

PROPOSAL TO CREATE 45-CREDIT NATURAL SCIENCE TEACHING ENDORSEMENT

CURRICULUM:

Must hold an existing endorsement in one of the following areas: Biological Science, Chemistry, Earth Science, Geology, or Physics; and complete a total of twenty-four (24) semester credit hours as follows:

- a. Existing Biological Science Endorsement. Eight (8) semester credit hours in each of the following areas: Physics, Chemistry, Earth Science/Geology.
- b. Existing Physics Endorsement. Eight (8) semester credit hours in each of the following areas: Biology, Chemistry, Earth Science/Geology.
- c. Existing Chemistry Endorsement. Eight (8) semester credit hours in each of the following areas: Biology, Physics, Earth Science/Geology.
- d. Earth Science or Geology Endorsement. Eight (8) semester credit hours in each of the following areas: Biology, Physics, Chemistry.

PROGRAM COMPONENT (Group B) OR NON-SUBSTANTIVE MINOR REQUEST FORM (Short Form)

Instructions: Please use one form for each request/action. Clearly mark all changes using either (1) Track Change or (2) strikethroughs for deletions and underlines for additions. Yellow indicates a required field. Green are fields that are optional depending on the change you are requesting. Following the appropriate department and college approvals the **department chair** will e-mail the completed form to provost@uidaho.edu.

Deadline: This form must be submitted by **October 1** for inclusion in the next available General Catalog and to be available for scheduling beginning with the next summer session.

When applicable, a Curriculum Change Form and Course Approval Forms must accompany the short form. Incomplete forms will be returned.

Submission Information

| | | | |
|---|---|--------------|--|
| Dept Chair Name: | Dr. Raymond Dixon | Email: | rdixon@uidahoe.edu |
| Department/Unit: | Curriculum and Instruction | | |
| College: | College of Education, Health and Human Sciences | | |
| Dept/Unit Curriculum Committee Approval Date: | Sec. Ed Program 8/31/18 C&I 9/7/2018 | Vote Record: | Unanimous 7-0 Unanimous 18-0 |
| Dept Chair Signature of Approval | | | |
| College Curriculum Committee Approval Date: | TECC 9/11/18 CCC 9/12/18 All EHHS Faculty 9/20/18 | Vote Record: | Unanimous 12-0 Unanimous 10-0 Unanimous 35-0 |
| Dean Signature of Approval | | | |
| Primary Point of Contact: | Dr. Taylor Raney | Email: | tcraney@uidaho.edu |
| Briefly describe the change you are requesting: | Add a composite Natural Science endorsement comprised of Biology, Physics, Chemistry and Earth Science/Geology. | | |

What is the financial impact of the requested change?

| | | | |
|--------------------------|--------------------------------|-------------------------------------|-----------------------------|
| <input type="checkbox"/> | Greater than \$250,000 per FY: | <input checked="" type="checkbox"/> | Less than \$250,000 per FY: |
|--------------------------|--------------------------------|-------------------------------------|-----------------------------|

****Note: If financial impact is greater than \$250,000, you must complete a Program Proposal form.**

Describe the financial impact:

Rationale for Program Component Request or Name Change

Explain the change you are requesting, and provide a rationale for this request. Include an explanation of how the department will manage the added workload for a new program component; describe whether the program component curriculum and admissions requirements remain the same; describe the rationale for a name change or degree designation change, if applicable.

The Department of Curriculum and Instruction, College of Education, Health and Human Sciences proposes a composite Natural Science endorsement. This endorsement is comprised of four other endorsements (Biology, Physics, Chemistry, Earth Science/Geology) for which we are already approved, so it does not need State Board approval. The proposed endorsement language is taken directly from Idaho code 08.02.02.024.05, "Natural Science (5-9 or 6-12)."

Name or Degree Change Only Requests

Leave blank if not making a name and/or degree change only request

This section to be completed **ONLY** for changes to the name of: degree, major, minor, option, emphasis, certificate, teaching endorsement.

| | |
|-----------------|--|
| Current Name: | |
| New Name: | |
| Current Degree: | |
| New Degree: | |
| Other Details: | |
| Effective Date: | |

Please indicate if any course or curriculum changes are occurring as a result of this name or degree change request: Yes No

If there are accompanying curriculum or course changes, complete the next section and attach the curriculum and/or course forms.

****Note: A substantive change to a program degree, major, or program component may require a program proposal form.**

Please indicate whether 25% or more of the program learning outcomes are changing: Yes No

****Note: If you answered YES to this question, complete the table below:**

| | List Old Learning Outcomes | New Learning Outcome, if changed (if no change, write N/A and move to next outcome) | New Direct Measure (list student work product and explain how it will be evaluated) | Have you updated the assessment cycle to include this change? (yes/no) |
|-------|----------------------------|--|--|--|
| SLO#1 | | | | |
| SLO#2 | | | | |
| SLO#3 | | | | |
| SLO#4 | | | | |
| SLO#5 | | | | |

Program Component Request

Leave blank if not adding, discontinuing, or modifying a program component. Program components consist of option, emphasis, minor, academic certificate less than 30 credits, or teaching endorsement

Clearly mark all changes to existing program components by using either (1) Track Change or (2) strikethroughs for deletions and underlines for additions. A curriculum change form and/or course approval forms associated with this request are required to be submitted with this short form.

