Project Title
P3: People, Prosperity and the Planet Student Design Competition for Sustainability

Amount Requested
$1590

Proposal Author (must be a current UAF student) *
Maura Sateriale

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Author's Phone
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Group/Department
Mechanical Engineering

Sustainability Theme:
* Energy
* Transportation
* Purchasing
* Waste Management
* Sustainable Design
* Food Systems
* Education and Curriculum
* Social Sustainability
* Process and Institution

Proposal Summary
For the last eight years, the EPA holds a design competition to encourage students to improve the world by creating developing ideas that help people, the environment, and the world economy. This grant aims to encourage UAF students to enter this competition, so that it will encourage students to explore independent research options. Once winners are selected, this fund will provide research money to develop these ideas. This will bring fame and glory to UAF.

Proposal Description
Our goal is to have several successful grant proposals for the EPA’s P3: People, Prosperity and the Planet Student Design Competition for Sustainability. Students enrolled in the Fall 2011 section of English 314 will form into teams and write grant proposals for this academic competition. Several ideas that we are currently working on include: Better burning wood stoves, water purification systems for rural villages, Bio-fuel production, and cold weather battery systems. This design contest allows students to research innovative inventions that reduce pollution to the air, land and water and reduce reliance on non-renewable energy. Around 220 applications are received, and 55 are awarded throughout the US. Schools are eligible to win multiple awards. Each award is $15,000 and this funding allows for research and an invention,
and for designers to attend the National Design Sustainability Expo. The annual expo takes place in Washington, DC in April. About 7 teams will win a Phase II prize of $90,000.

**Project Value**
As a premier arctic university, it is important for UAF to take the lead and develop sustainable inventions here in Alaska for the benefit of both students and residents. The arctic environment is unique and requires more thought and skill to develop a sustainable lifestyle. This student design competition gives us the impetus to get various disciplines on campus to work together as a team, and submit proposals for sustainability inventions. Utilizing an English 314 class and its members to write the grant proposals alleviates a major hurdle in obtaining funding – writing the grant. It also teaches students a valuable skill.
An interesting fact is that “Lucid Dashboard” was awarded one of the first EPA P3 awards. This is technology the RISE board has funded for the UAF campus.

**Technical Advisors and Collaborators**
Dr. Sarah Stanley, Composition Director
Sarah Stanley joined the UAF faculty as Composition Director in the fall of 2010. She received her Ph.D. from UMass Amherst in the English Department’s Composition and Rhetoric program. She has a M.A. in Language and Literature from the University of Kansas and a B.A. in Creative Writing from Creighton University.

Her research interests entail how disparate fields of linguistic and social theory inform writing instruction, classroom practices, and curriculum. As a teacher and writing administrator, she emphasizes and is committed to learning ever more about the linguistic and cultural resources of diverse student populations.
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**Project Schedule:**

<table>
<thead>
<tr>
<th>Project task</th>
<th>Person responsible</th>
<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
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<tbody>
<tr>
<td>Create Groups &amp; integrate Inventors</td>
<td>Students of English 314</td>
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<tr>
<td>Write Draft Proposals</td>
<td>Students of English 314</td>
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<tr>
<td>Work on Inventions</td>
<td>Volunteer Inventors</td>
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<td>Consult &amp; Facilitate</td>
<td>Maura Sateriale</td>
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<td>Conduct Poster Presentations</td>
<td>Group Leaders</td>
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<tr>
<td>Submit US EPA P3 Proposals</td>
<td>Due to OSP: 16 Dec 2011</td>
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**Budget Detail**

**SUPPLIES:**
- Supplies to fabricate prototypes for the innovative invention: $800

**SERVICES:**
- Small stipends for the student writers: $400
- Contest for the best proposal: $300
- Grant Proposal Writing conference materials: $40
- Grant Proposal demonstration/posters: $50

**Budget Justification**
- Supplies to fabricate prototypes for the innovative invention:
  - Enable initial prototype fabrication.
- Small stipends for the student writers
  - Give added incentive to the students when the grant proposal is completed.
- Contest for the best proposal
  - This program will allow another incentive to the students.
- Grant Proposal Writing conference materials
  - for copies, and other materials
- Grant Proposal demonstration/posters
  - This would enable funding to make several poster displays.
  - This company teaches grant proposal writing. We can use them some of their services in either instruction or reading the proposals.

**Qualification and Experience:**
Maura Sateriale has a bachelor’s degree in mechanical engineering and is working on her master’s. She was formerly employed as a freelance writer. Last year, she competed in the EPA P3 competition, and can attest to the value of the competition, and offer valuable insight to encourage and guide new applicants from UAF.