The items listed below (approved by Faculty Senate) will be considered to have the necessary faculty approval unless a petition requesting further consideration of these items is signed by five faculty members and submitted to the chair of the Faculty Senate within 14 calendar days after the date of circulation. As a rule, if no petition is received within 14 days, or by January 3, 2011, (in this case the 14 days has been extended due to the winter break) the report will be submitted to the president for approval and transmittal to the regents, if regents' action is required. If a petition is received, the report will be referred to the Faculty Senate. On referred items, Faculty Senate may: (1) affirm the action and report it to a meeting of the university faculty, (2) amend the action and report it to a meeting of the university faculty, or (3) rescind the action.

The following items will be presented in the policy report that begins immediately below:

UCC Catalog Changes:

FS-11-013: (UCC-11-041) Change Geology to Earth Science
FS-11-015: (UCC-11-040) Education – HPERD Name Change
FS-11-016: (UCC-11-045) Business – Marketing Emphasis
FS-11-017: (UCC-11-046) Science – Six Sigma Renaming
FS-11-018: (UCC-11-048) Science – Climate, Change Minor
The College of Education is requesting that the teaching minor in Geology be change to Earth Science. Note, the curricular changes have already been reviewed and approved by UCC and appear in General Curriculum Report 258.
TO: University Curriculum Committee
FROM: College of Education
RE: Change of name for an existing academic department  [Summer 2011]
DATE: October 13, 2010

The College of Education is requesting that the Department of Health, Physical Education, Recreation and Dance be change to the Department of Movement Sciences.
Idaho State Board of Education
Academic/Professional-Technical Education

Notice of Intent

Institution Submitting Proposal: University of Idaho

Name of College, School, or Division: College of Business and Economics

Name of Department(s) or Area(s): Department of Business

Indicate if this Notice of Intent (NOI) is for an Academic or Professional-Technical Program

- Academic
- Professional - Technical

For a New, Expanded, or Off-Campus Instructional Program, or Administrative/Research Unit (circle one), and list the title/name:

ENTREPRENEURSHIP EMPHASIS (IN MARKETING MAJOR, B.S. BUSINESS ADMINISTRATION)

(Title of Degree or Certificate or Name of Unit)

Proposed Starting Date: Fall 2011

For New Programs:

Program (i.e., degree) Title

CIP 2010 Code
(consult Institutional Researcher/Registrar)

For Existing Programs:

Marketing Major/Entrepreneurship Emphasis
Program (i.e., degree) Title

CIP 2010 Code

Dean approved/mds

For Other Instructional Activity:

- Program Component (major/minor/option/emphasis)
- Off-Campus Program Activity
- Instructional/Research Unit
- Addition/Expansion
- Discontinuance/consolidation
- Contract Program/Collaborative
- Other

VP Research and/or Graduate Dean (as applicable)

State Administrator, SDPTE (as applicable)

Chief Academic Officer, OSBE

SBOE/OSBE Approval

College Dean (Institution) Date

Chief Fiscal Officer (Institution) Date

Chief Academic Officer (Institution) Date

President Date
Before completing this form, refer to Board Policy Section III.G., Program Approval and Discontinuance.

1. Briefly describe the nature of the request.

   This request is in reference to adding a new emphasis to an existing degree program. The existing degree program is Marketing, while the new emphasis being requested is Entrepreneurship (in Marketing). Approval of this request would result in two emphases in the Marketing degree program: namely, [1] General Marketing Emphasis and [2] Entrepreneurship Emphasis.

2. Provide a statement of need for a new program or a program modification. Include (but do not limit to) the following:

   a) A projection of full-time and part-time enrollment over a three year period of time
      
      Year 1 – 12  
      Year 2 – 26  
      Year 3 – 34

   b) A projection of state work force needs such as job titles requiring this degree. Also include Department of Labor research on employment potential.

      From: State of Idaho, Strategic Five-year State Workforce Investment Plan (2007)...

      Create an Entrepreneurial Workforce. The state will build on opportunities to create an entrepreneurial workforce and an environment that supports business growth and expansion. Idaho will support entrepreneurial development, provide programs informing primary and secondary students about entrepreneurial careers, and extend programs to students in higher education. .... The State’s Workforce Development Training Fund will be enhanced to encourage higher wage jobs and WIA funds will be used, where appropriate for customized and incumbent worker training to support job creation and increased earnings for participants in high wage, high skill jobs. (http://labor.idaho.gov/wia1/wiaplanfinal.pdf)

   c) A description of how the proposed change will act to stimulate the state economy by advancing the field, providing research results, etc.

