

SAMPLE INTERDISCIPLINARY STUDIES STUDENT DESIGNED MAJOR PROPOSAL

Name
e-mail address
phone number

“Indigenous Technology”

I am intending to pursue an Interdisciplinary Studies major because I believe that the wide perspective obtained through studying multiple, overlapping fields will provide me with a strong understanding of the topic I intend to study, “Indigenous Technology.” Further, by becoming familiar with the methods and concepts utilized by different fields, I will have a larger tool box from which to draw from in the future. To me, there are potential short falls in focusing solely on one discipline. Primarily, I see the potential of becoming stuck in a way of thinking or analyzing projects that is the paradigm of a specific field. Each field has its own framework for looking at pertinent issues, and that framework doesn’t always take into account other possibilities or all of the factors. By combining multiple fields and choosing relevant upper division general education classes, I seek to explore a variety of frameworks with which to assess issues. Further, I intend to incorporate independent and directed studies into my major contract. This will allow me to explore working models, interact with professionals in the fields, and gain first hand experience of how various concepts play out in real life situations.

I am self motivated and have a good idea of what I want to learn and how I learn most effectively. There is a lot to learn from books, lectures and labs, but there is even more to learn from nature and life itself. Personally, I am an activity oriented learner. By conducting independent studies, I will be able to place myself in a position where I am able to supplement what I am learning in class with actual experiences in the application of theory and idea. To me, this is where the true learning takes place. When I am able to see an idea put to the test of implementation, I am able to assess the benefits and shortfalls and take the knowledge of experience as my own.

Independent studies will also better prepare me for the job market. By gaining real life experience while pursuing my Bachelors, I will be one step ahead of those who solely did course work. From what I have gathered by talking to many friends who have

SAMPLE INTERDISCIPLINARY STUDIES STUDENT DESIGNED MAJOR PROPOSAL

graduated and are entering the job market, many employers are looking for more than just a degree. Employers are looking at internships and work experience as a criteria in hiring. Given that I learn better within a hands- on context and that I believe work experience will provide me a competitive advantage upon graduation, I feel the inclusion of independent study work in very appropriate.

I have searched through the HSU catalogue, looking at existing majors to see if one of these might provide the depth and cross- perspective outlook I am seeking. While there are some majors that deal with aspects of what I intend to study (often going into more specifics and more depth for a given field), I found none that suited my educational needs as well as an IS major can. There may be other universities that offer a major more in line with what I am seeking, but I am settled into the Arcata community and not ready to move again. More importantly, Humboldt County has a wide range of resources that deal with topics of relevance to my areas of interest. Some of these include: CCAT, Potawot Indian Health Village, the Arcata Marsh, local Native peoples, and many organic farms.

I am proposing to call my major “Indigenous Technology.” For the purpose of this major, I am defining “Indigenous Technology” as those technologies that closely relate to and/or are derived from knowledge of the natural resources available in a specific bioregion and/or culture. Further, these technologies are based on knowledge of and designed specifically for use in a particular bioregion.

My goal for this major is to explore technologies that are designed for the environment they are applied in and become knowledgeable about Indigenous and scientific perspectives of plants. Further, I am seeking to understand ways that: 1) plants form the structure that most technologies, and humans, depend upon, 2) Indigenous peoples developed and used technologies in conjunction with a deep respect and understanding of the natural world to meet everyday needs, and 3) how proper use of plants and technology can be used in the present day to meet the needs of humans without sacrificing the health of ecosystems.

The three parts of my major and their proposed components are:

Appropriate Technology. The courses for this segment include:

SAMPLE INTERDISCIPLINARY STUDIES STUDENT DESIGNED MAJOR PROPOSAL

ENGR 114 Whole Earth Engineering (2);
ENGR 305 Appropriate Technology (3);
ENGR 308 Technology and the Environment (3);
ENGR 480 Sustainable Technologies Seminar (1);
ENGR 499 Directed Study (3); and
FISH 473 Wastewater Aquaculture (3), for a total of 15 units.

Plants. The courses for this segment include:
BOT 105 Introduction to Botany (4);
FOR 231 Forest Ecology (3);
BOT 300 Plants and Civilization (3);
BOT 330 Plant Ecology (3);
WSHD 315 Watershed Management (4) and
ENVS 480 Herbalism (1), for a total of 18 units.

Native American Studies. The courses for this segment include:
NAS 331 Native American Perspectives on Natural Resource Use (3);
NAS 394 Experiential Learning (3);
NAS 499 Directed Study (3); and one or two of the following:
NAS 358 Cultural Resource Management (3),
NAS 401 International Indigenous Issues (NR and Env) (3), or
NAS 484 Special Topics in Native American NR and Env (3), for a total
of 12 – 15 units.

