COLORADO COLLEGE - OFFICE OF THE REGISTRAR

APPLICATION FOR ADMISSION TO THE MAJOR IN LIBERAL ARTS & SCIENCES

I wish to major in Liberal Arts & Sciences. I understand that my courses of study within this major must be *supported and approved by two faculty sponsors from two different departments*, one of whom is my principal sponsor and academic adviser. Both faculty sponsors must evaluate the project or thesis. However, the Principal Sponsor/Adviser works closely with the student in conceptualizing and completing the thesis and turns in the final grade. The Associate Sponsor acts as a reader of the final draft of the thesis and recommends a final grade to the Principal Sponsor. The approval of the Dean's Advisory Committee is necessary for final acceptance of my plan of study within the major. In addition, I understand that, to make changes in the approved plan, I must have the agreement of each faculty sponsor. The Principal Sponsor should send a letter in support of the proposed changes to the Associate Dean of the College and the Registrar.

(Please submit 7 copies of this application and your Liberal Arts & Sciences proposal to the Dean's Advisory Committee **no later** than the second semester of your sophomore year. The Advisory Committee will not consider your application until the completed proposal - including faculty recommendations - has been received.)

Name (Please Print) [redacted] ID Number [redacted]

Worner Box [redacted] Phone [redacted] Student Signatur [redacted]

Current number of units earned [redacted] Expected graduation date [redacted]

Address [redacted] N. Cascade Ave. Colorado Springs CO 80946
Street City State Zip

Principal Sponsor/Adviser Walt Hecox Dept Environmtl Scienc/Econ

Associate Sponsor Eric Perramond Dept Southwest Studies

Description of the field of concentration (TITLE) Sustainable Development

This form must be signed by two faculty members from different departments who are full-time or adjunct faculty members who will be here (to the best of their knowledge) while the student is completing the major. Sponsors should also forward their letter of recommendation once they have signed this form. Return to the Office of the Associate Dean of the College, along with a description of the major and the required courses (including a description of the thesis topic). The Associate Dean will notify both student and sponsors of acceptance or rejection of the proposal, and the outline of the proposed major will be approved by both sponsors and sent to the Registrar. (Any change of adviser must be approved by the Dean's Advisory Committee, upon submission of a letter from the adviser.)

Principal Faculty Sponsor Walter E Hecox

Associate Faculty Sponsor E P [illegible]

To the Sponsors: your signature indicates approval of the proposed major. Please comment on this proposal in a brief letter to the Advisory Committee under separate cover. Please indicate your familiarity with the student's past academic performance and comment on his/her ability to carry out a program which requires an unusual amount of *independence and responsibility*. The Principal Faculty Sponsor/Adviser agrees to work closely with the student in composing the major, conceptualizing and completing the thesis and advising the student.

approved

LIST OF REQUIRED COURSES FOR PROPOSED LIBERAL ARTS & SCIENCES MAJOR
(Note: only between 9 and 14 units can be counted for the major and only two courses at the 100 level may be required in the major. All other courses must be above the 100 level.)

Required courses already taken: with statement as to how courses relate to major.

EV 212 Energy and the Environment

EV271 - Environmental Policy

EV 281 - Environmental Ethics

AH 111 - History of Architecture

Required courses to be taken: with statement as to how courses relate to major.

EV 141 - sustainable development GS 400-401 - senior thesis

EV 222 Quantitative methods of Environmental science

EV490 - Independent Research in Environmental science

EC 320 - Entrepreneurship EC 335 - Environmental Economics

EC 341 - Ecological economics and sustainability

Courses completed which are complimentary to the proposed major but not required:

EV 120 - Intro to sustainable planning

(Be sure to list General Studies GS 400-401 if you plan to get units of credit for your thesis.)

Total number of units to be counted toward the major: 13

Other Requirements: The student should explain why the proposed goals of the major cannot be achieved through a departmental major or through outside courses taken in addition to the requirement of a departmental major. In addition, the application should be accompanied by a typewritten description of the concentration (major) proposed, that is, a rationale demonstrating the cohesiveness of the proposed program of courses, a listing of the courses completed and to be completed, and a narrative statement for each course indicating how each required course relates to the proposed major as described. Please indicate the content of your proposed thesis including a discussion of objectives and methods.

Associate Dean of the College Victor Nelson-Cisneros 3/10/06
Signature

Please sign below if you give the Committee permission to share your name with other student's pursuing a Liberal Arts and Sciences major. The Committee would like to encourage more networking and support among students electing this option for the major.