      An increasing number of students entering the university intend upon graduation to start their own business. In addition, small business is one of the primary economic growth engines of the state generating tax revenue and employment opportunity. The entrepreneurship emphasis within marketing leverages current curriculum to allow the College of Business and Economics to meet the needs of our stakeholders.

      Attach a Scope and Sequence, SDPTE Form Attachment B, for professional-technical education requests.

3. Briefly describe how the institution will ensure the quality of the program (e.g., program review, accreditation, professional societies, licensing boards, etc.).

   The degree will be accredited through the Association to Advance Collegiate Schools of Business (AACSB). In addition the Marketing Program receives advisement through College of Business and Economics Advisory Board and the Marketing Area Advisory Board.

Revised 5/4/10

Page 2
4. Identify similar programs offered within the state of Idaho or in the region by other colleges/universities. If the proposed request is similar to another program, provide a rationale for the duplication. *This may not apply to PTE programs if workforce needs within the respective region have been established.*

At this point, there is only one Entrepreneurship Bachelor’s degree offered within the state. If other universities within the state choose to offer an Entrepreneurship major, then there is sufficient demand to justify duplication of this degree across universities. Currently, we (UI) offer an Entrepreneurship certificate, and the addition of an emphasis within the marketing major would build upon the certificate program and use existing resources.

**Degrees offered by school/college or program(s) within disciplinary area under review**

<table>
<thead>
<tr>
<th>Institution and Degree name</th>
<th>Level</th>
<th>Specializations within the discipline (to reflect a national perspective)</th>
<th>Specializations offered within the degree at the institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSU</td>
<td>BBA, BS, BA</td>
<td>Entrepreneurship Management</td>
<td></td>
</tr>
<tr>
<td>CSI</td>
<td>AAS</td>
<td>Business Management/Entrepreneurship</td>
<td></td>
</tr>
<tr>
<td>CWI</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EITC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISU</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCSC</td>
<td>AS</td>
<td>Entrepreneurship</td>
<td></td>
</tr>
<tr>
<td>NIC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UI</td>
<td>Certificate</td>
<td>Entrepreneurship</td>
<td></td>
</tr>
</tbody>
</table>
Enrollment and Graduates (i.e., number of majors or other relevant data)  
By Institution for the Proposed Program  
Last three years beginning with the current year and the 2 previous years

<table>
<thead>
<tr>
<th>Institution</th>
<th>Relevant Enrollment Data</th>
<th>Number of Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Current</td>
<td>Previous Year</td>
</tr>
<tr>
<td>BSU (BBA, BS, BA)</td>
<td>170</td>
<td>159</td>
</tr>
<tr>
<td>CSI (AAS)</td>
<td>82</td>
<td>93</td>
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<tr>
<td>CWI</td>
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<tr>
<td>EITC</td>
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<td>0</td>
</tr>
<tr>
<td>ISU</td>
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<td>0</td>
</tr>
<tr>
<td>LCSC (AS)</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>NIC</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>UI (Cert)</td>
<td>13</td>
<td>15</td>
</tr>
</tbody>
</table>

Note:

5. Describe how this request is consistent with the State Board of Education’s policy or role and mission of the institution.

The proposed degree program is consistent with how business education is treated within the state; namely, where no institution has exclusive responsibility of areas within business education.

6. Describe how this request fits with the institution’s vision and/or strategic plan.

According to the University of Idaho’s Strategic Action Plan’s Vision, Values and Direction statement:

We emphasize quality and access, focusing our efforts on sustaining strong programs and investing resources in strategic directions that advance the interests of Idaho in an increasingly interdependent and competitive world…. Through the creation of public, private and community partnerships, we will undertake bold initiatives…to catalyze entrepreneurial innovation…. 

7. Is the proposed program in your institution’s regional 8-year plan? Indicate below.

Yes ___   No  X ___

If not on your institution’s regional 8-year plan, provide a justification for adding the program.

An increasing number of students upon graduation intend to start their own business. In addition, new businesses are one of the primary economic growth engines of the state, generating tax revenues and employment opportunities. The entrepreneurship emphasis within marketing leverages current curriculum to allow the College of Business and Economics to meet the needs of our stakeholders.
8. List potential ways your campus can collaborate with other institutions on this program to reduce cost and expand learning opportunities in Idaho. For example, what courses, if any, can be delivered electronically by another state institution.