For my Senior Capstone Project I have thought of a few potential projects. One would be to conduct research and partake in the ongoing projects of an indigenous tribe that is implementing (or looking to implement) “Indigenous Technologies.” Another idea is to do an internship at one (or more) of the many organizations that are working towards sustainable land use practices to meet their needs. I feel that as I immerse myself further into my studies a project of significant relevance will emerge that is more appropriate than anything I could think of right now.

Other courses that I have taken or will take to satisfy my GE requirements that are relevant to this major include: WLDF 300 Wildlife Ecology and Management (3); WLDF 302 Environmental Ethics (3); NR 400 Inscape and Landscape (3); and PLSOIL 120 Organic Farming and Gardening (3) (taken at UMASS). I have also obtained a strong background in Appropriate Technology, as well as an introduction to both the use of plants and Native cultures, through independent research, work and internships.

SAMPLE INTERDISCIPLINARY STUDIES STUDENT DESIGNED MAJOR PROPOSAL

For independent research, I have been reading on a wide range of topics including Permaculture, Ecological Design, Natural Building, Ecological Economics, Farming, and Native American cultures. I have also been attending various conferences and festivals including the Northeast Organic Farming Associations winter conference, Bioneers, and Solfest, that bring together a wide range of progressive and ecological minded thinkers and activists for presentations, discussions, and workshops.

I have also gained a lot of previous hands on experience through work and internships. I have worked for years as a landscaper and carpenter. Currently, as well as in the past, I am working at the Campus Center for Appropriate Technology. I have also done internships at the Solar Living Institute in Hopland, CA, and the Farm Ecovillage Training Center in Summertown, TN. Further, I completed a Permaculture Design Certification Course at the Lost Valley education Center in Dexter, OR. This past summer I returned to a friend's cabin in Colorado to continue experiments in the application of Hybrid Adobe and other natural and alternative building styles. Also, I spent a few days volunteering in the Navajo Nation working on a papercrete medicine lodge. Due to the amount of experience and knowledge I have gained through my past hands on experiences, I feel it is very beneficial for me to include independent study work in my degree so that I can further explore and learn in life's laboratory.

There are many correlations between the courses I have selected that make them more than a collection of classes.

ENGR 305 builds upon the foundation set in ENGR 114 dealing with methods and concepts for self- sufficient systems, including energy, water, housing, food, and waste management. The water aspect ties in with "Watershed Management", and is further explored in terms of waste management in "Wastewater Aquaculture" (a correlation to food production). Housing issues are further emphasized in a paper I am writing as part of NAS 331 on Native building materials and methods, which brings in additional botanical and Native studies relevance. Food production relates to Botany and the areas of NAS I am focusing on, particularly in my intended Independent or Directed studies.

SAMPLE INTERDISCIPLINARY STUDIES STUDENT DESIGNED MAJOR PROPOSAL

ENGR 480, The “Sustainable Technology Seminar” provides more depth to the topics mentioned above with lectures on: Permaculture, Photovoltaics, Biodiesel, Natural Building, Greywater, Whole Foods, and Energy Efficient Homes.

ENGR 308 deals with the application of technology to meet societies needs in terms of environmental and resource impacts. Having this background will help to determine which technologies presented in ENGR 305 and 480 are applicable to a given site. I will go further than this by looking at ecology (BOT 330, FOR 231) and watersheds (WSDH 315) from a scientific view to understand how these systems function naturally, and resource use from an indigenous perspective (NAS 331, 394, 499) to explore traditional human – nature interrelations.

ENGR 499: I intend to do an Independent Study that will bring these concepts together in a real life, hands on situation in which I can apply my knowledge and explore a working model. Most likely I will do research regarding constructed wetlands, using the Arcata Marsh and CCAT as examples, to learn how to cycle water on-site, what plants are effective in cleaning wastewater, and how these mini- ecosystems interact with the surrounding landscape.

FISH 473 expands on concepts in ENGR 305 and 480, and also has relevance to my intended independent study mentioned above. This class deal with polycultures as well, increasing the importance of an understanding of plants in general, and plants used in wastewater and aquaculture systems in particular.

BOT 105 provides a foundation of the “structure, function, reproduction, life cycles and phylogenetic relationships of major plant groups.” In order to understand the role of plants in ecosystems, technologies and human use, it is important to understand the nature of plants and how they relate to each other.

FOR 231 expands on concepts of BOT 105 and goes into more detail on how these concepts are applied to forests. Forests provide a lot of the raw materials used by humans (ENGR 305, 308, NAS 331), making an understanding of how forests function and change across time, space, and use very important to being able to utilize this resource sustainably. Forests have significant impacts on watersheds (WSDH 315) and other important aspects of ecosystems.

