2020 – 2021 Faculty Senate – Pending Approval
Meeting # 16
Tuesday, December 8, 2020, 3:30 pm – 5:00 pm
Zoom only

Present: Ahmadzadeh, Brantz, Bridges, Carney, Carter, Chapman, Dezzani, Fairley, Goebel, Hickman, Kirchmeier (Chair), Lee-Painter, McIntosh, McKellar, Meeuf (Vice-Chair), Paul, Quinnett, Raja, Rashed, Rinker, Sammarruca (w/o vote), Schwarzlaender, Smith, Stroebel, Tenuto, Tibbals, Torrey Lawrence (w/o vote), Wargo
Absent: Rose
Guest Speakers/Presenters: Lee Vierling, Mindi Wood, Megan Dobson, Yesol Sapozhnikov

Call to Order: Chair Kirchmeier called the meeting to order at 3:30pm.

Approval of Minutes (vote):
• Minutes of the 2020-21 Meeting #15 – Attach. #1
  One typographical error was corrected in the attendance list.
  The minutes of the 2020-21 Meeting #15 were approved as corrected.

Chair’s Report:
• Last week, a question was asked about requirements for clinical faculty in the promotion and tenure process, particularly external reviews. FAC is going to look into this, together with other issues related to the recently revised promotion and tenure process. If there are aspects of the revised promotion and tenure process that you think should be reviewed, please send them to FAC, which is currently chaired by Richard Seamon.
• Reminders:
  o Nominations for University Excellence Awards close on December 11, 2020. Please look over the award categories for faculty and staff and consider nominating a colleague or two this year! https://www.uidaho.edu/governance/faculty-staff/university-awards
  o The survey seeking volunteers for Senate Committees closes on December 11, 2020. Please fill out the survey if you are interested in serving on a committee. Please encourage your colleagues to complete the survey.
  o Next University Faculty Meeting: December 9, 2:30 p.m. to 4:00 p.m., via Zoom.
• One upcoming deadline to keep in mind:
  o Deadline to request delay for promotion and/or tenure is March 14, 2021.
  Please help us spread the word about upcoming deadlines by sharing with your colleagues.

Provost’s Report:
• A reminder that December 11, 2020 is the deadline for completing the required university training, see https://www.uidaho.edu/governance/edl/required-training
• “A Christmas Carol” will be on for another week. The Zoom production is great. Congratulations to David Lee-Painter for an amazing performance!
• Thanks to everyone who participated in the provost search. Special thanks to Barb Kirchmeier for her diligent work on the search committee.
• COVID-19 update: face covering is mandatory in Moscow until June 9 (or until three weeks after certain conditions are met). 396 tests were done last week and revealed a slightly higher rate of
positive cases. There is no specific news about vaccine. When it becomes available, we will be able to partner with Gritman and Public Health for needs such as low-temperature storage of the vaccine.

- Spring semester schedule: we will open in person on Wednesday, January 13. Initially, the plan was for all classes to be online the first week to make sure students can be tested prior to in-person classes, as was done in the fall. Since then, our lab capabilities have improved—we can communicate results every four hours. So, we are able to test students prior to January 13. This will also avoid the back-and-forth between different delivery modes. Furthermore, if the university went online for the first week, students may not return until after the long weekend which follows that week. As for the COVID situation around us, unfortunately the news is not good.

- Update on spring enrollment: at this point (five weeks prior), we are 4.4% behind. A reminder to encourage our students to sign up for spring classes and return to campus in January.

Discussion:
A Senator asked whether online classes fill faster than those in person. The provost responded that, from a comparison in GenEd—where there is a large number of classes both online and in person—it does not seem to be the case. Institutional Research can look into this.

With regard to the mandatory training, a Senator inquired about the consequences of not complying with the requirement. Can email and internet access be taken away from those employees who do not complete the training? Provost Lawrence noted that “disciplinary measures” are mentioned in the memo. There was plenty of time to complete the training. Why not just do it?

To the question of whether the number of students who test positive becomes part of state public health data, the Provost responded affirmatively.

Will the university go virtual/online the week after Spring Break to allow for testing, and will testing be required for employees? The Provost clarified that employees are recommended, but not required, to be tested. Probably, there will be some time with only virtual/online classes after Spring Break, depending on how the data looks before Spring Break.

Vice Chair Meeuf noted that some faculty have already spent considerable time making plans based on earlier communication that the first week (or more) of the term would be entirely remote. Provost Lawrence said that starting in person will help get students engaged. On the other hand, we all need to be ready to switch, so efforts to be prepared for a transition are not wasted.

There were no more questions or comments for the Provost.

Committee Reports:
- University Curriculum Committee (Vote)
  o Discontinuation of B.S. in Natural Resources Conservation – Lee Vierling Attach. #2
  o Changes to the B.S. in Environmental Science Emphases – Lee Vierling Attach. #3
Rationale: The Environmental Science B.S. degree, especially the Social Science Option, and the Natural Resources Conservation B.S. degree have considerable overlap, especially in the areas of environmental planning, policy, and natural resources
management. The discontinuation of the B.S. in Natural Resources Conservation is proposed together with the changes to the Environmental Science curriculum to be adopted concurrently.

Discussion:
In reply to a question, Lee Vierling said that the proposed changes will have no impact on the M.S. program. This is only about the new undergraduate curriculum.

A Senator asked about students enrolled in these programs and whether these changes will impact recruiting. Lee Vierling replied that there are about 45 students currently enrolled in the Natural Resources Conservation program. There is a teach-out plan specifically for those students. The same courses will continue to be taught without creating any problems. As for the Environmental Science program, there are 120 UG students enrolled in the current degree options, and those degree options will continue to be taught out. With regard to recruiting: these changes will result in more delineated career options. Currently, it is difficult for students to see how such a broad area (with Social, Biological, Physical Science options) can lead to a specific career path. The names now given to the new options will help with both recruiting and advising. Lee Vierling emphasized that the faculty did diligent work, met with many groups across campus, and benchmarked other institutions. They believe this will make a strong program even stronger and do well over time.

• Faculty Staff Policy Group
  ○ Removal of FSH 1440 – Mindi Wood Attach. #4
    Mindi Wood explained that FSH 1440 contains only a link to the Provost webpage. It is not a policy and thus it is appropriate to remove it from FSH.

The votes were as follows:
  ○ Discontinuation of B.S. in Natural Resources Conservation – approved with 96% majority.
  ○ Changes to the B.S. in Environmental Science Emphases – approved unanimously
  ○ Removal of FSH 1440 – approved with 96% majority

• COVID 19 Committee Dashboard Presentation – David Lee-Painter Attach. #5
  David Lee-Painter said it was an honor to serve on the COVID-19 Advisory Committee. The 16 members met every Friday at 8am through the fall semester to support the on-going university efforts. The committee membership was a true cross section of the U of I family, including leaders and experts in the sciences, law, admissions, and student representatives from GSA and ASUI. Recently, the committee’s focus has been on how we can improve COVID-19 data communication. Two of the seven exceptional student members will present the committee’s proposal today: Megan Dobson and Yesol Sapozhnikov. Megan is a junior majoring in Biology and Microbiology with a Pre-Health minor. Megan is a registered certified nursing assistant and EMT, and serves as the COS Ambassador. After graduation, Megan plans to pursue graduate studies in Public Health with emphasis on Infectious Diseases. She is also ΓΦΒ Vice President of Community Engagement. Yesol Sapozhnikov is a third-year doctoral student in Bioinformatic and Computational Biology. Yesol is a COVID-19 testing specialist at Gritman and a registered nurse.
David Lee-Painter said he is proud to have these two exceptional students represent the committee.

Yesol Sapozhnikov started the presentation noting that current data is difficult to interpret and needs more comprehensive reporting and transparency. The students spoke to experts in data modelling, visualization, and communication. Thanks to Shirley Luckhart, they made contact with a team led by Dr. Howard Forman, Professor of Diagnostic Radiology at Yale University School of Public Health, and Dr. Cary Gross, Professor of Medicine and Public Health at Yale University School of Medicine. Following their model, the committee recommends that U of I provide an interactive user interface that includes easy-to-read, detailed summaries and data visualization of current COVID-19 indicators and testing data. This information should be collected and shared on a web-based dashboard. Good data and transparency build trust. Clearly visible trends can influence both individual and institutional actions as well as monitor and validate the effectiveness of our mitigation plans. Tracking leading indicators helps prevent and minimize outbreaks. As the leading research institution in the state, we have the obligation to inform and lead our state during the pandemic.

Discussion:
There was a question about where accurate information would come from and how it would compare with data from state and federal sources. Response: The data which we are asking to be communicated clearly and visually is already being posted weekly on the U of I website in numerical form, not tabulated or visualized. In order to see trends, one needs to expand the history of past updates. Also, for a web-based, real-time dashboard to be effective, it needs to be updated more frequently. The administration already receives real-time updates on testing data – it’s a matter of weighing the advantages and disadvantages of more frequent updates. Some schools post campus data together with county or even state data, which allows students to obtain all the information they need from one site, whereas in Idaho it is not easy to get the overall picture without additional information from the different public health districts.

A Senator asked which aspects of the proposal require Senate approval. Response: This ad hoc committee originated from Faculty Senate and Staff Council. We brought this proposal to Senate for their endorsement.

Could the dashboard be useful in other circumstances? Response: Once it is built, it can be used in other reporting situations.

Is it possible to incorporate spatial/geographic information from the state and compare data with those from U of I? Incorporating a geographical component would be very useful to identify spatial hot spots for the purpose of planning and mitigation. Response: The university has the data that we are asking to be more visually presented and more frequently updated. We like to see positive cases reported daily or as frequently as possible, broken down by demographics, undergraduate or graduate students, faculty or staff. This way, we’ll have a better idea of where the hot spots are across campus. Once the template to showcase or graph the data is built, the university, using the data it already has, would need to update it, for instance through a spreadsheet that automatically feeds into the dashboard. Once the templates are established – they have been offered to us – maintenance will require minor effort. With regard to expanding geographically to areas around us: as the U of I Advisory Committee, we focus on U of I data and on providing links to data for other communities, counties, and at the state level, so that students who are traveling can be more aware of the risks. As for the spatial component, there
is a modeling team on campus that is working on that, but it is strictly separate from the U of I data we are talking about.

A Senator expressed appreciation for the committee’s idea and wondered whether the committee had received any negative feedback. **Response:** we are trying our best to support our campus. As we move into the winter and the unknown about the spring semester, having transparent, readily updated (in real time), easy-to-access data will help the administration validate the positive outcomes. It will also engage people collectively in the safety of the campus and help them make the best personal decisions. There are no negatives which we haven’t talked about and addressed.

A Senator thanked the Advisory Committee for their efforts and asked about the timeline for the dashboard to be up and accessible to everyone. **Response:** just before Thanksgiving, the committee reached out to the group of national experts identified earlier by Yesol and asked for their help. The group is about to launch – around mid-December – a major initiative to help colleges across the country. They are willing and excited to help our campus.

A Senator asked what Senate can do, concretely. Chair Kirchmeier responded that, because the Advisory Committee is an **ad hoc** committee, a seconded motion from the floor is needed (to accept the proposal as written, or formulated in other words). If the motion passes, Faculty Senate Leadership will send a copy of the proposal to President Green’s office with the full support of Senate behind it.

Are any funds needed? **Response:** None. The Yale team offered to help us build the dashboard from the transportable template Yesol talked about. They will provide intellectual and technical support to work with our experts to modify their template for our purposes. They are willing to help us build the dashboard and customize it to our needs for free.

It was moved (Schwarzlaender) and seconded (Tibbals) to approve the proposal from the Advisory COVID-19 Committee as written.

**Further discussion:**
Responding to a pending question about incorporating vaccine information, a committee member said that they do not expect to have that type of information – unless it is related to some special program internal to U of I and separate from what is happening at the federal level. As for regional data, the committee hopes we can be as comprehensive and inclusive as possible, if the administration does not object to including external data on the U of I website.

A Senator noted that U of I data would have to go beyond the Moscow campus. We need access to data from the state, because we have off-campus centers and because of travel.

Shirley Luckhart added some final remarks: The committee members reached out to many people with excitement about our involvement with, and support by, the Yale group. This inspired a “national COVID dashboard makeover challenge.” The challenge was for each campus to gather 100 nominations from faculty, staff, students, alumni, and parents. The first to get 100 nominations wins the challenge. Our campus had 100 nominations by the next day, while nobody else was even close. The largest number of votes came from students, which is why we
are happy to have Megan and Yesol represent our committee and the students, who had the strongest voice.

Vote: The motion was approved unanimously. Chair Kirchmeier will send the Senate support of the proposal to President Green by the end of the week. She gave special thanks to the committee members for their work and dedication through the semester and asked them to be recognized.

Chair Kirchmeier introduced the next item on the agenda and noted that, with ten minutes left, only one of the two remaining agenda items can be undertaken. The conversation regarding the assessment committee with Dean Panttaja was postponed and will continue in the spring. Charles Goebel will be invited back to participate in the conversation.

Senator Charles Goebel expressed appreciation for the opportunity to sit in for Alistair Smith as the CNR representative this fall semester.