The UI has pre-existing articulation agreements with all other state colleges and universities, as well as with other higher education institutions within the Pacific Northwest. Students wishing to complete their first two years of curriculum at another state institution could then effectively and efficiently transfer into this proposed program. We cooperate across campus and with other institutions in our business plan competition and our student teams compete statewide and regionally.

9. Explain how students are going to learn about this program and where students are going to be recruited from (i.e., within institution, out-of-state, internationally).

Anecdotal evidence suggests there is favorable latent demand for this program. For instance, at the UI Vandal Friday event, which is a day dedicated to introducing students to university programs and policies, numerous students have indicated interest in an entrepreneurship and marketing degree program. We will also update current recruitment material to reflect the change.

Internal Recruitment
Similar to other program processes used within the institution, university and college advisors will be provided the necessary information to communicate the existence of the proposed new program.

External Recruitment
The proposed degree program will utilize the recruitment processes already in place within the College of Business and Economics and the University of Idaho.
10. This section requires institutions to reference all cost savings and/or additional resources needed. (Use additional sheets if necessary.):

<table>
<thead>
<tr>
<th>Estimated Fiscal Impact</th>
<th>FY__11/12__</th>
<th>FY__12/13__</th>
<th>FY__13/14__</th>
<th>Cumulative Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Recurring</td>
<td>Non-Recurring</td>
<td>Recurring</td>
<td>Non-Recurring</td>
</tr>
<tr>
<td>A. Expenditures</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Personnel</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2. Operating</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>3. Equipment</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>4. Facilities</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Total Expenditures</strong></td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

The proposed degree program has been developed to be resource neutral (e.g., uses existing courses, faculty, and facilities)

B. Source of Funds

<table>
<thead>
<tr>
<th></th>
<th>FY__11/12__</th>
<th>FY__12/13__</th>
<th>FY__13/14__</th>
<th>Cumulative Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Appropriated - Reallocation</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2. Appropriated - New</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>3. Federal</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>4. Other (Specify)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Total Expenditures</strong></td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Marketing (B.S.Bus.)

Required course work includes the university requirements (see regulation J-3), the college requirements, and:

- Bus 324  Buyer Behavior (3 cr)
- Bus 421  Marketing Research and Analysis (3 cr)
- Bus 428  Marketing Management (3 cr)

One of the following communication courses (3 cr):

- Comm 233  Interpersonal Communication (3 cr)
- Comm 235  Organizational Communication (3 cr)
- Comm 332  Communication and the Small Group (3 cr)
- Comm 410  Conflict Management (3 cr)

Tier 1 Marketing Electives: three credits of the following courses (3 cr):

- Bus 420  Promotional Strategy (3 cr)
- Bus 422  Personal Selling and Sales Force Management (3 cr)
- Bus 424  Pricing Strategy and Tactics (3 cr)
- Bus 425  Retail Distribution Management (3 cr)
- Bus 426  Marketing Channels Management (3 cr)
- Bus 427  Services Marketing (3 cr)
- Bus 429  Vandal Solutions (1-6 cr, max 6)
- Bus 482  International Marketing (3 cr)
- Bus 495  Product and Process Development and Commercialization (3 cr)

And one of the following emphases:

A. General Marketing Emphasis

Tier 1 Marketing Electives: six credits of the following courses (6 cr):

- Bus 420  Promotional Strategy (3 cr)
- Bus 422  Personal Selling and Sales Force Management (3 cr)
- Bus 424  Pricing Strategy and Tactics (3 cr)
- Bus 425  Retail Distribution Management (3 cr)
- Bus 426  Marketing Channels Management (3 cr)
- Bus 427  Services Marketing (3 cr)
- Bus 429  Vandal Solutions (1-6 cr, max 6)
- Bus 482  International Marketing (3 cr)
- Bus 495  Product and Process Development and Commercialization (3 cr)

Tier 2 Business Elective: one upper division (300-400 level) CBE, statistics, or mathematics courses, (excluding Bus 301, Bus 311, Bus 321, Bus 350, Bus 370.) (3 cr)

Research Elective: select a total of three credits from the following courses (3 cr)*:

- Math 160  Survey of Calculus or
- Math 170  Analytic Geometry and Calculus I (4 cr)
- Math 330  Linear Algebra (3 cr)
- Math 451  Probability Theory (3 cr)
- Stat 401  Statistical Analysis (3 cr)
- Stat 422  Sample Survey Methods (3 cr)
- Stat 423  Beginning SAS Programming (1 cr)
- Stat 424  Intermediate SAS Programming (1 cr)
- Stat 425  Topics in SAS Programming (1 cr)
- Stat 433  Econometrics (3 cr) **
- Stat 514  Nonparametric Statistics (3 cr)

Other research methods class as approved by your advisor and the marketing area

Electives to total 128 cr for the degree

*Note: Courses that are used to satisfy the CBE General Core Mathematics requirement may not be used to fulfill the Research Elective.

