



Environmental Program Student Handbook

“The Colorado College Environmental Program faculty and students contribute to an enhanced understanding of environmental issues in the American West and beyond through scholarly work in the classroom and field. To meet this objective, we seek a fundamental understanding of environmental processes, systems analysis, systems thinking, and the political and economic issues inherent in environmental management.”

Effective February 2009

TABLE OF CONTENTS

Introduction	3
The Environmental Program Faculty Advisors	4
Course Requirements for the Environmental Science Major	5
The Integrated Major	5
Chemistry Concentration Requirements	6
Physics Concentration Requirements	6
Recommended Course Sequence for the Environmental Science Integrated Major	6
Recommended Course Sequence for the Environmental Science:	
Chemistry Concentration	8
Physics Concentration	11
Course Requirements for the Environmental Policy Major	13
Recommended Course Sequence for the Environmental Policy Major	13
Course Requirements for the Environmental Issues Thematic Minor	16
Advice on Scheduling Courses for an Environmental Program Major	16
Bypass Exams for Introductory Courses in the Environmental Program	16
Study and Research at Other Institutions	17
Petitioning the EV Faculty for Course Credit	17
Senior Thesis Information and Guidelines	17
Thesis Proposal Timeline	18
Environmental Science and Policy Thesis Rubric	18
Planning Your Senior Research	20
Registering Your Senior Thesis	21
Funding Your Senior Research	21
Completing Your Senior Thesis or Independent Research	21
Submitting the Senior Thesis	22
Presenting Your Senior Thesis Research	23
Senior Seminar Requirement	23
Environmental Program Seminars	23
Seniors Graduating in December	23
EV Day	24
Environmental Program Senior Honor Awards	24
Life Beyond Colorado College	24
Application to Graduate Schools	24
Letters of Recommendation	25
The Graduate Record Exam	26
Additional Departmental Information	26
Senior Thesis and Graduation with Distinction in Environmental Science	26
Undergraduate Opportunities	26
Department Alcohol and Drug Policy	26
Department Field Trip Policy	27
Course Evaluations	27
Appendix I: Sample Thesis Title Page	28
Appendix II: Example Graduate Programs in Environmental Science	29

INTRODUCTION

The Colorado College Environmental Program prepares majors to understand their connection to the environment, acquire the skills to explore scientific and human interrelationships in the global ecosystem, and pursue interdisciplinary approaches to problem solving. We offer two majors in the program: Environmental Science and Environmental Policy. In addition, we offer disciplinary tracks in Environmental Science: Integrated, Chemistry, and Physics. We also offer a thematic Environmental Issues minor.

Graduates of the Colorado College Environmental Program...

1. Will have a rigorous intellectual foundation in cross-disciplinary environmental issues, leading to advanced study in environmental science and/or policy.
2. Will have demonstrated competence in reading and critically evaluating environmental literature (science, policy, economics, ethics, etc.) in understanding environmental problems as complex systems.
3. Will have demonstrated effective oral and written communication skills.
4. Will have the necessary quantitative and qualitative reasoning skills to critically analyze current research on environmental issues from scientific, political, economic, and/or societal perspectives.
5. Will have demonstrated practical lab and field experience beyond the classroom through scientific or socioeconomic research.
6. Will have demonstrated the capacity to understand how local and regional environmental processes interact globally with environmental systems.

This student handbook will answer many questions Environmental Program majors have concerning requirements, suggested courses, research, meetings, and the numerous opportunities in the program. For complete guidance, please meet with your advisor, watch the bulletin boards, attend the majors' meetings, attend seminars, and check your Worner Center mailbox and e-mail. Please advise the department staff assistant of your Worner Center box number, phone number, e-mail address, any prolonged off-campus sojourn, and any change in your status at the College.

Ultimately it is your responsibility to know all departmental and college requirements and regulations. Please carefully review the following materials several times throughout your college career, and please ask if any information or policy is unclear.

The Environmental Program includes coursework in Environmental Science and Policy. The Environmental Science major includes an integrated major with an interdisciplinary focus, as well as disciplinary tracks in Environmental Physics and Environmental Chemistry. The Environmental Policy major offers an integrated environmental major with emphasis on Political

Science and Economics. All majors include three common interdisciplinary “capstone sequence” courses: Environmental Inquiry, Environmental Management and Environmental Synthesis.

Scheduling courses for both majors requires careful planning with our major advisor. If you are considering majoring in EV Science or Policy, speak with any of the program faculty listed below.