Other Announcements and Communications:

- Update on the budget metrics – Torrey Lawrence
  Provost Lawrence proceeded to give a brief update – more will be communicated in the spring. First, some context/history: President Green put together a work group to develop a new budget model for the university. The product of that was a white paper describing some general parameters for a new way of budgeting, which, in the Provost’s own words, could be described as a “responsive” budget – responsive, for instance, to enrollment figures. This is different than what has been typically done – units get a fixed budget. Within the new model, there are several components, some of which would be based on very general metrics such as enrollment. The main question is: how academic units (that is, colleges) will be budgeted. A focal point of the discussions (primarily with Provost Council, the Vice Provost, and the directors of our centers), was to understand in which way metrics will influence where money goes. A number of brainstorming sessions resulted in 124 possible metrics, focused on three areas: 1. Student success; 2. Research; 3. Financial health. This list was narrowed down to about 30 and is in the process of being further narrowed down to about six, depending on the metrics themselves and how they will be used. Enrollment and student credit hours are examples of possible metrics. Completion and retention rates could measure student success. Possible metrics for research may include research expenditures, graduate or terminal degrees awarded, successful grant proposals. Student credit hours are also a measure of financial health, along with program costs and program management. None of the above is finalized – discussions will continue in January. Finding metrics that work for every unit is challenging, and there can be unintended consequences of using a particular metric. Another group is working on metrics to fund non-academic units, such as Facilities or Student Services. More information will come later, with opportunities for input and feedback. In the end, we hope to have a budget model that is responsive to needs, based on the university’s priorities.

Discussion:
A Senator noted that, although it is useful to have benchmarks by which we evaluate programs and departments, departments can be very different in nature. A department may not “fit” within a given index or benchmark. Are these contingencies going to be considered? The Provost
recognized that colleges can have unique attributes and, thus, unique aspects of budgeting. The goal – if possible – is to have a model that is understandable and works for everybody, but one of the main challenges is precisely to identify metrics and use/weight them in a way that is fair to different units.

Chair Kirchmeier invited the Senators to send additional questions to her or place them in the Zoom chat.

On behalf of Senate, Chair Kirchmeier congratulated Torrey Lawrence for his appointment to the position of Provost and Executive Vice President, and thanked him for his dedication to the university.

**Adjournment:**
The agenda was not completed, thus the Chair asked for a motion (Fairley/ Ahmadvadeh) to adjourn. The meeting was adjourned at 5:00pm.

Respectfully Submitted,

Francesca Sammaruca
Secretary of the University Faculty & Secretary to Faculty Senate
I. Call to Order

II. Approval of Minutes (Vote)
   • Minutes of the 2019-2020 Faculty Senate Meeting #14 December 1, 2020 Attach. #1

III. Chair’s Report

IV. Provost’s Report

V. Committee Reports
   • UCC
     o Discontinuation of BS in Natural Resources Conservation – Lee Vierling Attach. #2
     o Changes to the BS in Environmental Science Emphases – Lee Vierling Attach. #3
   • Faculty Staff Policy Group – Mindi Wood
     o Removal of FSH 1440 Attach. #4
   • COVID 19 Committee Dashboard Presentation – David Lee Painter Attach. #5

VI. Other Announcements and Communications
   • Update on the budget metrics – Torrey Lawrence
   • Conversation about the assessment committee – Dean Panttaja Attach. #6

VII. Special Orders

VIII. New Business

IX. Adjournment

Attachments:

- Attach. #1 Minutes of the 2020-2021 Faculty Senate Meeting #15 (December 1, 2020)
- Attach. #2 Discontinuation of BS in Natural Resources Conservation
- Attach. #3 Changes to the BS in Environmental Science Emphases
- Attach. #4 FSH 1440
- Attach. #5 COVID 19 Committee Dashboard
- Attach. #6 Assessment Committee by Charles Goebel
2020 – 2021 Faculty Senate – Pending Approval
Meeting # 15
Tuesday, December 1, 2020, 3:30 pm – 5:00 pm
Zoom only

Present: Ahmadzadeh, Brantz, Bridges, Carney, Carter, Chapman, Dezzani, Fairley, Goebel, Hickman, Kirchmeier (Chair), Lee-Painter, MacIntosh, McKellar, Meeuf (Vice-Chair), Paul, Quinnet, Rashed, Rinker, Rose, Sammarruca (w/o vote), Smith, Stroebel, Tenuto, Tibbals, Torrey Lawrence (w/o vote)
Absent: Wargo (excused), Schwarzlaender, Raja
Guest Speakers/Presenters: Gregory Turner-Rahman, Jim Nagler, Rebecca Couch, Sierra Brantz, K. Dawn Amos

Call to Order: Chair Kirchmeier called the meeting to order at 3:30pm.

Approval of Minutes (vote):
- Minutes of the 2020-21 Meeting #14 – Attach. #1
  Two errors were pointed out in the attendance list.
  The minutes of the 2020-21 Meeting #14 were approved as corrected.

Consent Agenda (vote):
- Sabbaticals for 2021-22
  In response to a Senator’s question, it was clarified that sabbatical leaves are approved twice per year.
  The consent agenda was adopted.

Chair’s Report:
- Thank you to those of you who sent feedback about the Provost candidates to Senate Leadership. A special thanks to Russ who worked to compile that information, along with the results of the ranking survey, into a memo that we sent to President Green yesterday.
- Athena is proud to announce the call for participation in the 2021 Athena Women’s Mentorship Program. If you are interested in participating in the 2021 Athena Women’s Mentorship Program as either a mentee or a mentor, we ask you to fill out the following survey by Monday, December 7. We encourage people from any college, office, campus, and of any background to apply. Cohort three will be announced by Friday, December 18.
- Reminders:
  - Nominations for University Excellence Awards close on December 11. Please look over the award categories for faculty and staff and consider nominating a colleague or two this year! [https://www.uidaho.edu/governance/faculty-staff/university-awards](https://www.uidaho.edu/governance/faculty-staff/university-awards)
  - The survey seeking volunteers for Senate Committees closes on December 11. Please fill out the survey if you are interested in serving on a committee. Please also encourage your colleagues to complete the survey.
  - Next University Faculty Meeting: December 9, 2:30 p.m. to 4:00 p.m., via Zoom.
- One upcoming deadline to keep in mind:
  - Deadline to request delay for promotion and/or tenure is March 14, 2021. Please help us spread the word about these upcoming deadlines by sharing with your colleagues.
There were no questions or comments for the Chair.

**Provost’s Report:**
- A reminder that December 11 is the deadline for completing the required university training, see [https://www.uidaho.edu/governance/edl/required-training](https://www.uidaho.edu/governance/edl/required-training)
- COVID-19 update: about 1,000 tests were done prior to Thanksgiving, and a few isolated tests last week. Testing is currently available (contact covid19questions@uidaho.edu), but surveillance testing is not taking place, as many students are not in Moscow and many faculty and staff are working remotely. The schedule for spring semester testing will be communicated soon.

**Discussion:**
A Senator suggested that we encourage students to come back earlier than the beginning of classes – which start on a Wednesday – so that testing can start early and the number of online days can be minimized. The Provost responded that testing will be available early, and students will be encouraged to arrive early and before January 13.

A Senator asked whether spring enrollment is being tracked by class delivery method (in-person, online, etc.). The Provost responded that it is not currently reported with this information but he will try to gather that information.

There were no more questions or comments for the Provost.

**Committee Reports:**
- University Curriculum Committee (Vote)
  - Discontinue the MAT in Art – Gregory Turner-Rahman Attach. #3
    This is essentially a “clean up.” The MAT has not been offered for many years, but the discontinuation was never completed. There were no questions.
    Vote: the proposal was approved with 100% of the votes in favor.
  - Discontinuation of Molecular Biology and Biotech – Jim Nagler Attach. #4
    A Senator inquired about the reasons for the discontinuation. Jim Nagler responded that this was not a popular program – over the past five years, the enrollment has been as high as 10 students and as low as one. Moreover, the coursework is essentially the same as in the Microbiology major, so it was decided to concentrate resources on the latter major. In terms of courses, nothing will be lost by discontinuing the Molecular Biology and Biotech major.
    Vote: the proposal was approved with 100% of the votes in favor.

**Other Announcements and Communications:**
- APM 40.32, Parking and Transportation Services – Rebecca Couch Attach. #5
  The changes concern clarification for use of budget numbers for parking violations of employees who work off campus and visitors.
- ASUI Mental Health Days – Sierra Brantz and K. Dawn Amos
  ASUI is working on a project to introduce “Mental Health Days.” These would be excused absences – like sick days – but used by the student to reduce stress. ASUI suggests two-to-three days per semester, excluding test days, presentation days, or days when assignments are due. They propose an eight-hours advance notice rather than the more typical 24 hours, because
mental health issues cannot be predicted so far in advance. The idea of the project developed from data that ASUI Leadership collected in September 2020. Of the 2,000 respondents, only 50% reported normal depression scores, measured according to a widely used depression questionnaire. The ASUI initiative would improve performance, attitude, and physical health. Furthermore, it would benefit students, by empowering and educating them to take ownership of their mental health – one in four people between the age of 20 to 24 (namely, college age) have a diagnosed mental illness. It would benefit faculty by assuring that students in the classroom can fully focus on their education. There would also be a benefit for the Center for Testing and Counseling (CTC), which is under pressure with all the mental health issues on campus – this upstream prevention technique would take some of the weight off CTC so they could handle more crises. The overall goals of the project are: remove the stigma around mental health issues; improve our campus mental health; promote a culture of discussion and openness; create an upstream approach aimed at prevention of mental health issues; educate the students on how to care for their mental health and recognize the signs.

Discussion:
Senators were supportive of and impressed with the ASUI efforts to help their fellow students. A number of comments, suggestions, and concerns were raised, mostly with regard to the following points. The meaning of “excused absence” can vary wildly with the type of class and/or instructor – for instance, some instructors do not monitor attendance. Excused absences would make no difference in such cases. A recurrent comment/concern was that missing classes and falling behind may create even more stress for the student. What would students do during those days at home? Wouldn’t they get even more depressed? If the student’s status is due to an approaching crisis, they should reach out to professional help. Should these excused-absence days be guided somehow? In extreme cases, the instructor who is asked to allow a mental health day may become aware of a situation that could later escalate. At what point does the instructor become a “mandatory reporter?” Another comment: there is a huge difference between needing a “self-care” or “recharge” day and being in a crisis that needs intervention. This point needs to be clarified. Other issues to be explored: is PTSD a problem specific to returning veterans or is it a broader problem? Is there something we can do as an institution to reduce the causes at the root of the problem?

Other Senators noted that mental health is a broad issue that cannot be addressed with a few days of rest, although they understand and appreciate the ASUI intentions. Another concern was that the request of additional accommodation, in addition to those that have been provided due to COVID-19, may further disrupt the teaching process. It is possible that some students will make inappropriate use of this opportunity. Are we really teaching our students to take personal responsibility?

Sierra and Dawn recognized that an excused absence can have a very different meaning from class to class, and that appropriate adjustments will need to be made accordingly. They reiterated that the intent is to encourage students to take responsibility and practice mental health on their own. They can use the “free” days to reach out to available resources, such as CTC and/or Vandal Health Clinic. There is no data from universities to support the notion that breaking for a day helps with stress and anxiety, but high schools are starting to take similar steps as a prevention tool. That’s why ASUI would like to gather such data. They believe their “up-stream” approach can help with prevention. They also emphasized that such policy would demonstrate that the university cares about the students and their mental health. In cases
where a student really seems to be struggling, a VandalCARE report may be appropriate. We must trust our students and let them know that we care.

Everyone agreed that the ASUI initiative is to be commended. At the same time, mental health is not a problem with a simple solution that works for everyone. Better communication is important to promote a culture where there is no stigma around mental illness. Sometimes, a problem may go undetected for a long time if a student is not required to attend classes. We need a mechanism to reach out early to students in distress and educate them about available resources before they have missed a large part of the semester. The link below was posted in the chat:

https://www.uidaho.edu/current-students/vandal-health-education/events/mental-health-month

Chair Kirchmeier thanked Sierra and Dawn for the opportunity to engage in such lively and important conversation.

New Business:
Chair Kirchmeier asked whether there was any new business.
• A Senator announced that David Lee-Painter will be the star in the production of “A Christmas Carol.” The performance is via Zoom.
• In response to the concerns raised by a Senator in regard to the role of various committees in the assessment process, FSL is gathering more information together with Dean Panttaja and will bring them to Senate soon.
• Please be sure to watch the lovely ASUI Faculty and Staff appreciation video at: https://www.youtube.com/watch?v=GHiM2BoHeQQ

Adjournment:
The agenda being completed, the Chair adjourned the meeting at 4:52pm.

Respectfully Submitted,

Francesca Sammarruca
Secretary of the University Faculty & Secretary to Faculty Senate
Program Change Request

A deleted record cannot be edited

Program Inactivation Proposal

Date Submitted: 10/08/20 1:14 pm

Viewing: 223: Natural Resource Conservation (BSNATRESCCONSV)

Last approved: 10/07/20 11:12 am
Last edit: 10/08/20 1:14 pm
Changes proposed by: Joana Espinoza (V00370901)

Catalog Pages Using this Program
Natural Resource Conservation (B.S.Nat.Resc.Consv.)

Final Catalog 2020-2021

Rationale for Inactivation

In Workflow
1. 153 Chair
2. 11 Curriculum Committee Chair
3. 11 Dean
4. Provost's Office
5. Assessment
6. Curriculum Review
7. Registrar's Office
8. UCC
9. Faculty Senate Chair
10. UFM
11. President's Office
12. State Approval
13. NWCCU

Approval Path
1. 10/08/20 1:15 pm
   Joana Espinoza (jespinoza):
   Approved for 153 Chair
2. 10/08/20 1:16 pm
   Joana Espinoza (jespinoza):
   Approved for 11 Curriculum Committee Chair
3. 10/08/20 1:17 pm
   Joana Espinoza (jespinoza):
   Approved for 11 Dean
The College of Natural Resources is the administrative home of the campus-wide Environmental Science Program at the University of Idaho. Over time the Environmental Science B.S. degree (in particular the Social Science Option) and the Natural Resource Conservation B.S. degree developed a significant deal of content overlap, particularly in the areas of environmental planning, policy, and natural resource management. As a result these two programs often competed for students who were seeking expertise in the environmental social sciences.