**Note: Stat 433/Econ 453 Econometrics does not satisfy the Upper Division Economics requirement if used to satisfy the Research Elective.

B. Entrepreneurship Emphasis

Acct 482 cr  Enterprise Accounting (3 cr)
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acct 582</td>
<td>Entrepreneurship (3 cr)</td>
</tr>
<tr>
<td>Bus 414</td>
<td>Entrepreneurship (3 cr)</td>
</tr>
<tr>
<td>Bus 415</td>
<td>New Venture Creation (3 cr)</td>
</tr>
<tr>
<td></td>
<td>Entrepreneurship Practicum/Internship/Vandal Solutions (3 cr)</td>
</tr>
<tr>
<td></td>
<td>Tier 2 Business Elective: one upper division (300-400 level) CBE, statistics, or mathematics courses, (excluding Bus 301, Bus 311, Bus 321, Bus 350, Bus 370.) (3 cr)</td>
</tr>
<tr>
<td></td>
<td>Electives to total 128 cr for the degree</td>
</tr>
</tbody>
</table>

### C. Professional Golf Management Option

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bus 103</td>
<td>Introduction to Professional Golf Management (2 cr)</td>
</tr>
<tr>
<td>Bus 150</td>
<td>Professional Golf Management I (2 cr)</td>
</tr>
<tr>
<td>Bus 251</td>
<td>Professional Golf Management II (2 cr)</td>
</tr>
<tr>
<td>Bus 298</td>
<td>Internship (2 cr)</td>
</tr>
<tr>
<td>Bus 385</td>
<td>Professional Golf Management III (2 cr)</td>
</tr>
<tr>
<td>Bus 386</td>
<td>Food &amp; Beverage Hospitality with Lab (4 cr)</td>
</tr>
<tr>
<td>Bus 398</td>
<td>Internship (6 cr)</td>
</tr>
<tr>
<td>Bus 425</td>
<td>Retail Distribution Management (3 cr)</td>
</tr>
<tr>
<td>Bus 428</td>
<td>Marketing Management (3 cr)</td>
</tr>
<tr>
<td>Arc 301</td>
<td>Survey of Landscape Architecture &amp; Golf Course Design (3 cr)</td>
</tr>
<tr>
<td>PISc 302</td>
<td>Golf and Sports Turf Management (3 cr)</td>
</tr>
<tr>
<td>Rec 105</td>
<td>Teaching Golf I (2 cr.)</td>
</tr>
<tr>
<td>Rec 205</td>
<td>Teaching Golf II (2 cr)</td>
</tr>
<tr>
<td>Rec 305</td>
<td>Teaching Golf III (2 cr)</td>
</tr>
</tbody>
</table>

*Students must have a 12.0 handicap or better to enter this program. Students must also be a U.S. citizen to be eligible for PGA membership.*
TO: University Curriculum Committee
FROM: College of Science
RE: Change of name for an existing academic certificate [Summer 2011]
DATE: November 11, 2010

The College of Science is requesting that the Six Sigma Innovation and Design academic certificate be change to the Process & Performance Excellence academic certificate.

MEMO: Request for Change of Name

From: GRADUATE CERTIFICATE IN SIX SIGMA INNOVATION & DESIGN
To: GRADUATE CERTIFICATE IN PROCESS & PERFORMANCE EXCELLENCE

The UI Department of Statistical Science offers a portfolio of programs that includes the graduate certificate in “Six Sigma Innovation & Design”.

This certificate demands 12 semester credit hours with three required courses:
- Statistics 507: Experimental Design
- Statistics / Business 446: Six Sigma Innovation & Design
- Business 531 / Statistics 511: Design for Six Sigma & Lean Enterprise

and one elective course to be chosen from a specified menu. A certificate coordinator approved substitution may serve as the elective course. Particularly significant among the list of approved electives are:
- Statistics 422: Sample Survey Methods
- Statistics 519: Multivariate Analysis

Via cross-listing, three of the courses listed above explicitly acknowledge integration of statistics and business whereas the three remaining courses with Statistics-only prefixes provide content commonly employed in business and engineering settings, particularly as relates to design, improvement, and innovation in and of products, processes, and systems.