| | | | | | | | |
|---|----------------|--|---------------------|----------------------|---------------------|---|--|
| X | Create New | | Discontinue | Implementation Date: | Fall semester 2019 | | |
| | Graduate Level | | Undergraduate Level | Law Level | Credit Requirement: | 45 | |
| Are new courses being created: (circle your response) | | | | No | Yes | If yes, how many courses will be created: | |

If the request is for an option or emphasis, enter the associated major and degree:

| | | | | | |
|--------|---------------------|-----------|---------|---------|----------|
| Major: | Secondary Education | CIP Code: | 13.1205 | Degree: | B.S. Ed. |
|--------|---------------------|-----------|---------|---------|----------|

Enter the name of the program component in the appropriate row:

| | |
|--|--------------------------------|
| Option: | |
| Emphasis: | |
| Minor: | |
| Academic Certificate less than 30 credits: | |
| Teaching Endorsement (Major/Minor): | Natural Science Teaching Major |

Provide a summary/description of the program component using 50 words or less:

45-Credit Natural Science Teaching Major

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- c. Existing Chemistry Endorsement. Eight (8) semester credit hours in each of the following areas: Biology, Physics, Earth Science/Geology.
- d. Earth Science or Geology Endorsement. Eight (8) semester credit hours in each of the following areas: Biology, Physics, Chemistry.

Learning Outcomes and Assessment Information

This section must be completed if program component request section is completed

1. List the intended learning outcomes for the program component. Use learner centered statements that indicate what will students know, be able to do, and value or appreciate as a result of completing the program:

The candidate recognizes how common misconceptions and/or partial understandings of scientific disciplinary core ideas affect student learning.
 The candidate designs and implements lessons that align with Idaho State Science (K-12) standards.
 The candidate designs opportunities to apply science practices to propose, investigate, and evaluate possible solutions to problems.
 The candidate designs lessons which allow students to utilize mathematics to analyze, interpret, and display scientific data.

2. Describe the assessment process that will be used to evaluate how well students are achieving the intended learning outcomes of the program component:

Formative assessment will occur during candidates' progression toward completion through analysis of content course outcomes. Additionally, assessment of candidate competencies occurs during the required (EDCI) teaching methods and practicum courses. Summative assessment will occur through the state-mandated *Praxis II* assessment: 5435. This is accomplished during the formative assessment "candidate competencies . . . teaching methods and practicum courses." Candidates are required to pass this assessment, which is aligned with program outcomes, with a minimum score of 149. Finally, assessment will occur following graduation, as the Department of Curriculum and Instruction maintains employment histories of its alumni through analysis of publicly available school district reporting mechanisms.

3. How will you ensure that the assessment findings will be used to improve the program?

The findings from all of the above-mentioned assessment strategies are employed to evaluate program outcomes annually in-house and every seven years through our state and national accreditation process. Additionally, the state requires an interim evaluation three years following initial approval of a new teaching endorsement.

4. What direct and indirect measures will be used to assess student learning?

Direct: practicum placement observations and K-12 partner teacher evaluation, *Praxis II* assessment 5435 (This is a content exam. In order to design and implement lessons aligned to Idaho standards, that content must be mastered.)
 Indirect: employment data, candidate progress through required content course work

5. When will assessment activities occur and at what frequency?

Direct: annually in the summer/fall from the previous academic year
 Indirect: annually in the late fall/winter as school districts report (due 10/15 each year) employment data

Distance Education Availability

This section must be completed if program component request section is completed

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 may be completed via distance education. **If the program component is to be offered via distance education, additional or different formwork may be required.** Contact provost@uidaho.edu for assistance.

The U.S. Department of Education defines distance education as follows:
Distance education means education that uses one or more of the technologies listed below to deliver instruction to students who are separated from the instructor and to support regular and substantive interaction between the students and the instructor, either synchronously or asynchronously. The technologies may include--

- (1) *The internet;*
- (2) *One-way and two-way transmissions through open broadcast, closed circuit, cable, microwave, broadband lines, fiber optics, satellite, or wireless communications devices;*
- (3) *Audio conferencing; or*
- (4) *Video cassettes, DVDs, and CD-ROMs, if the cassettes, DVDs, or CD-ROMs are used in a course in conjunction with any of the technologies listed in paragraphs (1) through (3).*

| | | | | |
|---|------|--------------------------|----|-------------------------------------|
| Can 50% or more of the curricular requirements of this program component be completed via distance education? | Yes* | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| *If Yes, can 100% of the curricular requirements of this program component be completed via distance education? | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |

Geographical Area Availability

This section must be completed if program component request section is completed

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

| | | | |
|---------------|-------------------------------------|--------------|----------------------|
| Moscow | <input checked="" type="checkbox"/> | | |
| Coeur d'Alene | <input type="checkbox"/> | | |
| Boise* | <input type="checkbox"/> | | |
| Idaho Falls* | <input type="checkbox"/> | | |
| Other** | <input type="checkbox"/> | Location(s): | <input type="text"/> |

*Note: Programs offered in locations other than Moscow may require additional formwork from the State Board of Education. Contact the Office of the Provost and Executive Vice President for additional information.

**Note: If Other is selected, identify the specific area(s) this program component will be offered.