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<tr>
<th>Date</th>
<th>Time</th>
<th>Name</th>
<th>Email</th>
<th>Message</th>
</tr>
</thead>
<tbody>
<tr>
<td>4/10/20</td>
<td>1:18 pm</td>
<td>Joana Espinoza</td>
<td>(jespinoza)</td>
<td>Approved for Provost's Office</td>
</tr>
<tr>
<td>5/10/20</td>
<td>8:33 am</td>
<td>Sara Mahuron</td>
<td>(sara)</td>
<td>Approved for Assessment</td>
</tr>
<tr>
<td>6/10/20</td>
<td>6:47 pm</td>
<td>Rebecca Frost</td>
<td>(rfrost)</td>
<td>Approved for Curriculum Review</td>
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<tr>
<td>7/11/20</td>
<td>11:23 am</td>
<td>Amy Kingston</td>
<td>(amykingston)</td>
<td>Approved for Registrar's Office</td>
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<tr>
<td>8/11/20</td>
<td>4:39 pm</td>
<td>Rebecca Frost</td>
<td>(rfrost)</td>
<td>Approved for UCC</td>
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**History**

1. Oct 6, 2020 by Joana Espinoza (jespinoza)
2. Oct 7, 2020 by Joana Espinoza (jespinoza)
Environmental Science programs are seeing significant enrollment growth across the country. We are poised to tap into this enrollment growth at the University of Idaho given our prominence as a state that enjoys a tremendous reputation in natural resource and environmental stewardship. As a result we propose a coordinated action where we 1) redesign the Environmental Science (ENVS) B.S. degree to more formally include environmental planning, policy, and natural resource management (in addition to other emphases), while also 2) discontinuing the Natural Resource Conservation (NRC) B.S. degree. In this way, we will be able to 1) streamline undergraduate offerings by eliminating unnecessary redundancy, 2) consolidate our undergraduate programs under the popular Environmental Science degree umbrella, and 3) initiate strategic branding and marketing of the Environmental Science program at the University of Idaho.

Following this rationale, the faculty of the Department of Natural Resources and Society voted in support of this discontinuance proposal with the condition that the proposed changes to the Environmental Science curriculum be adopted concurrent with this proposal. Fifteen of sixteen faculty voted, with the final vote tally on 9/1/2020 in support of this proposal being 12 yes, 0 no, and 3 abstain.

Attach State Form

CNR - Discont NRC w Budget.pdf

<table>
<thead>
<tr>
<th>Faculty Name</th>
<th>Faculty Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dennis Becker</td>
<td><a href="mailto:drbecker@uidaho.edu">drbecker@uidaho.edu</a></td>
</tr>
</tbody>
</table>

Change Type

Description of Change

Academic Level: Undergraduate
College: Natural Resources
Department/Unit: Natural Resources & Society
Effective Catalog Year: 2020-2021
Program Title: Natural Resource Conservation (BSNATRESCCONSV)
Program Credits: 120
CIP Code
03.0201 - Natural Resources Management
and Policy.

Emphasis/Option
CIP Code(s)

Curriculum:

Required Course work includes the university requirements (see regulation J-3) and:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 202</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>FOR 221</td>
<td>Principles of Ecology</td>
<td>3</td>
</tr>
<tr>
<td>FOR 375</td>
<td>Introduction to Spatial Analysis for Natural Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>NR 101</td>
<td>Exploring Natural Resources</td>
<td>2</td>
</tr>
<tr>
<td>NRS 125</td>
<td>Introduction to Conservation and Natural Resources</td>
<td>3</td>
</tr>
<tr>
<td>NRS 235</td>
<td>Society and Natural Resources</td>
<td>3</td>
</tr>
<tr>
<td>NRS 310</td>
<td>Social Science Methods</td>
<td>4</td>
</tr>
<tr>
<td>NRS 311</td>
<td>Public Involvement in Natural Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>NRS 383</td>
<td>Natural Resource and Ecosystem Service Economics</td>
<td>3</td>
</tr>
<tr>
<td>NRS 387</td>
<td>Environmental Communication Skills</td>
<td>3</td>
</tr>
<tr>
<td>NRS 498</td>
<td>Internship</td>
<td>1-6</td>
</tr>
<tr>
<td>STAT 251</td>
<td>Statistical Methods</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following: 3-4

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 143</td>
<td>College Algebra</td>
</tr>
<tr>
<td>MATH 160</td>
<td>Survey of Calculus</td>
</tr>
<tr>
<td>MATH 170</td>
<td>Calculus I</td>
</tr>
</tbody>
</table>

Emphases

Select one of the following emphases: 50-72

Conservation Planning and Management
Conservation Science

Total Hours 87-115

A. Conservation Planning and Management Emphasis

To graduate a student must earn an average GPA of 2.30 or higher in all NRS courses.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 101</td>
<td>Fundamentals of Oral Communication (or one semester of a foreign language course)</td>
<td>2-4</td>
</tr>
<tr>
<td>ENGL 207</td>
<td>Persuasive Writing</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 208</td>
<td>Personal &amp; Exploratory Writing</td>
<td></td>
</tr>
<tr>
<td>ENV S 225</td>
<td>International Environmental Issues Seminar</td>
<td>3</td>
</tr>
<tr>
<td>or IS 322</td>
<td>Int'l Environmental Governance</td>
<td></td>
</tr>
<tr>
<td>NRS 364</td>
<td>Politics of the Environment</td>
<td>3</td>
</tr>
<tr>
<td>NRS 462</td>
<td>Natural Resource Policy</td>
<td>3</td>
</tr>
<tr>
<td>NRS 475</td>
<td>Local and Regional Environmental Planning</td>
<td>3</td>
</tr>
</tbody>
</table>

https://nextcatalog.uidaho.edu/courseleaf/approve/
NRS 476  Env Proj Mgmt/Decision Making  4
POLS 101  American National Government  3
or POLS 275  American State and Local Government  3
PSYC 101  Introduction to Psychology  3
SOC 101  Introduction to Sociology  3
Select one of the following:  4

BIOL 102  Biology and Society
& 102L  and Biology and Society Lab
BIOL 115  Cells and the Evolution of Life
& 115L  and Cells and the Evolution of Life Laboratory
Select one of the following:  3

ENGL 313  Business Writing
ENGL 316  Environmental Writing
ENGL 317  Technical Writing
ENGL 322  Studies in Environmental Literature and Culture
Select one of the following:  3

AGEC 477  Law Ethics and the Environment
ENVS 479  Introduction to Environmental Regulations
NRS 386  Managing Complex Environmental Systems
Select one of the following:  4

CHEM 101  Introduction to Chemistry
& 101L  and Introduction to Chemistry Laboratory
CHEM 111  General Chemistry I
& 111L  and General Chemistry I Laboratory
GEOL 101  Physical Geology
& 101L  and Physical Geology Lab
Select one of the following:  3-4

NRS/FOR 472  Remote Sensing of the Environment
NRS/REM 440  Restoration Ecology
NRS 478  LIDAR and Optical Remote Sensing Analysis
Select one of the following:  3-4

BIOL 314  Ecology and Population Biology
FOR 326  Fire Ecology
NRS 450  Global Environmental Change
REM 340  Ethnobotany
REM 429  Landscape Ecology
REM 459  Rangeland Ecology
& REM 460  and Integrated Field Studies in Rangelands
WLF 370  Management and Communication of Scientific Data
WLF 440  Conservation Biology
Contract Courses 1  12-18
Total Hours 62-72

Courses to total 120 credits for this degree

1. Students must submit a contract for a minimum of 12 credits, completed through prior consultation and approval from the faculty advisor. Courses taken to fulfill major requirements above cannot be double counted for contract courses. All contract courses must be upper division (University of Idaho 300-, 400-, or 500-level courses). Students may fulfill their contract requirement by completing a University approved minor, certificate, or approved study abroad experience. Students are encouraged to make choices that strengthen their expertise and demonstrate proficiency in an area of professional interest.

B. Conservation Science Emphasis.

To graduate, a student must earn an average GPA of 2.00 or higher in all courses taught in the College of Natural Resources and complete an approved professional work experience in natural resources.

NRS 364 Politics of the Environment 3
or NRS 462 Natural Resource Policy

Select one writing course:

ENGL 207 Persuasive Writing 3
ENGL 208 Personal & Exploratory Writing
ENGL 313 Business Writing
ENGL 316 Environmental Writing
ENGL 317 Technical Writing

Select one of the following:

NRS 475 Local and Regional Environmental Planning 3-4
NRS 476 Env Proj Mgmt/Decision Making
NRS 490 Wilderness and Protected Area Management

Select one of the following:

CHEM 101 Introduction to Chemistry 4
& 101L and Introduction to Chemistry Laboratory
CHEM 111 General Chemistry I
& 111L and General Chemistry I Laboratory

Select one of the following:

BIOL 114 Organisms and Environments
BIOL 115 Cells and the Evolution of Life
& 115L and Cells and the Evolution of Life Laboratory

Natural Resource Science Restricted Electives 33

Select 33 credits of Natural Resource Science Restricted electives from the following (at least 15 credits must be at the 400-level):

Fishery Science

Select at least 6 credits from the following:

FISH 314 Fish Ecology
FISH 315 Fish Ecology Field Techniques and Methods
Fire Ecology and Management
Select at least 2 credits from the following:
- FOR 326 Fire Ecology
- FOR 433 Fire and Fuel Modeling
- FOR 450 Fire Behavior
- FOR 454 Air Quality, Pollution, and Smoke

Forestry and Renewable Materials
Select at least 9 credits from the following:
- FOR 220 Forest Biology & Dendrology
- FOR 275 Forestry Resource Sampling
- FOR 330 Terrestrial Ecosystem Ecology
- FOR 424 Silviculture Principles and Practices
- FOR 430 Forest Operations
- FOR 431 Low Volume Forest Roads
- FOR 436 Cable Systems
- FOR 462 Watershed Science and Management
- FOR 468 Forest and Plant Pathology
- FOR 472 Remote Sensing of the Environment
- FSP 321 Properties of Forest and Sustainable Products
- FSP 436 Biocomposites
- FSP 438 Introduction to Lignocellulosic Chemistry
- FSP 444 Primary Forest Products Manufacturing
- FSP 450 Biomatl Deterioration/Protect
- FSP 491 Biomaterial Product and Process Development Lab
- FSP/MKTG 495 Product Development and Brand Management

Rangeland Ecology and Management
Select at least 6 credits from the following:
- REM 341 Systematic Botany
- REM 410 Principles of Vegetation Monitoring and Measurement
- REM 411 Wildland Habitat Ecol & Assmnt
- REM 429 Landscape Ecology
- REM 440 Restoration Ecology
- REM 456 Integrated Rangeland Management
- REM 459 Rangeland Ecology
- REM 460 Integrated Field Studies in Rangelands

Wildlife Science
Select at least 6 credits from the following:

- **WLF 314** Ecology of Terrestrial Vertebrates
- **WLF 315** Techniques Laboratory
- **WLF 370** Management and Communication of Scientific Data
- **WLF 440** Conservation Biology
- **WLF 448** Fish and Wildlife Population Ecology
- **WLF 482** Ornithology
- **WLF 492** Wildlife Management

Total Hours: 50-51

### Courses to total 120 credits for this degree

---

**Distance Education Availability**

To comply with the requirements of the Idaho State Board of Education (SBOE) and the Northwest Commission on Colleges and Universities (NWCCU) the University of Idaho must declare whether 50% or more of the curricular requirements of a program which may be completed via distance education.

Can 50% or more of the curricular requirements of this program be completed via distance education?

No

*Note: Existing programs transitioning from less than 50% of its curricular requirements to 50% or more of its requirements being available via distance education is considered a Group C change and must complete the program proposal formwork before these changes will be processed.*

---

**Geographical Area Availability**

Identify the geographical area(s) this program can be completed in:

- Coeur d'Alene
- Moscow

---

**Student Learning Outcomes**

Have learning outcomes changed?

No Change

Learning Objectives

---

**Conservation Science Option**

Graduates will be able to communicate effectively. In particular, graduates will be able to create and practice effective oral, written, and graphic communication with diverse audiences, especially within interdisciplinary...
teams and with stakeholders in the fields of conservation and environmental science, planning, and management. Graduates will be able to critically evaluate and integrate concepts and knowledge from ecological, social, economic and political perspectives. They will master basic concepts, apply key concepts and knowledge from social-ecological sciences, and effectively implement current research technologies (e.g., GPS, Remote Sensing, GIS, statistical packages, data collection and management, and environmental and social assessment techniques) individually and in teams to create, manage, and deliver outcomes relating to conservation and environmental science, planning, and management.

Graduates will be able to integrate and critically assess diverse viewpoints and perspectives that increase their ability to effectively manage natural resources and the environment. Graduates will also be able to demonstrate reflection and expanded levels of empathy as applied to professional goals through both independent and interdisciplinary team-based work in relation to a variety of societal activities and levels of governance. Graduates will be able to define and apply sustainable natural resource management best practices as ethical and socially responsible; they will be able to examine ethical dilemmas and make ethically informed choices. Graduates will also be able to identify and evaluate the role of natural resource policy and regulation, economics, and markets, their development, and the application of frameworks used in conservation planning and management at various scales (from landscape to regional to international levels); they will also be able to connect the historical development of conservation and environmental philosophies with modern day methods that currently drive conservation and environmental policy, management, and planning.