In order to more comprehensively describe the content and trajectory of the certificate program, as well as better reflect the international interpretation of its content, we request a minor editorial change in name

- From: Graduate Certificate in Six Sigma Innovation & Design
- To: Graduate Certificate in Process & Performance Excellence

All requested changes have been vetted and approved by constituent College of Business & Economics entities.

Dr. Rick L. Edgeman, Professor & Chair, Department of Statistics
Adjunct Professor of Business
Certificate Coordinator: Graduate Certificate in Six Sigma Innovation & Design
Email: redgeman@uidaho.edu
Tel: +1 208-885-4410
**Idaho State Board of Education**

**Academic/Professional-Technical Education**

**Notice of Intent**

Institution Submitting Proposal: University of Idaho  
Name of College, School, or Division: College of Science  
Name of Department(s) or Area(s): Geography

Indicate if this Notice of Intent (NOI) is for an Academic or Professional-Technical Program  
Academic [X]  Professional - Technical [ ]

For a New, Expanded, or Off-Campus Instructional Program, or Administrative/Research Unit (circle one), and list the title/name:  
**New undergraduate minor in Climate Change**

(Title of Degree or Certificate or Name of Unit)

Proposed Starting Date: Fall 2011

<table>
<thead>
<tr>
<th>For New Programs:</th>
<th>For Other Instructional Activity:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minor in Climate Change</td>
<td>Program Component (major/minor/option/emphasis)</td>
</tr>
<tr>
<td>Program (i.e., degree) Title</td>
<td>Off-Campus Program Activity</td>
</tr>
<tr>
<td>CIP 2010 Code</td>
<td>Instructional/Research Unit</td>
</tr>
<tr>
<td>(consult Institutional Researcher/Registrar)</td>
<td>Addition/Expansion</td>
</tr>
<tr>
<td>For Existing Programs:</td>
<td>Discontinuance/consolidation</td>
</tr>
<tr>
<td>Program (i.e., degree) Title</td>
<td>Contract Program/Collaborative</td>
</tr>
<tr>
<td>CIP 2010 Code</td>
<td>Other</td>
</tr>
</tbody>
</table>

Scott A. Wood 11/12/10  
College Dean (Institution) Date  
VP Research and/or Graduate Dean (as applicable) Date

Chief Fiscal Officer (Institution) Date  
State Administrator, SDPTE (as applicable) Date

Chief Academic Officer (Institution) Date  
Chief Academic Officer, OSBE Date

President Date  
SBOE/OSBE Approval Date
Before completing this form, refer to Board Policy Section III.G., Program Approval and Discontinuance.

1. Briefly describe the nature of the request.

    The minor in Climate Change is a new undergraduate minor at the University of Idaho. This is a new program that will be offered through the Department of Geography in cooperation with other departments across campus. Most of the courses for the minor already exist at the UI, or will be developed with the expertise of new faculty in Geography (that were recently hired by the Idaho EPSCoR project, Water Resources in a Changing Climate).

2. Provide a statement of need for a new program or a program modification. Include (but do not limit to) the following:

    a) A projection of full-time and part-time enrollment over a three year period of time
    b) A projection of state work force needs such as job titles requiring this degree. Also include Department of Labor research on employment potential.
    c) A description of how the proposed change will act to stimulate the state economy by advancing the field, providing research results, etc.

    Attach a Scope and Sequence, SDPTE Form Attachment B, for professional-technical education requests.

    The Minor in Climate Change is a key component in the overall strategy by the Department of Geography at the University of Idaho to increase educational opportunities and research activity in the areas of climate science and climate change. This minor will increase the “climate literacy” of a broad cross section of students. The minor is designed to be flexible to attract students from various fields across colleges. It will prepare students for an expanding job market in the areas of climate science, as well with the growing workforce in climate adaptation and mitigation strategies.

    There is a growing national need for qualified personnel who have a working knowledge of climate science, potential impacts, and strategies for adapting and mitigating these potential impacts. The U.S. Global Change Research Program (USGCRP) has outlined specific educational goals for training the next generation of scientists and decision makers in climate literacy. The development of these guidelines has been done by several agencies, including the National Oceanic and Atmospheric Administration (NOAA), the American Association for the Advancement of Science (AAAS), and the National Science Foundation (NSF). There are currently several significant educational initiatives in these areas from agencies, including NASA and NSF, attesting to the need for increased educational opportunities. In addition, the need for an educated public and workforce that can make informed decisions in the area of climate change is expected to greatly increase over the next decade.