The Environmental Program Faculty Advisors:

Director, Mike Taber (mike.taber@coloradocollege.edu), Associate Professor of Education

Environmental Science

Howard Drossman (hdrossman@coloradocollege.edu), Professor of Chemistry and Environmental Science

Walt Hecox (whecox@coloradocollege.edu), Professor of Environmental Economics

Phillip Kannan (pkannan@coloradocollege.edu), Distinguished Lecturer and Legal Scholar-in-Residence

Miroslav Kummel (mkummel@coloradocollege.edu), Assistant Professor of Environmental Science

Eric Perramond (eric.perramond@coloradocollege.edu), Associate Professor of Environmental Science and Southwest Studies

Barbara Whitten (bwhitten@coloradocollege.edu), Professor of Physics

Shane Burns (sburns@coloradocollege.edu), Professor of Physics

Marc Snyder (msnyder@coloradocollege.edu), Associate Professor of Biology

Shane Heschel (shane.heschel@coloradocollege.edu), Assistant Professor of Biology

Sally Meyer (smeyer@coloradocollege.edu), Professor of Chemistry

Eric Leonard (eleonard@coloradocollege.edu), Professor of Geology

Henry Fricke (hfricke@coloradocollege.edu), Associate Professor of Geology

Jane McDougall (jmcdougall@coloradocollege.edu), Associate Professor of Mathematics

Steven Janke (sjanke@coloradocollege.edu), Professor of Mathematics

Mike Siddoway (msiddoway@coloradocollege.edu), Professor of Mathematics

Environmental Policy

Andrew Price-Smith (andrew.price-smith@coloradocollege.edu), Assistant Professor of Political Science

Walt Hecox (whecox@coloradocollege.edu), Professor of Environmental Economics

Phillip Kannan (pkannan@coloradocollege.edu), Distinguished Lecturer and Legal Scholar-in-Residence

Andy Dunham (adunham@coloradocollege.edu), Professor of Political Science

Wade Roberts (wroberts@coloradocollege.edu), Assistant Professor of Sociology

Marion Hourdequin (marion.hourdequin@coloradocollege.edu), Assistant Professor of Philosophy

Environmental Issues Thematic Minor

Phillip Kannan (pkannan@coloradocollege.edu), Distinguished Lecturer and Legal Scholar-in-Residence

Barbara Whitten (bwhitten@coloradocollege.edu), Professor of Physics

Additional Environmental Faculty:

Economics: Mark Smith (msmith@coloradocollege.edu)

English: David Mason (dmason@coloradocollege.edu)

History: Susan Ashley (sashley@coloradocollege.edu)

Math: David Brown, (dbrown@coloradocollege.edu)

Philosophy: Jonathan Lee (jlee@coloradocollege.edu), John Riker (jriker@coloradocollege.edu),

Rick Furtak (rfurtak@coloradocollege.edu)

Biology: Tass Kelso (tkelso@coloradocollege.edu)

Geology: Jeff Noblett (jnoblettt@coloradocollege.edu)

COURSE REQUIREMENTS FOR THE ENVIRONMENTAL SCIENCE MAJOR

This major is intended for students who wish to have a significant scientific background to pursue graduate study or future work in Environmental Science, Environmental Studies, or Environmental Advocacy. An environmental issues minor is also available (see Thematic Minors in the Colorado College Catalog of Courses [CCCC]) that can be used with any departmental major. This may be preferable for students wishing a less science-oriented environmental degree program or for science majors wishing to better understand Environmental Science issues. Finally, there are Environmental Studies options for LAS majors. Also refer to the CCCC for information on designing your own LAS major.

All Environmental Science majors require the following:

1. The integrated major or a major in Environmental Chemistry or Environmental Physics
2. A capstone experience that includes Environmental Inquiry (EV 221); Environmental Management (EV 321); Senior Seminar (EV 490); and either Environmental Synthesis (EV 421) or Senior Thesis (EV 499). (3 units)

The Integrated Major (12 units)

Introduction to Global Climate Change (EV 128); Calculus I (MA 126); Physical Geology (GY 140); Sustainable Development or Microeconomics (EV 141 or EC 151); Environmental Policy* (EV 271); Environmental Ethics* (EV281/PH 246); Human Impacts on Biogeochemical Cycles (EV 211); Analysis of Environmental Data* (EV 228); Energy: Environmental Thermodynamics and Energetics (EV 212); Ecology and the Environment (EV 209); Water: Hydrology, Aquatic Chemistry and Ecology (EV 311); and Air: Atmospheric Physics and Chemistry (EV 431). *GY 130 may substitute for GY 140. PS 321 may substitute for EV 271. BY 220 or MA 117 or MA 217 may substitute for EV 228. EV 275 Nature & Society or EV 273 Environmental History or FG 215 Ecofeminism or EV 161 Environmental Sociology may substitute for EV 281.