Graduates will be able to synthesize ideas and information to identify, analyze, and address natural resource issues. They will critically evaluate and apply planning and management principles, processes, and best practices (e.g., appropriate theoretical and applied project frameworks, philosophies, policies, decision making, and strategic planning) using appropriate technologies (e.g. geospatial and data collection/analysis/management tools), and develop planning and management skills to productively address conservation and environmental issues across scales.

Rationale for the proposed change. Include an explanation of how the department will manage the added workload, if any.

Supporting
Documents

Requires TECC No
Review

Reviewer
Comments

Key: 223
Idaho State Board of Education
Proposal for Discontinuation
*(Fill out if discontinuing an academic program or certificate.)*

<table>
<thead>
<tr>
<th>Date of Proposal Submission:</th>
<th>September 1, 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institution Submitting Proposal:</td>
<td>University of Idaho</td>
</tr>
<tr>
<td>Name of College, School, or Division:</td>
<td>College of Natural Resources</td>
</tr>
<tr>
<td>Name of Department(s) or Area(s):</td>
<td>Department of Natural Resources and Society</td>
</tr>
</tbody>
</table>

**Program Identification for Proposed Discontinued Program:**

<table>
<thead>
<tr>
<th>Title:</th>
<th>Natural Resource Conservation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree/Certificate:</td>
<td>Bachelor’s of Science</td>
</tr>
<tr>
<td>Method of Delivery:</td>
<td>Face-to-Face</td>
</tr>
<tr>
<td>CIP code:</td>
<td></td>
</tr>
<tr>
<td>Proposed Discontinuation Date:</td>
<td>Fall Semester 2021</td>
</tr>
</tbody>
</table>

**Indicate whether this request is a discontinuation of either of the following:**

- [x] Undergraduate Program
- [ ] Graduate Program
- [ ] Undergraduate Certificate
- [ ] Graduate Certificate
- [ ] Other

**N/A**

<table>
<thead>
<tr>
<th>Graduate Dean (as applicable)</th>
<th>Date</th>
<th>State Administrator, IDCTE</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Sept 25, 2020</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>College Dean (Institution)</th>
<th>Date</th>
<th>Academic Affairs Program Manager</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>FVP/Chief Fiscal Officer (Institution)</th>
<th>Date</th>
<th>Chief Financial Officer</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Provost/VP for Instruction (Institution)</th>
<th>Date</th>
<th>Chief Academic Officer, OSBE</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Revised 3/28/16
1. **Provide rationale for the discontinuance.**

The College of Natural Resources is the administrative home of the campus-wide Environmental Science Program at the University of Idaho. Over time the Environmental Science B.S. degree (in particular the Social Science Option) and the Natural Resource Conservation B.S. degree developed a significant deal of content overlap, particularly in the areas of environmental planning, policy, and natural resource management. As a result these two programs often competed for students who were seeking expertise in the environmental social sciences.

Environmental Science programs are seeing significant enrollment growth across the country. We are poised to tap into this enrollment growth at the University of Idaho given our prominence as a state that enjoys a tremendous reputation in natural resource and environmental stewardship. As a result we propose a coordinated action where we 1) redesign the Environmental Science (ENVS) B.S. degree to more formally include environmental planning, policy, and natural resource management (in addition to other emphases), while also 2) discontinuing the Natural Resource Conservation (NRC) B.S. degree. In this way, we will be able to 1) streamline undergraduate offerings by eliminating unnecessary redundancy, 2) consolidate our undergraduate programs under the popular Environmental Science degree umbrella, and 3) initiate strategic branding and marketing of the Environmental Science program at the University of Idaho.

Following this rationale, the faculty of the Department of Natural Resources and Society voted in support of this discontinuance proposal with the condition that the proposed changes to the Environmental Science curriculum be adopted concurrent with this proposal. Fifteen of sixteen faculty voted, with the final vote tally on 9/1/2020 in support of this proposal being 12 yes, 0 no, and 3 abstain.

2. **Teach-out Plans/Options for currently enrolled students.**

   a. Describe teach-out plans for continuing students. Indicate the year and semester in which the last cohort of students was admitted and the final term the college will offer the program.

   The last cohort of students entering the NRC program will begin their program in Fall, 2020. We will continue to support the program for for six years, or until the last NRC major has graduated, whichever comes first. This is very attainable because all but one of the courses required for the current NRC program will continue to be offered under the ENVS umbrella.

   b. Is there an alternative program/major or field of study? If so, please describe.

   Yes, the ENVS program has been redesigned to include an emphasis in Policy, Planning and Management. This ENVS degree emphasis will contain all but one of the courses currently included in the discontinued NRC degree. As a result, students will be able to switch to this degree pathway with no disruption.

   c. How will continuing students be advised of impending changes and consulted about options or alternatives for attaining their educational goals?

   Faculty and Staff who currently support the NRC degree will continue to advise students in both the newly designed ENVS degree emphasis in Policy, Planning, and Management, as well as the

Revised 3/28/16
outgoing NRC degree during the teach-out.

3. Identify similar programs offered by other public colleges/universities (Not applicable to CTE programs).

<p>| Similar Programs offered by other Idaho institutions and by institutions in nearby states |</p>
<table>
<thead>
<tr>
<th>Institution Name</th>
<th>Degree name and Level</th>
<th>Program Name and brief description if warranted</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Utah State University</strong></td>
<td>B.S. Undergraduate</td>
<td>Recreation Resource Management: The Recreation Resource Management degree prepares students for careers in managing outdoor recreation settings. Students who pursue this degree might work in a visitor center or as an interpreter at a public forest or rangeland, state or national park, or wilderness area. Because these jobs require an understanding of both the land itself and the people who visit these areas, this degree offers a solid foundation in both the biological and social sciences.</td>
</tr>
<tr>
<td><strong>Washington State University</strong></td>
<td>B.S. Undergraduate</td>
<td>Environmental and Ecosystems Sciences: The Environmental and Ecosystems Sciences (EES) major at WSU features a broad interdisciplinary science and social science core coupled with a flexible advanced curriculum. This flexibility allows students to choose in-depth studies in an area of interest, minors, and hands-on research and management experience and to prepare for graduate school and management careers.</td>
</tr>
<tr>
<td><strong>University of Montana</strong></td>
<td>B.S. Undergraduate</td>
<td>Resource Conservation: Resource Conservation integrates classroom learning with hands-on field experiences and internships to prepare students for a range of conservation professions. Students develop a foundation in conservation science and then focus on the issues and topics they are most passionate about. Students can emphasize climate and environmental change, community conservation, ecology, environmental policy, international conservation, rangeland management and ecology, water resources, wilderness studies, or wildland fire management, or design their own emphasis working with faculty advisors.</td>
</tr>
</tbody>
</table>
4. Using the chart below, provide enrollments and numbers of graduates for similar existing programs at your institution and other Idaho public institutions.

<table>
<thead>
<tr>
<th>Existing Similar Programs: Historical enrollments and graduate numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institution and Program Name</td>
</tr>
<tr>
<td>-----------------------------------</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>BSU</td>
</tr>
<tr>
<td>ISU</td>
</tr>
<tr>
<td>UI</td>
</tr>
<tr>
<td>LCSC</td>
</tr>
</tbody>
</table>

5. Describe the impact the discontinuance will have on (a) other programs and (b) the mission of the institution.

Because we are coordinating the discontinuance of this program by integrating the content into the redesigned ENVS program, we anticipate that ENVS will see increased enrollment. We anticipate that the size of ENVS will increase not only by the number of students who traditionally enrolled in the NRC degree, but by greater amounts because ENVS is a more visible degree option for high school students. We expect this change to have a long term positive impact on the land grant mission of the UI because it is likely that more students will be served, and these students will be able to more effectively interact with employers and other stakeholders due to the reconfiguration of the ENVS degree to include the NRC content.

6. Describe the potential faculty and staff reductions or reassignments that would result from the discontinuance.

Faculty and staff will be reassigned to support the newly redesigned ENVS degree. Because the content of the new degree emphasis within ENVS is very similar to the NRC degree being discontinued, we expect that the transfer of expertise to the ENVS program will be seamless.

7. Fiscal Impact. Using the budget template provided, identify amount, if any, which would become available for redirection as a result of discontinuance.

Please see attached. Thank you.
Program Resource Requirements.
- Indicate all resources needed including the planned FTE enrollment, projected revenues, and estimated expenditures for the first four fiscal years of
- Include reallocation of existing personnel and resources and anticipated or requested new resources.
- Second and third year estimates should be in constant dollars.
- Amounts should reconcile subsequent pages where budget explanations are provided.
- If the program is contract related, explain the fiscal sources and the year-to-year commitment from the contracting agency(ies) or party(ies).
- Provide an explanation of the fiscal impact of any proposed discontinuance to include impacts to faculty (i.e., salary savings, re-assignments).

I. PLANNED STUDENT ENROLLMENT

<table>
<thead>
<tr>
<th>FY</th>
<th>FTE</th>
<th>Headcount</th>
</tr>
</thead>
</table>

A. New enrollments

<table>
<thead>
<tr>
<th>FY</th>
<th>FTE</th>
<th>Headcount</th>
</tr>
</thead>
</table>

B. Shifting enrollments

| Total Enrollment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

II. REVENUE

<table>
<thead>
<tr>
<th>FY</th>
<th>On-going</th>
<th>One-time</th>
</tr>
</thead>
</table>

1. New Appropriated Funding Request

2. Institution Funds

3. Federal

4. New Tuition Revenues from Increased Enrollments

5. Student Fees

6. Other (i.e., Gifts)

| Total Revenue | $0 | $0 | $0 | $0 | $0 | $0 | $0 |

*Ongoing is defined as ongoing operating budget for the program which will become part of the base.*

*One-time is defined as one-time funding in a fiscal year and not part of the base.*
### III. EXPENDITURES

<table>
<thead>
<tr>
<th></th>
<th>FY _______</th>
<th>FY _______</th>
<th>FY _______</th>
<th>FY _______</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>On-going</td>
<td>One-time</td>
<td>On-going</td>
<td>One-time</td>
</tr>
</tbody>
</table>

#### A. Personnel Costs

1. FTE

2. Faculty

3. Adjunct Faculty

4. Graduate/Undergrad Assistants

5. Research Personnel

6. Directors/Administrators

7. Administrative Support Personnel

8. Fringe Benefits

9. Other:

<table>
<thead>
<tr>
<th>Total Personnel and Costs</th>
<th>$0</th>
<th>$0</th>
<th>$0</th>
<th>$0</th>
<th>$0</th>
<th>$0</th>
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<th>$0</th>
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</table>
### B. Operating Expenditures

<table>
<thead>
<tr>
<th>Item</th>
<th>FY _______</th>
<th>FY _______</th>
<th>FY _______</th>
<th>FY _______</th>
<th>FY _______</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Travel</td>
<td></td>
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<tr>
<td>2. Professional Services</td>
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<tr>
<td>3. Other Services</td>
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<tr>
<td>4. Communications</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>5. Materials and Supplies</td>
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</tr>
<tr>
<td>6. Rentals</td>
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</tr>
<tr>
<td>7. Materials &amp; Goods for Manufacture &amp; Resale</td>
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<tr>
<td>8. Miscellaneous</td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>

**Total Operating Expenditures**

|            | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |

### C. Capital Outlay

<table>
<thead>
<tr>
<th>Item</th>
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<th>FY _______</th>
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<tbody>
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<td>1. Library Resources</td>
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<tr>
<td>2. Equipment</td>
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</table>

**Total Capital Outlay**

|            | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |

Draft-Novel-6, 2015

Page 3
D. Capital Facilities
Construction or Major
Renovation

E. Other Costs

Utilities

Maintenance & Repairs

Other

Total Other Costs $0 $0 $0 $0 $0 $0 $0 $0 $0 $0

TOTAL EXPENDITURES: $0 $0 $0 $0 $0 $0 $0 $0 $0 $0

Net Income (Deficit) $0 $0 $0 $0 $0 $0 $0 $0 $0 $0

Budget Notes (specify row and add explanation where needed; e.g., "I.A., B. FTE is calculated using..."):
All courses in the discontinued Natural Resources Conservation (NRC) degree will be offered in the newly redesigned Environmental Science (ENVS) degree that will now include an NRC-type emphasis area. As a result, all faculty teaching these courses will continue to teach and advise students in the redesigned ENVS degree. We expect enrollment in these courses to grow due to the popularity of ENVS degrees that have relatively higher visibility to high school students."
Program Change Request

Date Submitted: 10/21/20 3:05 pm

Viewing: **105 : Environmental Science (BSENVY)**

Last edit: 11/30/20 4:04 pm
Changes proposed by: Joana Espinoza (V00370901)

Catalog Pages Using this Program

[Environmental Science (B.S.Env.S.)]