SAMPLE INTERDISCIPLINARY STUDIES STUDENT DESIGNED MAJOR PROPOSAL

BOT 300 explores the human use of plants throughout history, including economic use, ecological effects, and food crops. This perspective of historical uses of plants ties in with ethnobotanical traditions (NAS), herbalism (ENVS 480), and appropriate technology. Combined with the ecological outlook provided through other botany classes (105, 330, FOR 231), a framework for how to interact with plants for the mutual benefit of humans and ecosystems begin to emerge.

BOT 330 goes into more depth on the interrelationships between plants, adding onto the base formed by BOT 105 and FOR 231. This will also correlate with the independent study work I intend to conduct through the NAS department, particularly at the Potawot village, where native plant restoration is underway. The class also explores 'population viability analyses' and 'conservation issues', which, when looked at in terms of economic botany (BOT 300) and/or ethnobotany (ENVS 480 and NAS), will be useful in making decisions regarding the cultivation and harvesting of various plants.

ENVS 480: Herbalism provides additional background on ethnobotanical knowledge of plants and how they can be incorporated into ones diet for greater health.

WSHD 315: For a true understanding of the ecology of plants and forests, one must understand water. This class will explore the effects of different types of land use on water quality and the effects of water on different types of land. Also, I will gain a "scientific understanding of natural water systems." Understanding the flows of water also ties in with AT in terms of utilizing water flows through a site to their highest potential and minimizing adverse effects from human activities.

NAS 331 explores Native American perspectives and case studies regarding the use of natural resources. There is a strong focus on the interactions between humans and the natural world, including ethnobotanical accounts (BOT, ENVS 480), resource management practices, and symbiotic relations.

NAS 394 will allow me to do Experiential Learning. Most likely, this will be in the form of an internship at the Potawot health village. This will integrate a lot of the concepts I am studying into a hands- on, working atmosphere. At Potawot, there is work being done in organic farming (BOT and AT), native species restoration, on site water use (AT), and the rekindling of traditional uses of plants, among many other things.

SAMPLE INTERDISCIPLINARY STUDIES STUDENT DESIGNED MAJOR PROPOSAL

NAS 449: Directed Study. I have not yet determined the exact nature of this study and will seek further counseling before I do so. There are many options that would be relevant to my degree, such as becoming involved with the Native American Renewable Energy Education Program, working within an Indigenous community, researching Indigenous agriculture and sustenance methods, or researching specific bioregional adaptations used by Indigenous peoples, to name a few.

Another NAS course(s) listed previously will be determined after further consultation and may be dependant on the specific issues being covered in the cases of NAS 401 and 484.

After graduation, I intend to work designing, consulting, and/or implementing “Indigenous Technology” projects in regards to the home, community and landscape. A major emphasis will be on increasing self- reliance and moving towards sustainability. Using the knowledge and experience gained during the course of completing my degree, I will work to provide ecologically and economically sensible solutions to everyday needs. By doing so, I seek to create a market niche that caters to the specific needs and characteristics of both the human occupants and the environmental conditions of the site. I may start out working for an established company or organization, but ultimately I intend to start my own enterprise.

I also intend to be an educator. I have already started on this path by giving workshops at CCAT this semester. By holding hands- on workshops dealing with various technologies I will be able to earn some money while spreading the word on Earth conscious design and use of resources. Currently, there is a large demand for hands on workshops in Natural Building, Alternative Energy, Permaculture, and other ecologically friendly technologies. I have witnessed this demand first hand while at my internships and also by talking to a wide sampling of people. Also, I have been paying attention to the workshops and internships being offered by organizations with a similar focus, and have noticed an increase in the number of workshops being offered. By talking with other students at HSU I have sensed a pattern in the desire for more hands on learning options. My degree will prepare me well with background knowledge and real

SAMPLE INTERDISCIPLINARY STUDIES STUDENT DESIGNED MAJOR PROPOSAL

life experience to delve into this growing field and carve out a career path while educating others on ecological living and self reliance.

As of now, I am not intending to go to graduate school. Should I change my mind in the future, New College of CA has a program in “Eco-Dwelling” that would be relevant to my IS major and longer term goals. Also, Evergreen State College has a Masters in Environmental Studies that I should be eligible for.

All in all, I feel strongly that the IS major is the right educational choice for me. I have a high desire for real life experience as an integral part of my education. I also feel strongly that by combining multiple fields into a unified whole, I will gain a better foundation of knowledge than the pursuit of a single discipline will provide.