tr>
</tbody>
</table>
SOUTH DAKOTA BOARD OF REGENTS
Revised Course Request: Common Course

ATTACHMENT A

Corequisite:                                          Prerequisite:
U. of Minnesota                                          U. Nebraska – Omaha
U. of Colorado – Boulder                                  Iowa State U.
Montana State U.                                          North Dakota State U.
U. of Nebraska – Lincoln                                 U. Wisconsin -- Madison
Purdue                                                  Kansas State U. – Eng. sections
Kansas State U. – Majors sections
U. of Wisconsin – La Crosse
U. of Northern Iowa
U. of Northern Illinois

ATTACHMENT B

From: Durben, Dan
Sent: Wednesday, January 02, 2013 12:10 PM
To: Rauber, Joel; Petukhov, Andre; Keller, Christina; Szczerbinska, Barbara; Dolejsi, Duane
Subject: RE: Phys 211/213 prereq and coreqs

Joel,

I will support this change, and would like to have BHSU join in. Officially making the math classes co-req’s (rather than pre-req’s) will make it more clear that freshmen can get started on their physics sequence right away (rather than waiting until after they’ve taken calculus).

Dan

From: Rauber, Joel
Sent: Monday, December 31, 2012 3:12 PM
To: Petukhov, Andre; Keller, Christina; Durben, Dan; Szczerbinska, Barbara; Dolejsi, Duane
Subject: Phys 211/213 prereq and coreqs

All – I would like to change the prerequisites for Physics 211/213 on the SDSU campus only and will need to get your blessing since it is a common course.

Current Requirements:
P211 – Prerequisites: Math 123 or 125
   Corequisites: P211L
P213 – Prerequisites: P211
   Corequisites: P213L

Proposed Requirements – for SDSU (and any others who want to join me)
P211—Prerequisites: none
   Corequisites: Math 123 (unless already taken) and P211L
P213 – Prerequisites: Phys211
   Corequisites: Math 125 (unless already taken) and P213L

A casual study shows that about 2/3 to ¾ of the calculus level courses have Calc I as a coreq rather than a prereq, it would simplify our lives immensely with little change in the rigour of the course. I’m only asking for this at the SDSU campus only, but as long as I’m doing the paperwork, anyone else that wants this can join in. I will need everyone OK to accomplish regardless. An e-mail response of no-objection is all that is probably necessary. I’d be happy to answer any questions that any of you have. Our engineering departments have no objection to this change, some are neutral and some prefer this change.

Thanks,
From: Szczerbinska, Barbara
Sent: Tuesday, January 01, 2013 4:34 PM
To: Rauber, Joel
Subject: RE: Phys 211/213 prereq and coreqs

Hi Joel,
I have no objections to the proposed change.
Cheers,
Barbara

Barbara Szczerbinska, Ph.D.
Associate Professor of Physics
Dakota State University

From: Dolejsi, Duane
Sent: Sunday, January 06, 2013 4:50 PM
To: Rauber, Joel
Subject: RE: Phys 211/213 prereq and coreqs

That would be ok with me.

Duane

From: Rauber, Joel
Sent: Thursday, January 03, 2013 8:01 AM
To: Dolejsi, Duane
Subject: RE: Phys 211/213 prereq and coreqs

Duane,

Do you want me to add NSU to the change in the paperwork?

Joel

From: Dolejsi, Duane
Sent: Wednesday, January 02, 2013 6:42 PM
To: Rauber, Joel; Petukhov, Andre; Keller, Christina; Durben, Dan; Szczerbinska, Barbara
Subject: RE: Phys 211/213 prereq and coreqs

I agree that this is the way to go.

Duane

From: Rauber, Joel
Sent: Monday, December 31, 2012 4:12 PM
To: Petukhov, Andre; Keller, Christina; Durben, Dan; Szczerbinska, Barbara; Dolejsi, Duane
Subject: Phys 211/213 prereq and coreqs

All – I would like to change the prerequisites for Physics 211/213 on the SDSU campus only and will need to get your blessing since it is a common course.

From: Keller, Christina
Sent: Thursday, January 03, 2013 9:27 AM
To: Dolejsi, Duane; Rauber, Joel; Petukhov, Andre; Durben, Dan; Szczerbinska, Barbara
Subject: RE: Phys 211/213 prereq and coreqs

Joel,

It’s not clear that you need the approval of all of us to make a change to unique pre-reqs on your campus, but I have no opposition to you changing your pre-requisites.
From: Dolejsi, Duane  
Sent: Wednesday, January 02, 2013 6:42 PM  
To: Rauber, Joel; Petukhov, Andre; Keller, Christina; Durben, Dan; Szczerbinska, Barbara  
Subject: RE: Phys 211/213 prereq and coreqs  

I agree that this is the way to go.  

Duane

From: Rauber, Joel  
Sent: Monday, December 31, 2012 4:12 PM  
To: Petukhov, Andre; Keller, Christina; Durben, Dan; Szczerbinska, Barbara; Dolejsi, Duane  
Subject: Phys 211/213 prereq and coreqs  

All – I would like to change the prerequisites for Physics 211/213 on the SDSU campus only and will need to get your blessing since it is a common course.

From: Petukhov, Andre  
Sent: Tuesday, March 26, 2013 2:11 PM  
To: Rauber, Joel  
Subject: Re: Existence Proof  

Hi Joel,  
I do apologize again. Now for the delay.  
My answer to the main question about the prereq versus corec is OK.  
I believe I met Parishu Kharel when he was at Wayne State. I know that he did a lot of good work for the project on d0 magnetism in In2O3, but I mostly worked with his bosses Boris Nadgorny and Gavin Lowes.  

Best regards  
Andre

On 3/11/13 4:47 PM, "Rauber, Joel" <Joel.Rauber@SDSTATE.EDU> wrote:  
Andre,  
While not super important our curriculum people require an email of “approval” before I can do any COM course requests. Below is what I sent out to all the other departments.  

Joel  

PS – My apologies, I meant to send this to you, but sent it to myself and I was wondering why I didn’t hear back on Thursday or Friday; the senior moments are coming more frequently. As an aside, we are interviewing a collaborator of yours for a position in our department Parishu Kharel, he apparently knows you from when he was at Wayne State U.  

What are your thoughts on the below.  

Andre,  

You are the only one who hasn’t responded yet. See below for proposal, All sites are OK with the proposal and BHSU and NSU have requested to be included on the change of prerequisites. I hope you are OK with us changing it on our campus (and the other two), and if you desire the change on your campus as well I will write up the request to include you guys.  

Joel

From: Rauber, Joel  
Sent: Monday, December 31, 2012 4:12 PM  
To: Petukhov, Andre; Keller, Christina; Durben, Dan; Szczerbinska, Barbara; Dolejsi, Duane  
Subject: Phys 211/213 prereq and coreqs  

All – I would like to change the prerequisites for Physics 211/213 on the SDSU campus only and will need to get your blessing since it is a common course.