Faculty Contact

In Workflow
1. 257 Chair
2. 11 Curriculum Committee Chair
3. Registrar's Office
4. Assessment
5. Curriculum Review
6. Registrar's Office
7. Registrar's Office
8. UCC
9. Faculty Senate Chair
10. UFM
11. President's Office
12. State Approval
13. NWCCU

Approval Path
1. 10/21/20 3:50 pm
   Joana Espinoza (jespinoza):
   Approved for 257 Chair
2. 10/21/20 3:53 pm
   Joana Espinoza (jespinoza):
   Approved for 11 Curriculum Committee Chair
3. 11/04/20 5:39 pm
   Amy Kingston (amykingston):
   Approved for Registrar's Office
4. 11/09/20 8:11 am
   Sara Mahuron
<table>
<thead>
<tr>
<th>Faculty Name</th>
<th>Faculty Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lee Vierling</td>
<td><a href="mailto:leev@uidaho.edu">leev@uidaho.edu</a></td>
</tr>
</tbody>
</table>

**Change Type**

- Change academic component name (degree, major, option, emphasis, minor, concentration, or specialization)
- Discontinue Option, Emphasis, Concentration, or Specialization within a major

**Description of Change**

Overhauling emphases - see rationale

**Academic Level**

Undergraduate

**College**

Natural Resources

**Department/Unit:**

Environmental Science

**Effective Catalog Year**

2021-2022

(sara): Approved for Assessment

5. 11/13/20 1:24 pm

Rebecca Frost (rfrost): Approved for Curriculum Review

6. 11/25/20 10:54 am

Amy Kingston (amykingston): Approved for Registrar's Office

7. 11/25/20 11:19 am

Amy Kingston (amykingston): Approved for Registrar's Office

8. 11/30/20 4:12 pm

Rebecca Frost (rfrost): Approved for UCC
Program Title
Environmental Science (BSENV)

Program Credits 120

CIP Code 03.0104 - Environmental Science.

Emphasis/Option
CIP Code(s)

Curriculum:

Required course work includes the university requirements (see regulation J-3), the general requirements for the B.S. degree, and:

- **BIOL 114** Organisms and Environments 4
- **COMM 101** Fundamentals of Oral Communication (OR one semester of a foreign language course) 2-3
  
  or **COMM 233** Interpersonal Communication

- **ENVS 101** Introduction to Environmental Science 3
- **ENVS 102** Field Activities in Environmental Sciences 1
- **ENVS 201** Careers in the Env Sciences 3
- **ENVS 300** (s) Environmental Sci Seminar 1-16
- **ENVS 498** Internship 1

  - **FOR/NRS 375** Introduction to Spatial Analysis for Natural Resource Management
  - or **GEOG 385** GIS Primer
  - **FOR/NRS 472** Remote Sensing of the Environment
  - **GEOG 301** Meteorology
  - **GEOG 313** Global Climate Change
  - **GEOG 401** Climatology
  - **GEOG 483** Remote Sensing/GIS Integration
  - **GEOL 361** Geology and the Environment
  - **MATH 175** Calculus I
  - **PHYS 111** General Physics I
    
    & 111L, and General Physics I Lab
  - **PHYS 112** General Physics II
    
    & 112L, and General Physics II Lab
  - **PHYS 211** Engineering Physics I
    
    & 211L, and Laboratory Physics I
  - **PHYS 212** Engineering Physics II
    
    & 212L, and Laboratory Physics II
  - **SOIL 205** The Soil Ecosystem
  - **WLF 482** Ornithology
  - **STAT 251** Statistical Methods 3
or **STAT 301**

Choose one course from the following:

- **BIOL-314** Ecology and Population Biology
- **FOR/REM** Principles of Ecology
- **221/WLF-220**
- **GEOG-410** Biogeography
- **NR-321** Ecology
- **ENVS 225** International Environmental Issues Seminar
- **ENVS 490** [Course ENVS 490 Not Found] 1-16
- **AIST 314** Tribal Sovereignty and Federal Policy
- **ENVS 479** Introduction to Environmental Regulations
- **ENVS 577** Law Ethics and the Environment
- **IS-322** Int'l Environmental Governance
- **NRS-311** Public Involvement in Natural Resource Management
- **NRS/POLS 364** Politics of the Environment
- **NRS/POLS 462** Natural Resource Policy

Choose one course from the following:

- **AGEC-451** Applied Environmental and Natural Resource Economics
- **AIST-344** Indigenous Ways of Knowing
- **ANTH/SOC-465** Environmental Justice
- **HIST-424** American Environmental History
- **ECON 202** Principles of Microeconomics
- **ECON 272** Foundations of Economic Analysis
- **GEOG-345** Global Economic Geography
- **NRS/FOR-235** Society and Natural Resources
- **NRS-383** Natural Resource and Ecosystem Service Economics
- **SOC-350** Food, Culture, and Society

**Water—one course from the following:**

- **ASM-315** Irrigation Systems and Water Management
- **BE-453** Northwest Climate and Water Resources Change

Choose one course from the following:

- **GEOL 309** Ground Water Hydrology

**Sustainability and Integration—one course from the following:**

- **ENVS-415** Environmental Lifecycle Assessment
- **ENVS-428** Pollution-Prevention
- **ENVS-484** History of Energy
- **ENVS-485** Energy Efficiency and Conservation
- **FS-436** Principles of Sustainability
- **GEOG-435** Climate Change Mitigation
- **ENVS-386** Managing Complex Environmental Systems
- **REM-456** Integrated-Rangeland Management
Technical—three courses from the following: 3–12

- BIOL-115 Cells and the Evolution of Life
- and Cells and the Evolution of Life Laboratory
- BIOL-250 General Microbiology
- BIOL-483 Mammalogy
- BIOL-489 Herpetology
- CHEM-253 Quantitative Analysis
- & CHEM-254 and Quantitative Analysis: Lab
- CHEM-275 Carbon Compounds
- CHEM-277 Organic Chemistry†
- ENVS 450 Environmental Hydrology
- FISH 415 Limnology
- FOR 462 Watershed Science and Management

Choose one course from the following: 4

- GEOG-100 Physical Geography
- and Physical Geography Lab
- GEOL-101 Physical Geology
- and Physical Geology Lab
- GEOL-111 Physical Geology for Science Majors
- & 111L and Physical Geology for Science Majors Lab
- SOIL-205 The Soil Ecosystem
- & SOIL-206 and The Soil Ecosystem Lab
- ENVS 497 Senior Research
- ENGL-316 Environmental Writing
- or ENGL-317 Technical Writing
- or ENGL-318 Science Writing
- PHIL-452 Environmental Philosophy
- NRS 476 Env Proj Mgmt/Decision Making

Emphasis

Select one of the following options: 3–12

Select one of the following emphases: 53–68

- Ecological Restoration
  - ENVS-428 Pollution Prevention
  - ENV S-429 Environmental Audit
  - GEOL-375 Geology of National Parks
  - REM-407 GIS Application in Fire Ecology and Management
  - REM-459 Rangeland Ecology
- Policy, Planning, and Management
- Culture and Communication
- Integrated Sciences
- Sustainability Sciences (Online only)
A. Biological Science Option

This option is suitable for students wishing to pursue technically oriented careers in environmental professions such as natural resource management, bioremediation, and environmental impact analysis.

Ecological Restoration Emphasis

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tr>
<td>BIOL 250</td>
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<td>BIOL 115</td>
<td>Cells and the Evolution of Life</td>
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<td>BIOL 115L</td>
<td>Cells and the Evolution of Life Laboratory</td>
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<td>CHEM 111</td>
<td>General Chemistry I</td>
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<tr>
<td>CHEM 111L</td>
<td>General Chemistry I Laboratory</td>
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<td>CHEM 112</td>
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<td>CHEM 112L</td>
<td>General Chemistry II Lab</td>
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<td>NRS 310</td>
<td>Social Science Methods</td>
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<td>PHIL 452</td>
<td>Environmental Philosophy</td>
<td>3</td>
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</table>

Choose one course from the following:

- ENGL 316  Environmental Writing
- ENGL 317  Technical Writing
- ENGL 318/JAMM 328  Science Writing
- NRS 387  Environmental Communication Skills
- WLF 370  Management and Communication of Scientific Data

Choose one course from the following:

- ENGL 322  Studies in Environmental Literature and Culture
- HIST 424  American Environmental History

Choose one course from the following:

- GEOG 313  Global Climate Change
- GEOG 410  Biogeography
- GEOG 435  Climate Change Mitigation
- GEOG 455  Societal Resilience and Adaptation to Climate Change

Choose one course from the following:

- ENVS/NRS 386  Managing Complex Environmental Systems
- GEOG 420  Land, Resources, and Environment
- NRS 235  Society and Natural Resources
- NRS 311  Public Involvement in Natural Resource Management
- SOC 466  Climate Change and Society
- SOC 340  Environmental Sociology and Globalization
Choose one course from the following: 3

- ENVS 479  Introduction to Environmental Regulations
- GEOG 488  Geography of Energy Systems
- NRS/POLS 364  Politics of the Environment
- NRS/POLS 462  Natural Resource Policy
- NRS 488  NEPA in Policy and Practice

Choose one course from the following: 4

- MATH 160  Survey of Calculus

Select 4 electives from at least two of the following areas: 20

Plant Protection:
- ENT 322  General and Applied Entomology
- PLSC 338  Weed Control
- PLSC 410  Invasive Plant Biology
- PLP 415  Plant Pathology
- SOIL 446  Soil Fertility

Animal Ecology:
- WLF 314  Ecology of Terrestrial Vertebrates
- WLF 315  Techniques Laboratory
- WLF 440  Conservation Biology I
- WLF 448  Fish and Wildlife Population Ecology I

Aquatic Ecology (Take all three courses):
- FISH 314  Fish Ecology
- FISH 415  Limnology
- FISH 430  Riparian Ecology and Management

Forest and Range Systems:
- FOR 330  Terrestrial Ecosystem Ecology
- FOR 426  Global Fire Ecology and Management
- REM 411  Wildland Habitat Ecol & Assmnt
- REM 429  Landscape Ecology
- MATH 170  Calculus I

Choose one sequence from the following: 4-5

- GEOG 100 & 100L  Physical Geography and Physical Geography Lab
- GEOL 111 & GEOL 101L  Physical Geology for Science Majors and Physical Geology Lab
- SOIL 205 & SOIL 206  The Soil Ecosystem and The Soil Ecosystem Lab

Choose one course from the following: 3

- FOR/REM 221  Principles of Ecology
- WLF 220  Principles of Ecology

Choose one course from the following: 3
ENVS 428  Pollution Prevention
ENVS 429  Environmental Audit
FS 409  Princ Environmental Toxicology
SOIL-425  Microbial-Ecology
SOIL-438  Pesticides in the Environment
SOIL-454  Pedology
Water:
ENVS-450  Environmental Hydrology
FOR-462  Watershed Science and Management
GEOL-309  Ground-Water Hydrology
GEOL-410  Groundwater Field Methods
HYDR-412  Environmental Hydrogeology
Geospatial-Tools (take at least 3 of the 6 courses listed below):
FOR-472  Remote Sensing of the Environment
GEOG-385  GIS-Primer
GEOG-424  Hydro-Apps/GIS&Remote Sensing
GEOG-475  Intermediate-GIS
GEOG-483  Remote Sensing/GIS-Integration
LARC-495  GIS-Applications in Land-Planning 2
Climate Change-and-Ecosystems (Take all three courses):
GEOL 361  Geology and the Environment
INDT 364  Hazardous Materials
Choose one course from the following:  
BE 433  Bioremediation
SOIL 422  Environmental Soil Chemistry
SOIL 452  Environmental Water Quality
Choose 3 credits from the following:  
FISH 496  Intro to Aquatic Restoration
PLSC 419  Plant Community Restoration Methods
REM 280  Introduction to Wildland Restoration
REM/NRS 440  Restoration Ecology
REM-459  Rangeland-Ecology
Soils:
Choose one course from the following:  
AGEC 477  Law Ethics and the Environment
NRS 311  Public Involvement in Natural Resource Management
NRS 383  Natural Resource and Ecosystem Service Economics
Total Hours  
58-59
Courses to total 120 credits for this degree

1 Either WLF 440%7C or WLF 448%7C may be used as a depth elective.

https://nextcatalog.uidaho.edu/courseleaf/approve/
B. Physical Science Option

This option is suitable for students wishing to pursue technical careers in environmental professions such as air, soil, and water pollution abatement, hazardous waste management, waste minimization, and ecological restoration:

Policy Planning and Management

Select 4 electives from at least two of the following areas:

Water:
- ENVS 450 Environmental Hydrology
- FOR 462 Watershed Science and Management
- GEOL 309 Ground Water Hydrology
- GEOL 410 Groundwater Field Methods
- HYDR 412 Environmental Hydrogeology

Hazardous Waste:
- BE 433 Bioremediation
- BE 452 Environmental Water Quality
- BIOL 380 Biochemistry†
- CHEM 418 Environmental Chemistry
- ENVS 479 Introduction to Environmental Regulations
- FS 409 Princ Environmeental Toxicology

Geology:
- GEOL 335 Geomorphology
- GEOL 361 Geology and the Environment
- GEOL 422 Principles of Geophysics
- GEOL 423 Principles of Geochemistry

Mathematics and Statistics:
- MATH 175 Calculus II
- MATH 275 Calculus III
- MATH 310 Ordinary Differential Equations
- STAT 431 Statistical Analysis

Soils:
- CHEM 418 Environmental Chemistry
- SOIL 415 Soil and Environmental Physics
- SOIL 422 Environmental Soil Chemistry
- SOIL 454 Pedology

Economics and Management (take both courses):
- OM 378 Project Management
- ENVS 428 Pollution Prevention
Geospatial Tools (take at least 3 of the 4 courses):
- **FOR 472** Remote Sensing of the Environment
- **GEOG 385** GIS Primer
- **GEOG 424** Hydro-Apps/GIS & Remote Sensing
- **GEOG 483** Remote Sensing/GIS Integration