Signature Feb 27 2006
Date

NOTE: This completed application must be in the Associate Dean of the College's office by 5:00 p.m., the second Friday of the block in order to be considered at that block's meeting. The Dean's Advisory Committee meets the 3rd Thursday of each block.
Rev. 3/97

Proposal for a Sustainable Development LAS Major

[redacted]

I came to Colorado College in September of 2004 with the idea that I was going to be an environmental science major in order to make a difference in this world. This was quite a lofty goal which at the time I really did not know how I was going achieve. Initially I decided to pursue an environmental science major in the hopes of learning about solutions to some of the world's pressing problems such as global warming and our dependence on fossil fuels. From taking several of that major's required classes I gained valuable knowledge about the problems that we face and basic knowledge of how to solve them. However, I also began to see that the required courses in the environmental science major are numerous and alone would not give me the depth of knowledge I need about how to solve these pressing problems. So I have decided that a better approach to my undergraduate education is to design an LAS major for myself that is based around both understanding critical environmental problems and implementing sustainable development practices with a focus on building design, environmental science, and economics.

In order to do this I have selected classes from both the Environmental Science Department as well as the Economics Department. This comes from the realization that for the most part people will not simply make changes to their lifestyles and building practices unless they can be convinced that these changes are not only attractive esthetically but economically as well.

What I mean by this is that environmental passion alone is insufficient in convincing people to adopt new building practices and alternative forms of energy just because it is the "right" thing to do. Instead people must be

convinced that sustainable building practices are both financially the right decision and at the same time result in a more desirable building.

After I graduate from Colorado College I see myself hopefully working for an architecture firm or at a real-estate development firm that employs sustainability in both their business practices and in the buildings which they design and build. In order to be fully prepared for this I have selected a group of courses for my major which will make me proficient in both the economics as well as in the application sustainable development practices. I have carefully chosen economics and environmental science classes complemented by architecture themed courses that exist at CC, all pertinent to the knowledge I need. I realize that Colorado College is not the best place to study architecture so I will take what I can get from CC and make up for that lack though summer classes at other universities and internships. I have also chosen a Fall 2006 study abroad program in Byron Bay, Australia for its focus on sustainable development, as described in my attached list of courses.

In conclusion I am requesting that this LAS major be approved. I have chosen a rigorous set of courses that are challenging and relevant to my objectives for an undergraduate education. They also will help prepare me for work related to the design and building of sustainable buildings, because I see that field as being very important in the coming years. To summarize I realize the Colorado College is the not best place to attend if I am trying to learn about building design, but due to my love of CC I simply cannot think of leaving. Therefore I have structured a major which will give me a strong base upon which to continue my education in this subject after graduation. Thank you for you

time spent reviewing this application and I hope that I have done a good job of convincing you of my need for an LAS major.

Course Progression:

[redacted]

ENVIRONMENTAL SCIENCE:

Courses to be counted toward LAS:

EV141- Sustainable development (1)**
EV212- Energy and the Environment (1)*
EV222-Quantitative Methods in Environmental Science (1)
EV271-Environmental Policy (1)*
EV281-Environmental Ethics (1)*
EV410-Independent Research in Environmental Science (1)**

Prerequisite Courses:

CH107- General Chemistry I (1)*
GY140- Physical Geology (1)*
EV155- Intro to Earth Systems Science (1)*
MA126- Calculus 1 (1)*

ECONOMICS:

Courses to be counted toward LAS:

EC320- Entrepreneurship (1)
EC335- Environmental Economics (1)
EC341-Ecological Economics and Sustainability (1)

Prerequisite Courses:

EC151- Principles of Microeconomics (1)
EC152- Principles of Macroeconomics (1)
EC160- Principles of Financial Accounting (1)

OTHER RELATED COURSES:

Courses to be counted toward LAS:

AH111- History of Architecture (2)*

Complementary Courses:

EV120- Intro to Sustainable Development (1)*

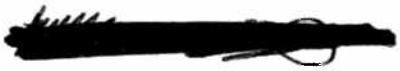
INTEGRATED COURSES:

GS400-401 Senior thesis (2)

Total Units for LAS: 13

*- Completed course
**- Courses to be substitutes by study abroad
(X)-Number of blocks

Description of LAS Courses



Environmental Science:

EV141- Sustainable Development

This course will cover the basic sustainable development practices which are the basis for my LAS major. It will also serve and a good way of gaining fundamental skills in the field of sustainable development because it will deal with the financial side of things and will then apply them to real life scenarios though time spent in the field during that block. (This class might also be replaced by my study abroad)

EV212- Energy and the Environment

This course will delve into the scientific explanation of sustainable practices such as what is physically happening then heat is escaping from a system such as a house. In this class we will also learn how to calculate efficiency which is a very important topic in sustainable development, because in sustainable development you are always trying to maximize efficiency and therefore it is good to know how efficiency is calculated so that you can have a understanding of how to make something more efficient. Also during this class we will perform an energy retrofit of a local Colorado Springs house which will provide a time for us to apply skills that we have learned about sustainability.