Chemistry Concentration Requirements (13 units)

A student interested in a major in environmental science with an emphasis in chemistry is required to take Sustainable Development or Microeconomics (EV 141 or EC 151); Environmental Policy (EV 271 or PS 321); General Chemistry I & II (CH 107 and 108); Organic Chemistry I (CH 250); Analytical Chemistry or Bioanalytical Chemistry (CH 241 or CH 345); Calculus I and II (MA 126 and 128); Classical Physics I and II (PC 241 and 242) and any three of the following: Organic Chemistry II (CH 251); Environmental Chemistry (CH 210); Organic Chemistry III (CH 351); Instrumental Analysis (CH 342); Biochemistry I (CH 382), Biochemistry II (CH 383), Physical Chemistry I (CH 366); Physical Chemistry II (CH 367); Inorganic Chemistry (CH 475); Air: Atmospheric Physics and Chemistry (EV 431). Students are encouraged to take the three advanced classes as a concerted sequence that can lead to graduate studies or careers in areas such as toxicology: CH 251, CH 382, CH 383 with CH 345 or atmospheric chemistry: CH 366, CH 367, and EV 431. Research in Environmental Chemistry and a field biology or geology course are also recommended.

Physics Concentration Requirements (12 units)

A student interested in a major in environmental science with emphasis in physics is required to take Sustainable Development or Microeconomics (EV 141 or EC 151); Environmental Policy (EV 271 or PS 321); Calculus (MA 126, 128, and 203); Introductory Physics (PC 241, 242, and 251); Electronics (PC 261); Techniques of Experimental Physics (PC 361); Mechanics I (PC 341); and Air: Atmospheric Physics and Chemistry (EV 431). A field biology or geology course is also recommended. A student interested in graduate school or an environmental science career in fields such as Atmospheric Physics, Meteorology, Geophysics, and Oceanography should take additional courses, such as differential equations, computer science, chemistry, and more physics.

RECOMMENDED COURSE SEQUENCE FOR THE ENVIRONMENTAL SCIENCE INTEGRATED MAJOR

First Year

EV128: Introduction to Global Climate Change (1 unit)

MA 126: Calculus I (1 unit)

or

MA 127: Calculus I & 2 Review may substitute for MA 126

GY 140: Physical Geology (1 unit)

or

GY 130: Introductory Geology

PR: No credit after GY 140

EV 141: Sustainable Development (1 unit)

PR: No Economics credit after EC 150 (EC151 and EC 152) or EC 160 and

May not be counted toward Economics or Political Economy majors

or

EC 151: Principles of Microeconomics (1 unit)

Also recommended: an introductory biology class (esp. BY 105: Biology of Plants) for students with a weak preparation in high school biology and/or CH107 for students with a weak preparation in high school chemistry.

Second Year

EV 212: Energy: Environmental Thermodynamics and Energetics (1 unit)

or

CH 108 Introductory Chemistry II **AND PC 241** Intro Classical Physics I may substitute for EV 212

EV 228: Analysis of Environmental Data (1 unit)

PR: **MA 126** Calculus I or **MA 125** Pre-Calculus and Calculus or **MA 127**

Calculus I and 2 Review

or

MA 217 Probability and Statistical Modeling or **BY 220** Biostatistics and Experimental Design or **MA 117** Probability and Statistics may substitute for EV 228

EV 211: Human Impacts on Biogeochemical Cycles (1 unit)

PR: EV128 and (MA126 or MA125 or MA127)

or

CH 107 AND MA 128 may substitute for EV 211

EV 271: Environmental Policy (1 unit)

PR: EV128

or

PS 321 Public Policymaking (2 units) may substitute for EV 271

EV221: Environmental Inquiry (1 unit)

PR: Either (1) EV128 and EV228 or (2) EV141 and EV271 and declared EV Chem or EV Physics track or (3) consent of instructor.