Climate Change and Emissions Reduction:
- **ENVS 485** Energy Efficiency and Conservation

<table>
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<tr>
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<th>Course Title</th>
<th>Credits</th>
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<tr>
<td><strong>ENVS/NRS 475</strong></td>
<td>Local &amp; Regional Env Planning</td>
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<tr>
<td><strong>NRS 235</strong></td>
<td>Society and Natural Resources</td>
<td>3</td>
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<tr>
<td><strong>NRS 310</strong></td>
<td>Social Science Methods</td>
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<tr>
<td><strong>NRS 311</strong></td>
<td>Public Involvement in Natural Resource Mgmt</td>
<td>3</td>
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<tr>
<td><strong>NRS/POLS 364</strong></td>
<td>Natural Resource and Ecosystem Service Econ</td>
<td>3</td>
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<td><strong>NRS 387</strong></td>
<td>Environmental Communication Skills</td>
<td>3</td>
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<tr>
<td><strong>NRS/POLS 462</strong></td>
<td>Natural Resource Policy</td>
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<tr>
<td><strong>NRS 476</strong></td>
<td>Env Proj Mgmt/Decision Making</td>
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Choose one course sequence from the following: 4-5

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<tr>
<td><strong>CHEM 101</strong></td>
<td>Introduction to Chemistry</td>
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<td>&amp; <strong>101L</strong></td>
<td>and Introduction to Chemistry Laboratory</td>
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<td><strong>CHEM 111</strong></td>
<td>General Chemistry I</td>
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<td>&amp; <strong>111L</strong></td>
<td>and General Chemistry I Laboratory</td>
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<td><strong>BIOL 114</strong></td>
<td>Organisms and Environments</td>
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Choose one course sequence from the following: 3-4

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<td>&amp; <strong>100L</strong></td>
<td>and Physical Geography Lab</td>
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<td>Physical Geology</td>
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<td>and Physical Geology Lab</td>
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<td><strong>GEOL 111</strong></td>
<td>Physical Geology for Science Majors</td>
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<td>&amp; <strong>GEOL 101L</strong></td>
<td>and Physical Geology Lab</td>
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<tr>
<td><strong>SOIL 205</strong></td>
<td>The Soil Ecosystem</td>
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<tr>
<td>&amp; <strong>SOIL 206</strong></td>
<td>and The Soil Ecosystem Lab</td>
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Choose one course from the following: 3

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<tr>
<td><strong>MATH 143</strong></td>
<td>College Algebra</td>
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<tr>
<td><strong>MATH 160</strong></td>
<td>Survey of Calculus</td>
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<td><strong>MATH 170</strong></td>
<td>Calculus I</td>
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Choose one course from the following: 3

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<tr>
<td><strong>GEOG 313</strong></td>
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<td><strong>GEOG 401</strong></td>
<td>Climatology</td>
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<tr>
<td><strong>GEOG 435</strong></td>
<td>Climate Change Mitigation</td>
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<tr>
<td><strong>FOR/REM 221</strong></td>
<td>Principles of Ecology</td>
</tr>
<tr>
<td><strong>WLF 220</strong></td>
<td>Principles of Ecology</td>
</tr>
</tbody>
</table>
Choose one course from the following:  
- ENGL 316 Environmental Writing  
- ENGL 317 Technical Writing  
- ENGL 318/JAMM 328 Science Writing  
- WLF 370 Management and Communication of Scientific Data  

Choose one course from the following:  
- BIOL 314 Ecology and Population Biology  
- FOR 326 Fire Ecology  
- NRS/REM 440 Restoration Ecology  
- REM 429 Landscape Ecology  
- REM 459 Rangeland Ecology  
- REM 460 Integrated Field Studies in Rangelands  
- WLF 440 Conservation Biology  

Choose one course from the following:  
- AGE 477 Law Ethics and the Environment  
- ENVS 386 Managing Complex Environmental Systems  
& NRS 386 and Managing Complex Environmental Systems  
- IS 322 Int'l Environmental Governance  

Choose one course from the following:  
- NRS 472 Remote Sensing of the Environment  
- NRS 478 LIDAR and Optical Remote Sensing Analysis  

Total Hours  55-59  

Courses to total 120 credits for this degree  

C. Physical Science 2 Option This option is only available to students in Coeur d'Alene and Idaho Falls. Culture and Communication  

Select 4 electives from at least two of the following areas:  

Water:  
- CE 433 Water Quality Management  
- ENVS 450 Environmental Hydrology  
- FISH 540 Wetland Restoration  
- GEO 309 Ground Water Hydrology  

Mathematics and Statistics:  
- MATH 175 Calculus II  
- MATH 275 Calculus III  
- MATH 310 Ordinary Differential Equations  
- STAT 431 Statistical Analysis  

Management Tools (take three of the following):  
- ENVS 415 Environmental Lifecycle Assessment  
- ENVS 428 Pollution Prevention
GEOG 385  GIS Primer
GEOG 475  Intermediate-GIS
GEOG 424  Hydro-Apps/GIS&Remote Sensing
INDT 364  Hazardous Materials
INDT 448  Project and Program Management

Environmental Policy and Regulations (Take three of the following):
NRS 572  Human Dimensions of Restoration Ecology
ENVS 429  Environmental Audit
ENVS 436  Principles of Sustainability
ENVS 479  Introduction to Environmental Regulations
ENVS 482  Natural Resource Policy and Law

Energy Systems:
GEOG 453  Water and Energy Systems
ENVS 484  History of Energy
ENVS 485  Energy Efficiency and Conservation
INDT 415  Impact of Technology on Society
INDT 434  Power Generation and Distribution

Sustainability Science:
ENVS 415  Environmental Lifecycle Assessment
ENVS 428  Pollution Prevention
ENVS 436  Principles of Sustainability
FS 409  Princ Environmental Toxicology
INDT 457  Lean to Green Sustainable Technology

ENGL 322  Studies in Environmental Literature and Culture  3
ENVS/NRS 386  Managing Complex Environmental Systems  3
NRS 235  Society and Natural Resources  3
PHIL 352  Philosophy, Politics, and Economics  3
HIST 424  American Environmental History  3
PHIL 452  Environmental Philosophy  3

Choose one course sequence from the following:  4

CHEM 101  Introduction to Chemistry
& 101L  and Introduction to Chemistry Laboratory
CHEM 111  General Chemistry I
& 111L  and General Chemistry I Laboratory
BIOL 114  Organisms and Environments

Choose one course sequence from the following:  4-5

GEOG 100  Physical Geography
& 100L  and Physical Geography Lab
GEOL 101  Physical Geology
& 101L  and Physical Geology Lab
**GEOL 111**  | Physical Geology for Science Majors  
& **GEOL 101L**  | and Physical Geology Lab  
**SOIL 205**  | The Soil Ecosystem  
& **SOIL 206**  | and The Soil Ecosystem Lab

Choose one course from the following:  
**MATH 143**  | College Algebra  
**MATH 160**  | Survey of Calculus  
**MATH 170**  | Calculus I

Choose one course from the following:  
**GEOG 313**  | Global Climate Change  
**FOR/REM 221**  | Principles of Ecology  
**WLF 220**  | Principles of Ecology

Choose one course from the following:  
**ENGL 316**  | Environmental Writing  
**ENGL 317**  | Technical Writing  
**ENGL 318/JAMM 328**  | Science Writing

Choose one course from the following:  
**GEOG 420**  | Land, Resources, and Environment  
**SOC 340**  | Environmental Sociology and Globalization  
**SOC 341**  | Science, Technology, and Society  
**SOC/ANTH 350**  | Food, Culture, and Society

Choose one course from the following:  
**PHIL 351**  | Philosophy of Science  
**PHIL 417**  | Philosophy of Biology  
**PHIL 450**  | Ethics in Science

Choose one course from the following:  
**NRS/POLS 462**  | Natural Resource Policy  
**POLS/NRS 364**  | Politics of the Environment

Choose one course from the following:  
**COMM 410**  | Conflict Management  
**NRS 387**  | Environmental Communication Skills

Choose one course from the following:  
**GEOG 435**  | Climate Change Mitigation  
**GEOG 455**  | Societal Resilience and Adaptation to Climate Change

Choose one course from the following:  
**SOC 342**  | Gender and Science  
**SOC 346**  | Responding to Risk  
**SOC 465**  | Environmental Justice  
**SOC 466**  | Climate Change and Society

**Total Hours**  
3-4  
3  
3  
3  
3  
3  
3  
3  
3  
53-55

**Courses to total 120 credits for this degree**
D. Social Science Option

This option is suitable for students wishing to pursue careers in environmental professions such as environmental regulation, land use planning, environmental administration, and as a pre-law program. For environmentallaw.

**Integrated Sciences**

<table>
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<tr>
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<th>Credits</th>
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<td>ENGL 309</td>
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<tr>
<td>or PHIL 201</td>
<td>Critical Thinking</td>
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<tr>
<td>SOG 309</td>
<td>Social Science Research Methods</td>
<td>3</td>
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<tr>
<td>or NRS 319</td>
<td>Social Science Methods</td>
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<tr>
<td>NRS 310</td>
<td>Social Science Methods</td>
<td>4</td>
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<tr>
<td>PHIL 452</td>
<td>Environmental Philosophy</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose one course sequence from the following: 3-4

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 101</td>
<td>Introduction to Chemistry</td>
<td></td>
</tr>
<tr>
<td>&amp; 101L</td>
<td>and Introduction to Chemistry Laboratory</td>
<td></td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry I</td>
<td></td>
</tr>
<tr>
<td>&amp; 111L</td>
<td>and General Chemistry I Laboratory</td>
<td></td>
</tr>
<tr>
<td>BIOL 114</td>
<td>Organisms and Environments</td>
<td></td>
</tr>
</tbody>
</table>

Choose one course sequence from the following: 4-5

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 100</td>
<td>Physical Geography</td>
<td></td>
</tr>
<tr>
<td>&amp; 100L</td>
<td>and Physical Geography Lab</td>
<td></td>
</tr>
<tr>
<td>GEOL 101</td>
<td>Physical Geology</td>
<td></td>
</tr>
<tr>
<td>&amp; 101L</td>
<td>and Physical Geology Lab</td>
<td></td>
</tr>
<tr>
<td>GEOL 111</td>
<td>Physical Geology for Science Majors</td>
<td></td>
</tr>
<tr>
<td>&amp; 111L</td>
<td>and Physical Geology for Science Majors Lab</td>
<td></td>
</tr>
<tr>
<td>SOIL 205</td>
<td>The Soil Ecosystem</td>
<td></td>
</tr>
<tr>
<td>&amp; SOIL 206</td>
<td>and The Soil Ecosystem Lab</td>
<td></td>
</tr>
</tbody>
</table>

Choose one course from the following: 3-4

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 143</td>
<td>College Algebra</td>
<td></td>
</tr>
</tbody>
</table>

Select 5 depth electives from one of the following areas: 15

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 160</td>
<td>Survey of Calculus</td>
<td></td>
</tr>
<tr>
<td>MATH 170</td>
<td>Calculus I</td>
<td></td>
</tr>
</tbody>
</table>

Choose one course from the following: 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOR/REM 221</td>
<td>Principles of Ecology</td>
<td></td>
</tr>
<tr>
<td>WLF 220</td>
<td>Principles of Ecology</td>
<td></td>
</tr>
</tbody>
</table>

Choose one course from the following: 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 316</td>
<td>Environmental Writing</td>
<td></td>
</tr>
<tr>
<td>ENGL 317</td>
<td>Technical Writing</td>
<td></td>
</tr>
<tr>
<td>ENGL 318/JAMM 328</td>
<td>Science Writing</td>
<td></td>
</tr>
</tbody>
</table>
NRS 387  Environmental Communication Skills
FOR 484  Forest Policy and Administration
GEOG 330  Urban Geography
POLS 364  Politics of the Environment
POLS 451  Public Administration
POLS 454  Public Organization Theory
POLS 462  Natural Resource Policy
PSYC 416  Industrial/Organizational Psychology
WLF 370  Management and Communication of Scientific Data

Choose one course from the following: 3
  GEOG 313  Global Climate Change
  GEOG 411  Natural Hazards and Society
  GEOG 435  Climate Change Mitigation
  GEOG 435  Climate Change Mitigation
  LARC 380  Water Conservation Technologies
  LARC 480  The Resilient Landscape
  GEOG 455  Societal Resilience and Adaptation to Climate Change
  NRS 383  Natural Resource and Ecosystem Service Economics

Choose one course from the following: 3
  ENVS/NRS 386  Managing Complex Environmental Systems
  ENVS 420  Intro to Bioregional Planning
  ENVS 423  Planning Sustainable Places
  GEOG 420  Land, Resources, and Environment
  NRS 235  Society and Natural Resources
  NRS 311  Public Involvement in Natural Resource Management
  SOC 466  Climate Change and Society
  SOC 465  Environmental Justice

Choose one course from the following: 3
  AGEC 477  Law Ethics and the Environment
  NRS/POLS 364  Politics of the Environment
  NRS/POLS 462  Natural Resource Policy
  ENVS 479  Introduction to Environmental Regulations
  PHIL 470  Philosophy of Law
  POLLS 364  Politics of the Environment
  POLLS 467  Constitutional Law
  POLLS 468  Civil Liberties
  GEOG 488  Geography of Energy Systems
  NRS 488  NEPA in Policy and Practice

Students must also take one additional upper division course across five different topic area bins 15
  Advanced Technical
  Climate Change
ACCT 482  Enterprise Accounting
COMM 410  Conflict Management
NRS 386  Managing Complex Environmental Systems

Communication
ARCH 151  Introduction to the Built Environment
ARCH 266  Materials and Methods
ARCH 463  Environmental Control Systems I
ARCH 464  Environmental Control Systems II

Contaminants
ENVS 479  Introduction to Environmental Regulations
ENVS 484  History of Energy
ENVS 485  Energy Efficiency and Conservation

Earth Science
Ecology
Economics
Energy
Geospatial
Human Dimensions
Planning
Policy
Sustainability
Water

Students must also complete one minor, certificate, or accredited semester long academic program. 2 12-18
Total Hours 59-68

1 Please contact the department to see a "Class list by Topic" spreadsheet of available courses.
2 Please contact the department for approved minors, certificates and academic programs.