    Student demand for a Minor in Climate Change is expected to be high. Surveys conducted in large lecture classes at the UI (physical and human geography) have shown an interest of about 75% of the students. This minor should be of interest to a wide variety of students from many disciplines, including environmental sciences, natural resources, agriculture, water resources, business, international studies, sustainability and architecture. The minor is designed to give students a firm background in the understanding of climate science and climate change, but also to be flexible to include courses from their own major fields.

    The state need for education in Climate Change is high in Idaho. Research activities related to climate issues are expanding rapidly at all the major institutions. Despite this, there is no comprehensive program to address climate studies. Various institutions offer classes in climate-
related issues, but there is a lot of variation in the depth and quality of these courses. The Minor in Climate Change will offer students both depth and breadth, and will fill the need at the state-level in this subject area.

The recent funding of the Idaho EPSCoR project by the NSF ($15M over five years) has created research opportunities in many areas related to climate studies, including the potential effects of climatic change on water resources, the connection between surface and ground water in the Snake River Plain, invasive species and insect infestations, and the effects on natural ecosystems in the Salmon River Basin, as well as the implications of potential climate change on economics and policy in Idaho. As part of this project, the University of Idaho is hiring 5 new assistant professors (3 have already been hired) that will increase the UI’s capacity to provide quality courses in education of climate change. In addition to preparing students for jobs in climate-related research, the Minor in Climate Change will provide students with job skills in natural resource planning for adaptation and mitigation, clean energy fields, and in climate-related policies at the local, state and federal levels.

3. Briefly describe how the institution will ensure the quality of the program (e.g., program review, accreditation, professional societies, licensing boards, etc.).

There are no accreditation agencies, professional societies, or licensing boards for climate studies. However, the program will adhere to guidelines and standards that are being set nationally [e.g., the climate literacy program set forth by the U.S. Global Change Research Program (http://climateliteracynow.org)]. Climatology is a well-recognized tradition in Geography and about 80% of the Geography faculty at UI actively conduct research, publish manuscripts, and teach in the field of climate change. The UI Geography department is also taking the lead in several educational funding initiatives to lead nationally in the area of climate change education, including the recently funded NASA Global Climate Change Education (GCCE) grant.

The overall goal of this minor is to provide the necessary educational opportunities to provide “literacy” of climate science. The specific goals below are from “Climate Literacy: The Essentials of Climate Sciences” (http://www.globalchange.gov/resources/educators/climate-literacy), which was first developed at a workshop sponsored by the National Oceanic and Atmospheric Administration (NOAA) and the American Association for the Advancement of Science (AAAS). Students completing this minor should master the following Learning Outcomes

- understand the essential principles of Earth’s climate system,
- know how to assess scientifically credible information about climate,
- communicate about climate and climate change in a meaningful way, and
- be able to make informed and responsible decisions with regard to actions that may affect climate.

Making informed decisions regarding climate change and its impacts requires an integrated and interdisciplinary approach to education. The required curriculum listed in Section 7 reflects this approach. The use of an integrative capstone course will ensure that students have mastered the necessary course material to make informed decisions regarding solutions to climate change issues.

4. Identify similar programs offered within the state of Idaho or in the region by other colleges/universities. If the proposed request is similar to another program, provide a rationale for the duplication. This may not apply to PTE programs if workforce needs within the respective region have been established.

There are currently no other programs in the state of Idaho in Climate Change, so there is no
duplication.

Degrees offered by school/college or program(s) within disciplinary area under review

<table>
<thead>
<tr>
<th>Institution and Degree name</th>
<th>Level</th>
<th>Specializations within the discipline (to reflect a national perspective)</th>
<th>Specializations offered within the degree at the institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSU</td>
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<tr>
<td>CSI</td>
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<td>UI</td>
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</tbody>
</table>

Enrollment and Graduates (i.e., number of majors or other relevant data)
By Institution for the Proposed Program
Last three years beginning with the current year and the 2 previous years

<table>
<thead>
<tr>
<th>Institution</th>
<th>Relevant Enrollment Data</th>
<th>Number of Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Current</td>
<td>Previous Year</td>
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<tr>
<td>BSU</td>
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<td>CSI</td>
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<td>UI</td>
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</tbody>
</table>
5. Describe how this request is consistent with the State Board of Education's policy or role and mission of the institution.

The Idaho State Board of Education states that “the goal of the State Board of Education is to provide an effective, integrated educational system which serves the needs of all Idahoans.” “Our vision is to improve the education system to a level of effectiveness that allows all learners to develop their full potential as individuals and contributors to society.”