Third Year

EV 209: Ecology (1 unit)

PR: EV211

or

(BY208 may substitute for EV209)

EV 281: Environmental Ethics (also **PH 246** Environmental Ethics) (1 unit)
or
EV 275 Nature & Society OR **EV 273** American Environmental History OR **FG 251**
Ecofeminism OR **EVI30** Environmental Sociology may substitute for EV 281

EV 311: Water: Hydrology, Aquatic Chemistry and Ecology (1 unit)
PR: EV 212, GY140, and EV228; EV209 recommended
EV321: Environmental Management (1 unit)
PR: EV221 or consent of instructor

Fourth Year

EV 431: Air: Atmospheric Physics and Chemistry (1 unit)
PR: EV212 and EV228; EV311 recommended

EV 421: Environmental Synthesis (1 unit)
PR: EV321
or
EV 499: Senior Thesis

EV 490: Senior Seminar (0 units)

TOTAL: 15 units

**RECOMMENDED COURSE SEQUENCE FOR THE ENVIRONMENTAL SCIENCE
CHEMISTRY CONCENTRATION**

First Year

CH 107: General Chemistry I (1 unit)
PR: Two years of high school algebra and one year high school chemistry or
consent of instructor

CH 108: General Chemistry II (1 unit)
PR: CH 107

MA 126: Calculus I (2 units)
And
MA 128: Calculus 2
PR: MA 125 or MA 126

EV 141: Sustainable Development (also EC141/SW141) (1 unit)
PR: No Economics credit after EC 150 (EC 151 and EC 152) or EC 160
And may not be counted towards Economics or Political Economy majors
Or
EC 151: Principles of Microeconomics

Second Year

CH 250: Structures of Organic Molecules (1 unit)
PR: CH 108

EV 271: Environmental Policy (1 unit)
PR: 100 or 200-level Environmental Science class or consent of instructor
Or
PS 321: Public Policymaking (2 units)
PR: Either PS 101 or PS 103 or consent of instructor

EV 221: Environmental Inquiry (1 unit)
PR: EV 128 and EV 228 (or MA 117 or BY 220) or
EV 271 and EV 141 or EC 151

Third Year

CH 241: Introduction to Analytical Chemistry (1 unit)
PR: CH 108 and CH 250
Or
CH 345: Bioanalytical Chemistry (1 unit)
PR: CH 382

PC 241: Introductory Classical Physics I, II (1 unit)
PR: Consent of Instructor or MA 128: Calculus 2
and
PC 242: Introductory Classical Physics I, II (1 unit)
PR: Consent of instructor or PC 241

EV 321: Environmental Management (1 unit)
PR: EV 221 or consent of instructor

Fourth Year

EV 421: Environmental Synthesis (1 unit)
PR: EV 321 or consent of instructor
Or
EV 499: Senior Thesis (1 unit)
PR: Consent of instructor and an appropriate research experience

EV 490: Senior Seminar

(0 units)

Any 3 of the following:

CH 251: Reactions of Organic Molecules

(3 units total)

PR: CH 250

Or

CH 210: Environmental Chemistry

PR: CH 250 or CH 108 and (BY 208 or GY 130 or GY 140)

Or

CH 351: Synthesis of Organic Molecules

PR: CH 251

Or

CH 342: Introduction to Instrumental Methods

PR: CH 241

Or

CH 382: Biochemistry I

PR: CH 251

Or

CH 383: Biochemistry II

PR: CH 382

Or

CH 366: Physical Chemistry I

PR: CH 241 and PC 241 and MA 128 and knowledge of computer programming

or

CH 367: Physical Chemistry II

PR: CH 366

Or

CH 475: Inorganic Chemistry I

PR: Consent of Instructor or CH 367

Or

EV 431: Air: Atmospheric Physics and Chemistry

PR: Either (1) EV 212 or (2) CH 108 and PC 241

TOTAL:

16 units

*If taking PS 321, the total is 17 units.

Students are encouraged to take the three advanced classes as a concerted sequence that can lead to graduate studies or careers in areas such as toxicology: CH 251, CH 382, CH 383 with CH 345 or atmospheric chemistry: CH 366, CH 367, and EV 431. Research in Environmental Chemistry and a field biology or geology course are also recommended.

RECOMMENDED COURSE SEQUENCE FOR THE ENVIRONMENTAL SCIENCE PHYSICS CONCENTRATION

First Year

EV 128: Introduction to Global Climate Change (1 unit)

MA 126: Calculus I	(1 unit)
---------------------------	----------

MA 128: Calculus 2 PR: MA 125 or MA 126	(1 unit)
---	----------

MA 203: Calculus 3 PR: MA 128	(1 unit)
---	----------

PC 241: Introductory Classical Physics I, II PR: Consent of instructor or MA 128 or equivalent	(1 unit)
--	----------

Second Year

EV 271: Environmental Policy PR: 100 or 200-level Environmental Science class or consent of instructor Or PS 321: Public Policymaking PR: Either PS 101 or PS 103 or consent of instructor	(1 unit) (2 units)*
--	--

EV 221: Environmental Inquiry PR: EV 128 and EV 228 (or MA 117 or BY 220)	(1 unit)
---	----------