Courses to total 120 credits for this degree

---E. Sustainability Sciences (Online only) Biophysical Science Option---

This option is intended for students at a distance wishing to pursue technically oriented careers in environmental professions such as natural resource management, bioremediation, and environmental impact analysis. Students need to work closely with an academic advisor to plan the courses needed to fulfill degree requirements which are not available through distance delivery.

BIOL 115  Cells and the Evolution of Life 3
BIOL 115L  Cells and the Evolution of Life Laboratory 1
BIOL 250  General Microbiology 3
or PHYS 111  General Physics I
CHEM 111  General Chemistry I 3
CHEM 111L  General Chemistry I Laboratory 1

https://nextcatalog.uidaho.edu/courseleaf/approve/
CHEM 112  General Chemistry II  3
CHEM 112L General Chemistry II Lab  2

Select one course sequence from the following:  4

PHYS 111  General Physics I
& 111L    and General Physics I Lab
PHYS 211  Engineering Physics I
& 211L    and Laboratory Physics I

Choose one course from the following:  4

MATH 160 Survey of Calculus
MATH 170 Calculus I

Earth Science - Choose one course sequence from the following:  4-5

GEOG 100 Physical Geography
& 100L    and Physical Geography Lab
GEOL 101 Physical Geology
& 101L    and Physical Geology Lab

Select 48 credits of electives, including at least one course from each of the following areas (all are available online):

GEOL 111 Physical Geology for Science Majors
& GEOL 101L and Physical Geology Lab
SOIL 205 The Soil Ecosystem
& SOIL 206 and The Soil Ecosystem Lab

Ecology - Choose one course from the following:  3

FOR/REM 221 Principles of Ecology
WLF 220 Principles of Ecology
BIOL 314 Ecology and Population Biology

Writing and Communication - Choose one course from the following:  3

ENGL 316 Environmental Writing
ENGL 317 Technical Writing
ENGL 318/JAMS 328 Science Writing
NRS 387 Environmental Communication Skills
WLF 370 Management and Communication of Scientific Data

Environmental Ethics and Philosophy:  3
PHIL 452 Environmental Philosophy

Select five of the following depth areas, and take at least 6 advisor-approved credits within each of the selected depth areas.  1

a. Mathematics, Physics, and Statistics
BE 452 Environmental Water Quality
MATH 175 Calculus II
MATH 275 Calculus III
MATH 310 Ordinary Differential Equations
PHYS 112 General Physics II
or PHYS 212  Engineering Physics II
PHYS 112L  General Physics II Lab
or PHYS 212L  Laboratory Physics II
STAT 301  Probability and Statistics
STAT 431  Statistical Analysis

b. Social Dimensions:
ENVS 423  Planning Sustainable Places
ENVS 428  Pollution Prevention
ENVS 484  History of Energy
FCS 411  Global Nutrition
INDT 415  Impact of Technology on Society
IS 322  Int'l Environmental Governance
NRS 235  Society and Natural Resources

c. Management Tools
ENVS 415  Environmental Lifecycle Assessment
ENVS 420  Intro to Bioregional Planning
ENVS 428  Pollution Prevention
ENVS 430  Planning Theory and Process
INDT 364  Hazardous Materials
INDT 448  Project and Program Management

d. Geospatial Tools:
GEOG 385  GIS Primer
GEOG 424  Hydro Apps/GIS&Remote Sensing
GEOG 475  Intermediate GIS
NRS/FOR 472  Remote Sensing of the Environment
NRS 478  LIDAR and Optical Remote Sensing Analysis
REM 407  GIS Application in Fire Ecology and Management

e. Environmental Policy and Regulations:
AGEC 477  Law Ethics and the Environment
ENVS 429  Environmental Audit
ENVS/FSP 436  Principles of Sustainability
ENVS 479  Introduction to Environmental Regulations
ENVS 482  Natural Resource Policy and Law
NRS 488  NEPA in Policy and Practice
POLS/NRS 462  Natural Resource Policy

f. Energy Systems:
GEOG 453  Water and Energy Systems
ENVS 484  History of Energy
FCS-411  Global Nutrition
ENVS 485  Energy Efficiency and Conservation
INDT 415  Impact of Technology on Society
INDT 434  Power Generation and Distribution

ENVS 420  Intro to Bioregional Planning
ENVS 415  Environmental Lifecycle Assessment
ENVS 423  Planning Sustainable Places
ENVS 428  Pollution Prevention
ENVS/FS 436  Principles of Sustainability
FS 409  Princ Environmental Toxicology
FS-436  Principles of Sustainability
GEOG 313  Global Climate Change
INDT 457  Lean to Green Sustainable Technology

h. Water and Soils:
SOIL 452  Environmental Water Quality
ENVS 450  Environmental Hydrology
SOIL 205  The Soil Ecosystem
SOIL 438  Pesticides in the Environment
SOIL 446  Soil Fertility

i. Restoration and Remediation:
BE 433  Bioremediation
FISH 496  Intro to Aquatic Restoration
FOR 426  Global Fire Ecology and Management
REM-221  Principles of Ecology
PLSC 419  Plant Community Restoration Methods
REM 280  Introduction to Wildland Restoration
REM 410  Principles of Vegetation Monitoring and Measurement
REM/NRS 440  Restoration Ecology
REM 459  Rangeland Ecology
SOIL 422  Environmental Soil Chemistry
SOIL 452  Environmental Water Quality
WLF 440  Conservation Biology

Total Hours 67-68

1 Courses listed more than once cannot double count across depth areas.
Courses to total 120 credits for this degree.

Distance Education Availability

To comply with the requirements of the Idaho State Board of Education (SBOE) and the Northwest Commission on Colleges and Universities (NWCCU) the University of Idaho must declare whether 50% or more of the curricular requirements of a program which may be completed via distance education.
Can 50% or more of the curricular requirements of this program be completed via distance education?

Yes No

If Yes, can 100% of the curricular requirements of this program be completed via distance education?

Yes

Note: Existing programs transitioning from less than 50% of its curricular requirements to 50% or more of its requirements being available via distance education is considered a Group C change and must complete the program proposal formwork before these changes will be processed.

Geographical Area Availability

Identify the geographical area(s) this program can be completed in:

Coeur d'Alene
Moscow

Student Learning Outcomes

Have learning outcomes changed?

Yes, more than 25%

Learning Objectives

Sustainability Sciences Emphasis

Biological Science Option: Students will be able to apply environmental science principles in biophysical within biological, physical; and social science contexts breadth areas, with a specialization to address societally relevant issues in apply knowledge of environmental science, management, and mitigation.

mitigation in at least one area: Students will be able to communicate environmental science, management, science principles and mitigation principles and applications effectively through writing, oral, and graphical writing and oral presentations.

Students will be able to demonstrate integrative environmental research and/or problem solving expertise that applies the scientific method for design, data collection, analysis, and reporting.

Students will be able to demonstrate how integrate technical expertise with socio-cultural and why fundamentals political dimensions of biophysical and social science contribute to environmental sustainability at the local, national, and international level.

Policy, Planning, and Management Emphasis

problem-solving.

Social Science Option: Students will be able to apply environmental science demonstrate the knowledge of foundational principles in biophysical and social science contexts to address societally relevant issues in environmental science, management, and mitigation.

the field of Environmental Science: Students will be able to communicate environmental science, management, and mitigation principles and applications effectively through writing, oral, and graphical presentations.
Students will be able to demonstrate integrative environmental research and/or problem solving expertise that applies the scientific method for design, data collection, analysis, and reporting.

Students will be able to demonstrate how core principles of policy and planning work within societal frameworks to complement and advance management decisions in the field of environmental science.

Ecological Restoration Emphasis
Students will be able to apply environmental science principles in biophysical and social science contexts to address societally relevant issues in environmental science, management, and mitigation.
Students will be able to communicate environmental science, management, and mitigation principles and applications effectively through writing, oral, and graphical presentations.
Students will be able to demonstrate integrative environmental research and/or problem solving expertise that applies the scientific method for design, data collection, analysis, and reporting.
Students will be able to demonstrate how core ecological principles are used to implement effective scientific approaches to environmental restoration and remediation.

Culture and Communication Emphasis
Students will be able to apply environmental science principles in biophysical and social science contexts to address societally relevant issues in environmental science, management, and mitigation.
Students will be able to communicate environmental science, management, and mitigation principles and applications effectively through writing, oral, and graphical presentations.
Students will be able to demonstrate integrative environmental research and/or problem solving expertise that applies the scientific method for design, data collection, analysis, and reporting.
Students will be able to demonstrate how and why cultural influences can affect societal decisions regarding key issues of environmental science.

Integrated Sciences Emphasis
Students will be able to apply environmental science principles in biophysical and social science contexts to address societally relevant issues in environmental science, management, and mitigation.
Students will be able to communicate environmental science, management, and mitigation principles and applications effectively through writing, oral, and graphical presentations.
Students will be able to demonstrate integrative environmental research and/or problem solving expertise that applies the scientific method for design, data collection, analysis, and reporting.
Students will be able to integrate biophysical expertise with socio-cultural dimensions of environmental problem-solving.

Students will be able to demonstrate integrative research expertise that applies the scientific method for design, data collection, analysis, and reporting. Students will be able to integrate technical expertise with socio-cultural and political dimensions of environmental problem-solving.

Summarize how the learning outcomes will be assessed for the proposed curriculum.

See attachment
Rationale for the proposed change. Include an explanation of how the department will manage the added workload, if any.

Change the name of the emphasis in Biophysical Sciences to Sustainability Sciences.
Remove the remaining emphases: Biological Sciences, Social Sciences, Physical Sciences, and Physical Sciences 2.
Add new emphases: Ecological Restoration; Policy, Planning, and Management; Culture and Communication; Integrated Sciences. Note these new emphases will have similar learning outcomes and needed resources as the old ones, but the names will better represent the overall program and career paths available to students.

Supporting Documents
- CNRENS 201(1).docx
- ENVS-CurricChange(25-Sep-20)_LV.docx
- CNRENS-ChangeNameEmphasisAreas_UPDATED.docx
- Environmental Science-Ecological Restoration_BSEnvS.xlsx

Requires TECC Review
- No

Reviewer

Comments
- **Joana Espinoza (jespinosa) (10/21/20 3:53 pm):** Amy see my email before approving.
- **Sara Mahuron (sara) (11/05/20 2:46 pm):** sent email to Lee Vierling. Need the outcomes for all the new emphases being created. I only see outcomes (I checked the attachments) for Sustainability Sciences, which will need to be renamed in the outcomes box. The other proposed new emphasis areas still need outcomes.
- **Sara Mahuron (sara) (11/09/20 8:09 am):** Updated the learning outcomes for all emphases per Lee Vierline (received requested changes and additions from Lee via email). All changes pasted from his email.
- **Rebecca Frost (rfrost) (11/09/20 12:31 pm):** Some issues with the curriculum with courses missing or having been deleted previously. The following curriculum problems exist: ENVS 300 - no record of this course exist. ENVS 446 - this course was discontinued and has been removed from this curriculum. ENVS 476 - no record of this course exists, and the listed cross-list NRS 476 has been put in its place. ENVS 420, ENVS 423, and ENVS 430 - no record of this course exists but it appears to be using a BIOP course title. ENVS 477 - no record of this course exists, but it is using the title of AGEC 477 and this has been used in its place. Most of these courses are in a choice list and will be removed if not remedied.
- **Amy Kingston (amykingston) (11/30/20 2:09 pm):** The course issues mentioned by Rebecca were resolved in cooperation with the department.
POLICY COVER SHEET
For instructions on policy creation and change, please see 
https://sitecore.uidaho.edu/governance/policy.

All policies must be reviewed, approved, and returned by the policy sponsor, with a cover sheet attached, to ui-policy@uidaho.edu.

Faculty Staff Handbook (FSH)
☐ Addition ☐ Revision*  X Deletion*  ☐ Emergency  ☐ Minor Amendment
Policy Number & Title: FSH 1440 ADMINISTRATIVE ORGANIZATION

Administrative Procedures Manual (APM)
☐ Addition ☐ Revision*  ☐ Deletion*  ☐ Emergency  ☐ Minor Amendment
Policy Number & Title:

*Note: If revision or deletion, request original document from ui-policy@uidaho.edu. All changes must be made using “track changes.”

Originator: Diane Whitney, University Policy and Compliance Coordinator

Policy Sponsor, if different from Originator:

Reviewed by General Counsel   x Yes ___No   Name & Date: Kent Nelson 4/27/20

1. Policy/Procedure Statement: Briefly explain the reason for the proposed addition, revision, and/or deletion.

   The Faculty-Staff Policy Group recommends deletion of FSH 1440 because it is not policy and simply links to a chart on the provost’s website. The chart will continue to be available after removal of this item from the FSH.