EV222- Quantitative Methods in Environmental Science

This class will help build proficiency is the use of modeling programs in order to model such events as climate change based on pollution and the water cycle. In this class we will model what happens when you add a new factor to a system that is at equilibrium, for example if you add more CO2 to the environment and the negative effects that result. This class will be very helpful to help visualize the problems in this world which sustainable development seeks to solve.

EV271- Environmental Policy

This class is an introduction to environmental law and the ways in which such laws allow for both the protection and the degradation of the environment depending on how they are interpreted. It will also address how new environmental policy is created in order to protect the environment and how people often find loopholes around these laws. This will be a good class for my major because it deals with environmental conservation which is a key aspect of sustainable development.

EV281- Environmental Ethics

This class will deal with the ethical side of environmental conservation especially the topic of whether or not is it ethical to protect the environment in the first place. It will also explore with how other cultures throughout history have viewed the environment, in the hopes of broadening the student's mind towards what the environment has to offer and why it is worth saving. In

summary it is a class that explores what the environment means to you how this shapes the way you act.

EV410- Independent Research in Environmental Science

This will be substituted by my study abroad which I will address later.

Economics:

EC320- Entrepreneurship

This class will deal with what it takes to start a business from scratch. It will address both start up costs as well as operating costs and talk about what it takes to make a new company either successful as well as what it takes to have a company fail. This is a very important class for my LAS major because most companies in the sustainable development field today are small start-up companies due to the fact that it is such a new field.

EC335- Environmental Economics

This class will address the correlation between economic trends and practices and the overall quality of the environment. It will focus on what economic conditions lead to environmental conservation and also which ones lead to environmental degradation. Also it will talk about how the vary nature of economics often can undermine environmental protection methods even within a single company. This class will be helpful because my major is based on the fact that you need to show someone that it is economically viable to adopt sustainable practices before they will be inclined to do so.

EC341- Ecological Economics and Sustainability

This class will focus on ways to meet our current material needs as a industrialized society while ensuring that our actions will not negatively effect future generations from also meeting their needs. During the course we will talk about how it can be possible to balance economics and the well being of the environment. Also the week long field trip which this class offers will be an important opportunity to see sustainable practices at work in the real world rather than simply learning about them in a classroom setting.

Related Courses:

AH111- History of Architecture

In my mind this is one of the more important classes for this major. This it due to the fact that the class explores the changes in the structures that humans have built over the course of time, from simple and sustainable mud buildings, to the industrial revolution, and even to the modern day where we are hopefully returning to sustainable building practices. It also offers a good base for building design and layout while giving a good overview of the styles of building which have been used over the years and which continue to influence our architecture today.

Integrated Courses:

GS400-401- Senior thesis

My thesis as I see it now will involve the building process in some way, right now I am have two ideas that I have been thinking of as possibly major topics. The first is a study on the waste produced during the process of building a house/commercial building. This thesis would deal with where the waste comes from, how to limit that waste, and creative ways of putting that waste back to use on the job site or in the building itself. My other possibility for a thesis would be to take the CC cabin off the grid and make it more sustainable. This process would involve preemptive research on what could be done to the cabin such as adding solar panels and a grey water system. Then I would go trough the process of applying for funding from the college, and the completing a retrofit of the cabin while writing a report on what was done, why it was done, and the benefits these improvements will have along with other actions which can be taken in the future. It is my hope that in doing this to the cabin it can then be used as an example when teaching sustainable development courses here at CC as a way of seeing sustainable practices being put to work. Also my research on this project will be helpful to local property owners in that area who are considering the positive benefits that adopting sustainable practices could have for their own homes.

Courses to be Substituted by Study Abroad

I am currently applying to study abroad inn the 2006 Fall term in Byron Bay, Australia in a program which is heavily focused on sustainable development. This program deals with topics such a land management through the study of the rainforests in Australia which have recently been experiencing very promising reconstruction efforts in an attempt to restore them to what they once were. The program also looks at aboriginal tribes in the surrounding area which have lived there for thousands of years in harmony with the natural world. It is thought that there is much we can learn from these people about sustainable farming practices and ways of living without having a negative effect on the environment. The overlying theme of the program though is sustainable development, both in principle and practice. Due to this I am going to attempt to substitute Colorado College's EV141-Sustianable Development with the program's course called Conservation and Resource Management which offers 120 class hours and is mainly focused on sustainable development. I am also hoping to substitute Colorado College's EV410- Independent Research in Environmental Science with a five week independent study project which occurs during the last five weeks of the program. As for the topic of the independent study I will not know my final topic until I am actually there and have met with their advisors, but so far I am thinking of a project on sustainable home building and ways of minimizing the waste involved in this process, or a research project into possible ways of using sustainable farming practices in the process of growing grapes for wine which is a large industry in Australia.