The proposed Minor in Climate Change is critical for creation of an informed citizenry as we move into a period when decisions will be made regarding how humans might adapt to potential environmental changes and how to mitigate their impacts. Climate Change plays a central role in many of the Signature Areas that are currently being focused on at the University of Idaho, including 1) the transition from urban to wildlands, 2) the water and energy nexus, and 3) Science, Technology, Engineering, Mathematics (STEM) education.

6. Describe how this request fits with the institution’s vision and/or strategic plan.

7. Is the proposed program in your institution’s regional 8-year plan? Indicate below.

Yes _____ No X

If not on your institution’s regional 8-year plan, provide a justification for adding the program.

The Minor in Climate Change will be a unique program within the state of Idaho. This program is in alignment with the statewide mission of the University of Idaho since its primary responsibilities are agriculture, architecture, law and natural resources. Students from all of these fields will likely be interested in this minor. The minor is also in direct alignment with the land-grant mission of the University of Idaho in that it will prepare students to understand the causes and ramifications of climate change on agriculture, natural resources, communities and society. By offering this minor to students, the University of Idaho will meet educational and workforce needs across the state, as well as nationally.

It should be noted that this minor is not “just” about science of climatic change. Although all students take a “core” class that thoroughly covers the science of climate change, after the core class, students are encouraged to specialize. Students with interest and background in biological or physical sciences have the opportunity to gain depth in the biophysical impacts of climate change. Students in other fields (e.g., Environmental Science, Agricultural Economics, Psychology, Sociology, Business, Economics, Journalism) will combine courses in their own fields with new courses in climate change-related topics (e.g., methods for quantifying greenhouse gas emissions; strategies for reducing greenhouse gas emissions at the international, national, state and local level, along with costs/benefits of such; societal impacts of climate change, the resilience and adaptation of communities to the impacts of climate change, especially rural communities. Thus, the minor is intended to prepare students in many fields to understand the scientific drivers and impacts of climate change, as well as the necessary knowledge base to become active participants in planning mitigation strategies and necessary community/societal adaptations.
8. List potential ways your campus can collaborate with other institutions on this program to reduce cost and expand learning opportunities in Idaho. For example, what courses, if any, can be delivered electronically by another state institution.

Currently, the Geography Department at the University of Idaho is the only department in the State that has the specific faculty to offer this Minor. However, we will explore the possibility of offering courses electronically if other universities and colleges in Idaho have an interest in offering these courses. We believe that there will be interest within the next 5 years.

9. Explain how students are going to learn about this program and where students are going to be recruited from (i.e., within institution, out-of-state, internationally).

We plan to advertise this Minor on our department website as a degree option. We have done this successfully with our GIS Certificate, which is quite popular with a broad range of students across the University of Idaho. We will also advertise this option by contacting departments and colleges across campus. In addition, the Minor in Climate Change will be advertised as part of our seminar series in Climate Change, which will be offered next during Spring semester of 2011. We offered a similar series in Spring 2007, and it was well attended by both faculty and students from a wide range of departments and colleges across campus. Finally, the most effective way to advertise is probably to specifically target certain faculty at the UI who are active in climate change research, and who may have an interest in having their students engage in this Minor. We anticipate significant interest from various colleges (Science, Natural Resources, Law, Business, Architecture, and Agriculture).
10. This section requires institutions to reference all cost savings and/or additional resources needed. (Use additional sheets if necessary.):

<table>
<thead>
<tr>
<th>Estimated Fiscal Impact</th>
<th>FY_2011__</th>
<th>FY_2012__</th>
<th>FY_2013__</th>
<th>Cumulative Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Recurring</td>
<td>Non-Recurring</td>
<td>Recurring</td>
<td>Non-Recurring</td>
</tr>
<tr>
<td>A. Expenditures</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Personnel</td>
<td>$37,917*</td>
<td>$0.00</td>
<td>$37,917</td>
<td>$0.00</td>
</tr>
<tr>
<td>2. Operating</td>
<td>$200</td>
<td></td>
<td>$200</td>
<td>$0.00</td>
</tr>
<tr>
<td>3. Equipment</td>
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<tr>
<td>4. Facilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Expenditures</strong></td>
<td>$38,117</td>
<td>$0.00</td>
<td>$38,117</td>
<td>$0.00</td>
</tr>
</tbody>
</table>