2. Fiscal Impact: What fiscal impact, if any, will this addition, revision, or deletion have? None.

3. Related Policies/Procedures: Describe other UI policies or procedures related or similar to this proposed change, or that will be impacted by it.

4. Effective Date: This policy shall be effective on July 1, or January 1, whichever arrives first after final approval (see FSH 1460 D) unless otherwise specified in the policy.
1440

ADMINISTRATIVE ORGANIZATION

(Chart on next page)
COVID-19 Advisory Committee Recommendation  
Regarding Sharing Testing Data

Overview

America’s leading research universities are at the forefront of supporting the fight against COVID-19 through diagnostic services, epidemiological and biological research, and data analysis and modeling. At the University of Idaho, we have demonstrated our strength in these areas. We have the potential to also lead Idaho and the region with respect to how we present campus COVID-19 data. President Green has highlighted his commitment to achieving Carnegie R1 status through critical investments in research support, and improving how we share COVID-19 data is consistent with that goal.

Below, we propose sharing data concisely and comprehensively through an interactive dashboard. Improved presentation of these data will not only enable our community to quickly and efficiently assess risk and demographic patterns of positivity, but will also more clearly highlight the successful implementation of COVID-19 surveillance, the positive impact of actions to limit COVID-19 in our community, and the agility and expertise of our faculty and staff in supporting the critical elements of real-time data analysis and data visualization.

What we propose below is also responsive to community concerns. ASUI recently sent a survey to all students asking about their experience attending the U of I during the pandemic. When asked “What could ASUI do to improve your student experience during the COVID-19 pandemic,” a majority of students responded that they wanted U of I “to communicate about COVID--be transparent about COVID cases.” This student feedback, along with feedback from ASUI, GPSA, faculty, staff, and students residing off-campus, inspired this committee to consider whether data could be shared more frequently via an interactive, graphic dashboard on the University’s COVID-19 website.

Sharing University COVID-19 Data Using Web-Based Dashboards

The committee recommends that U of I provide an interactive user interface that includes easy-to-read, detailed summaries and data visualization of current COVID-19 indicators and testing data. This information should be collected and shared on a web-based dashboard.

A team led by Dr. Howard Forman, Professor of Diagnostic Radiology at Yale University School of Public Health, and Dr. Cary Gross, Professor of Medicine and Public Health at Yale University School of Medicine has studied over 300 dashboards created by U.S. universities in response to the COVID-19 pandemic. They emphasize that “faculty, students, staff, and families should have clear and accessible information about how their institutions are monitoring COVID-19 spread, the results of COVID-testing programs, and clear information regarding the impact of COVID on all stakeholders, including the surrounding communities.” They have collected and shared their findings at the website We Rate Covid Dashboards.

In a Journal of the American Medical Association (JAMA) Health Forum article, they further explain their objective: “to engage the academic community and encourage meticulous reporting of COVID-19 data” (Ojo et al., 2020). The authors emphasize universities’ important role in informing the community during this grave public health crisis, and their potential contributions in generating scientific knowledge through reliable reporting.

An informative, accessible, and efficient web-based dashboard also provides immediate, practical benefits: it can alleviate anxiety and instill confidence in university decisionmaking.

Not all dashboards are created equal. The committee believes that the following features are key to creating an informative and effective web-based dashboard.

- Graphic presentation of data, including the total number of positive tests and the total number of tests.
- Frequent updates, ideally, every workday.
- The number of total positive cases, as well as the number of positive cases in the following categories: undergraduate students, graduate students, staff, and faculty.
- Information regarding the type of housing in which students who have tested positive reside (e.g., in residence halls, fraternity or sorority houses, off-campus).
- Information regarding the number of students who are currently self-isolating, in quarantine, or hospitalized, as well as the number of students who have recovered.
- Information regarding the current turn-around time for test results.
- Links to data regarding positivity rates at the city/county/state level.
- Links to data regarding positivity rates for all cities and counties in which the U of I has centers and facilities.

Ohio State University’s (OSU) dashboard is an excellent example of useful dashboard features. The OSU dashboard provides campus data and places it in context with shared state data. The dashboard permits viewers to filter the information they view and examine, for example, only on-campus cases. The dashboard further provides information regarding 7-day, cumulative, or single-day totals; separates on-campus and off-campus data; and provides options to view rolling average, cumulative, or single-day totals. Interactive buttons and filtering options provided by the OSU dashboard, for example, permit a user to toggle between different views or different time periods, maximizing the utility of the dashboard.

**COVID-19 Dashboard** [https://safeandhealthy.osu.edu/](https://safeandhealthy.osu.edu/)

**Daily Cases in Ohio**

Daily reported COVID-19 cases in Ohio from the Ohio Department of Health July 1, 2020 to October 22, 2020 [https://coronavirus.ohio.gov/wps/portal/covid-19/dashboards](https://coronavirus.ohio.gov/wps/portal/covid-19/dashboards)

**R(t) Numbers for Ohio**

COVID-19 reproduction number over time in Ohio and select areas, less than 1.0 is desirable. Based on data from the Ohio Department of Health July 1, 2020 to October 21, 2020

**Single Day Test Results for All Students by Test Date**

Data as of 10/22/2020 with data available through 10/20/2020

**Cumulative Tests**

<table>
<thead>
<tr>
<th>Students</th>
<th>B/14-10/20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pos. 3,385</td>
<td>Total 154,029</td>
</tr>
<tr>
<td>97.83%</td>
<td>2.17%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Employees</th>
<th>B/1-10/20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pos. 72</td>
<td>Total 3,212</td>
</tr>
<tr>
<td>97.70%</td>
<td>2.20%</td>
</tr>
</tbody>
</table>

**Isolation and Quarantine**

Isolation and quarantine beds available and occupied as of 10/20/2020

<table>
<thead>
<tr>
<th>Isolation</th>
<th>Quarantine</th>
<th>Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>44</td>
<td>41</td>
<td>962</td>
</tr>
</tbody>
</table>

**Notes**

- Student Testing – All student tests collected for any reason, using saliva, nasal, or nasopharyngeal samples.
- Employee Testing – All tests performed on faculty or staff using nasal or nasopharyngeal samples.
Idaho State University (ISU) has also created an effective dashboard for its testing data:

ISU’s dashboard includes explanatory notes when the number of positive rates rose suddenly.

The figure below compares how we present U of I testing data on our current COVID-19 website and what a graphical representation would look like. Though we recommend updating data daily, updating data in the below format would also be effective if done every 2-3 days. Presenting data graphically has the added benefit of communicating information objectively, whereas narratives can unintentionally skew interpretation of the data.
Creating the U of I’s Web-Based Dashboard

According to the U of I web team, there is no technological barrier to creating an interactive dashboard that will convey accurate and visual data. After the initial set-up, which includes the design, coding, designation of data files to “feed” the dashboard, current efforts can be redirected to update these data files to refresh the dashboard without the need for constructing narrative, memos, web editing, and so on. In this sense, an efficient and effective dashboard will be less error-prone than the current method, which requires manual editing in the U of I’s CMS platform. We have confirmed that building and maintaining such a dashboard can be done by the U of I web team.

The team behind We Rate Covid Dashboards, including Drs. Gross and Forman, has extended an offer to assist the U of I in setting up a data dashboard. Their offer of intellectual and IT support will allow us to implement a highly effective, straightforward, and intuitive dashboard model to be customized for our needs by our experts at the U of I. We have confirmed that building and maintaining such a dashboard can be done by the U of I web team.

These efforts will result in objectively determinant benefits to the health and well-being of the U of I, and affirm that the U of I is more than capable of earning Carnegie R1 status:

1. More detailed and frequent updates will allay fears of the unknown regarding COVID-19, which significant proportions of the University community are expressing.
2. Concise and comprehensive data visualization will enable viewers to assess COVID-19 risk temporally and spatially, as well as efforts to contain spread and mitigate risk. An effective dashboard will foster a sense of shared responsibility, and incentivize the community to sustain health-promoting behaviors.
3. An effective dashboard that is updated frequently will highlight the areas in which focused efforts are required to contain spread and mitigate risk.
4. Transparency of testing data will strengthen the trust between the administration and the University community, more effectively convey administrative successes in containing spread and mitigating risk, and affirm the sincerity of the administration’s concern for the well-being of our community.
5. An effective and comprehensive dashboard will define the substantial service and research capacity that our research faculty, staff, and students are providing to our campus, the community, the state, and the region. We are leaders; we have invested significantly in comprehensive COVID-19 testing, we have...
broad expertise and capacity, and an effective dashboard is not only critical for the health and well-being of the U of I, but also a point of pride that we are on track to become an R1 institution.

Conclusion

The U of I can build and maintain an effective, comprehensive, and transparent COVID-19 dashboard. This dashboard is critical to our health and well-being, as it can effectively convey successes in containment and risk mitigation and incentivize the community to sustain health-promoting behaviors.

Our U of I faculty, research staff, and students are well-positioned to establish an effective and comprehensive dashboard that provides transparent and digestible data in real-time to the U of I. This effort is consistent with our R1 goal, is enabled by our expertise, and will allow us to lead in the state and the region. High-quality, informative dashboard will highlight our comprehensive testing, the dedication of our university to the well-being of our community, and the commitment of the administration to ensuring that it is responsive to the needs and concerns of all members of our community.

References


University Assessment Committee

The University Assessment Committee, hereafter UAC, is a relatively new entity that first met in Fall 2017. A “committee charge” document exists, as well as a website listing committee members. The chair of the committee is listed on the website as Sara Mahuron, Associate Director of Assessment and Accreditation.

Relevant FSH Policy

FSH 1620 B-2.: The establishment, discontinuance, or restructuring of, and the assignment of responsibilities to, standing committees of the university faculty are policy actions that require approval by the Faculty Senate.

FSH 1620 B-6.: Ordinarily, no faculty committee will be chaired by an officer who is substantially responsible for implementing the policies or recommendations developed by the committee.

FSH 1620 B-7.: Unless otherwise noted within the structure of a committee in FSH 1640, chairs are selected by the Committee on Committees. The chairs of faculty standing committees generally are rotated so that no committee comes to be identified with one person.

Issues

UAC appears to be functioning outside faculty governance as it pertains to curriculum development, assessment, and approval.

- UAC has not been sanctioned by Faculty Senate; it does not exist in the Committee Directory (FSH 1640).
- No information is available on the University of Idaho website concerning the creation of UAC. For instance, under what authority was UAC created, what process was used to develop and approve the UAC’s charge, and how was UAC’s structure and membership determined?
- UAC appears to be duplicating assessment tasks charged to the University Teaching Committee (FSH 1640.87). Two functions of the University Teaching Committee, per FSH, are:
  - FSH 1640.87 A-2. To review and make recommendations concerning policies and procedures that affect teaching and the assessment of student, program and institutional learning outcomes. [rev. 10-19, 3-20]
  - FSH 1640.87 A-3. To monitor and advise on matters relating to student teaching evaluations and student learning outcomes, and to advise on the design and content of reports to the Vice Provost for Academic Initiatives, Faculty Senate, Institutional Assessment and Effectiveness, deans, unit leaders, and faculty. [ed. 7-09, rev. 10-19, 3-20]

Other concerns

- While it appears that UAC “is an advisory committee providing oversight of assessment,” this oversight is duplicative of the tasks assigned to the University Teaching Committee.
- One might argue that UAC is just “providing compliance” with accreditation guidelines, and compliance is an appropriate administrative function; in other words, is the institution ensuring that measurement and assessment student learning outcomes is taking place. The process to develop, refine, measure, and approve student learning outcomes, however, is a faculty task. Allowing administrators and staff to control the process undermines faculty control of curriculum and assessment.
- If the UAC was approved as a standing faculty committee sanctioned by FSH, how would the committee’s responsibilities differ from the University Teaching Committee?
University Assessment Committee

UAC Membership:

One representative from each college and/or each division/unit. One UG and GRAD student.

Purpose

This Committee facilitates communication, development, and implementation of Student Learning Outcomes Assessment in respective departments and colleges. The UAC will support the development of student learning assessment plans and reports that directly assess program-level student learning outcomes to ensure a quality education, continuous program improvement, and compliance with accreditation standards.

Duties

1. Facilitate communication between Institutional Effectiveness and Accreditation (IEA) and faculty/staff
2. Develop and implement assessment guidelines based on best practices
3. Provide faculty/staff development on assessment and program improvement related topics
4. Recognize those who are actively engaged in assessment work
5. Review and comment on results from university-wide assessment plans and reports
6. Review individual programs’ assessment plans and processes, including General Education, and recommend ways for improvement
7. Provide input and feedback on the online UI student learning outcomes reporting system
8. Serve as the subject matter expert in your college or area on student learning outcomes assessment and continuous program improvement
Program Review and Accreditation Committee

Purpose
This Committee positions the University to meet standards, policies, and procedures related to achieving Northwest Commissions on Colleges and Universities (NWCCU) accreditation and specialized accreditations. The committee provides recommendations on processes and intended outcomes, reviews and offers recommendations on draft specialized accreditation and external program review reports, and evaluates strengths and areas for growth in support of departments and colleges as part of the accreditation processes.

Duties
- Plan annual EPR Orientation each Fall semester
- Review EPRs and specialized accreditation reports and assist with feedback to programs and/or the Provost’s Office
- Review NWCCU reports and/or recommendations and provide input/feedback
- Provide input/feedback on the EPR online system and Institutional Memory Bank
- Assist with special projects pertaining to accreditation or EPR, as appropriate
- Advise on matters related to ongoing collection of data and evidence for accreditation standards
- Maintain a timeline for accreditation reporting
- Advise IEA on accreditation issues, as requested