* The minor depends primarily on existing, active courses that are taught regularly by faculty in GEOG and other departments. While there are two new courses included in the curriculum (one to be taught once/yr and one to be taught in alternate years, for an average of 1.5 new courses/year), these are courses that are of growing importance in the field and will also serve as important electives in the Geography major. We were planning to add these courses regardless of the introduction of this new minor. Nevertheless, in the interest of completeness we are including the cost of teaching these new courses in the table here. (Costs are estimated based on a $65K salary with a 3-course teaching load per year.) We also wish to note that in the last year, the Dept of Geography has hired two new faculty members into new EPSCoR-supported positions, and is in the process of hiring a third member to start in Fall 2011. With course loads of 3 courses/year, this provides 9 new teaching slots/year. So the instructional cost of the minor is already covered in the addition of these faculty.
### B. Source of Funds

1. Appropriated - Reallocation
   - $37,917
   - $0.00
   - $37,917
   - $0.00
   - $37,917
   - $0.00
   - $113,750
   - $0.00

2. Appropriated - New
   - 
   - 
   - 
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   - 
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   - 

3. Federal
   - 
   - 
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4. Other (Specify) OE
   - $200
   - $200
   - $200
   - $600

**Total Expenditures**
- $38,117
- $38,117
- $38,117
- $114,351
Proposed Curricular Requirements:

We have worked with faculty in other department and programs, especially the Environmental Sciences program (160 undergraduate majors), to design this as a minor that would be useful for majors across campus – from biophysical science majors to business majors.

With this in mind, our curriculum requirements share a “core” class in climate change science (Category 2 below). Then in categories 2, 3 and 4, students can customize the minor according to their interests and background. They can obtain more depth in climate change science, or a variety of other relevant topics such as societal and/or economic impacts of climate change, societal resilience and adaptation, ecological impacts and adaptation, or greenhouse gas mitigation strategies.

A total of 20 credits are required for the minor, distributed as follows:

Courses required for minor:

1) Geog 202 - Global Climate Change

2) 2 of 3:
   - Geog 401 - Climatology
   - Geog 435 – Mitigation of Climate Change
   - Geog 455 – Societal Resilience & Adaptation to Climate Change

3) 1 of 3:
   - Geog 493 – Senior Capstone in Geography
   - Geog/REM 450 - Global Environmental Change
   - Envs 497 – Senior thesis

4) 8 additional credits (3 classes) from list of electives:

   AgEc 477 - Law, Ethics, and the Environment
   AgEc 451 - Applied Environmental and Natural Resource Economics
   EDCI 329 - Education Curriculum and Instruction
   EDCI 433 – Secondary Science Ed Methods
   ECON 385 - Environmental Economics
   ENVS 101 - Intro to Env Sciences
   ENVS 225 - International Env Issues Seminar
   ENVS 438 - Western US Water Resource Policy and Env Equity
   FOR 235 - Society and Natural Resources
   FOR 330 - Forest Ecosystem Processes
   FOR 426 - Fire Ecology and Management
   Geog 100 - Physical Geography
   Geog 301 - Meteorology
   Geog 310 – Biogeography
   Geog 350 – Rural Development
   Geog 411 – Natural Hazards and Society
   JAMM 341 - Mass Media Ethics
   JAMM 428 - Environmental Journalism
Date: Oct 6, 2010

Re: Climate Studies Undergraduate Minor proposed by the Department of Geography

To: University Curriculum Committee

There can be little doubt that climate change has arrived as a major problem for humanity. Accordingly, it is appropriate that institutions of higher education throughout the world are identifying climate change as a necessary part of their curricula. The proposal from the Geography department represents the first attempt to bring the undergraduate programming at the University of Idaho into step with this worldwide trend. This is synergistic with the Climate Change track that is part of the new Professional Science Master’s degree. Overall, the curriculum for the proposed minor in climate change is rigorous and comprehensive. It compares favorably to other minors at the University of Idaho in terms of breadth and depth. It should be noted that the climate change minor is not just about the science as it applies to climate per se, but also includes courses that provide knowledge necessary for understanding mitigation and adaptation. Such courses are necessary in order for this minor to be comparable to similar programs at other institutions.

I strongly endorse the creation of this minor. Programmatically, this minor is fully consistent with programming in Environmental Science. I anticipate that it will become a popular minor among our undergraduate students in all three of our option areas (Social Science, Biological Science and Physical Science). We currently have 165 undergraduate majors. The minor is in complete accordance with our mission and pedagogy.

Sincerely,

Stephen S. Mulkey, Director
Environmental Science