PC 242: Introductory Classical Physics I, II PR: Consent of instructor or PC 241	(1 unit)
--	----------

EV 141: Sustainable Development (also ECI41/SWI41) PR: No Economics credit after EC 150 (EC 151 and EC 152) or EC 160 And may not be counted towards Economics or Political Economy majors Or EC 151: Principles of Microeconomics	(1 unit)
--	----------

Third Year

EV 321: Environmental Management PR: EV 221 or consent of instructor	(1 unit)
--	----------

PC 251: Introductory Modern Physics	(1 unit)
--	----------

PR: PC 242 or equivalent

PC 261: Electronics I (1 unit) PR: PC 242 or equivalent

PC 341: Mechanics (1 unit) PR: Consent of instructor or PC 251 and MA 203

Fourth Year

EV 431: Air: Atmospheric Physics and Chemistry (1 unit) PR: Either (1) EV 212: Energy: Environmental Thermodynamics and Energetics or (2) CH 108: General Chemistry II and PC 241: Introductory Classical Physics I, II
--

PC 361: Techniques of Experimental Physics (1 unit) PR: PC 251, PC 261 or consent of instructor

EV 490: Senior Seminar	(0 units)
-------------------------------	-----------

EV 421: Environmental Synthesis (1 unit) PR: EV 321 or consent of instructor Or EV 499: Senior Thesis (1 unit) PR: Consent of instructor and an appropriate research experience

TOTAL:	16 units
---------------	----------

*If taking PS 321, the total is 17 units.

A field biology or geology course is also recommended. A student interested in graduate school or an environmental science career in fields such as Atmospheric Physics, Meteorology, Geophysics, and Oceanography should take additional courses, such as differential equations, computer science, chemistry, and more physics.

COURSE REQUIREMENTS FOR THE ENVIRONMENTAL POLICY MAJOR

Environmental Policy majors required the following:

Core classes (5 units):

Introduction to Global Climate Change (EV128); Human Impacts on Biogeochemical Cycles (EV211); Calculus I (MA126); Analysis of Environmental Data (EV228) or Biostatistics and Experimental Design (BY220) or Probability and Statistics (MA117) or Probability and Statistical Modeling (MA217)

And one of the following:

Environmental Ethics (EV281/PH246) or Nature & Society (EV275) or Environmental History (EV273) or Ecofeminism (FG216) or Environmental Sociology (EV130);

Political Science and Economics (8 units):

Public Policymaking (PS321/EV373 2 units); Principles of Economics (EC150, 2 units) or Principles of Microeconomics (EC151) and Principles of Macroeconomics (EC152); Intermediate Microeconomic Theory (EC207).

And one of the following:

Introduction to International Political Economy (PS375/EC375) or Democracy and Markets (PS306) or Introduction to International Development (PS356, pending course approval by the faculty).

And one of the following:

Environmental Law and Policy for the Global Commons (EV374/PS324) or Environmental Policy (EV271) or Environmental Health and Security (PS358, pending course approval by the faculty),

And one of the following:

Political Ecology of the Southwest (SW301) or Ecological Economics and Sustainability (EV341/EC341/SW341) or Global Environmental Economics (EC390) or Economic Development (EC337) or Public Finance (EC330) or International Trade (EC342) or Natural Resource Economics (EC404).

And Core Capstone Experience (3 units):

Environmental Inquiry (EV221); Environmental Management (EV321); Senior Seminar (EV490, 0 units); and either Environmental Synthesis (EV421) or Senior Thesis (EV499).

RECOMMENDED COURSE SEQUENCE FOR THE ENVIRONMENTAL POLICY MAJOR

First Year

EV128: Introduction to Global Climate Change (1 unit)

MA 126: Calculus I (1 unit)
or
MA 127: Calculus I & 2 Review may substitute for MA 126
EC 150: Principles of Economics (2 units)
OR
EC 151: Principles of Microeconomics and **EC 152:** Principles of Macroeconomics

Second Year

EC 207: Intermediate Microeconomic Theory (1 unit)
PR: MA 126: Calculus I or EC 150: Principles of Economics or
EC 151: Principles of Microeconomics

EV 211: Human Impacts on Biogeochemical Cycles (1 unit)
PR: EV128 and (MA126 or MA125 or MA127)
or
CH: 107 **AND** MA: 128 may substitute for EV 211

EV 228: Analysis of Environmental Data (1 unit)
PR: MA 126 Calculus I or MA 125 Pre-Calculus and Calculus or MA 127
Calculus I & 2 Review
or
(MA 217: Probability and Statistical Modeling
or
BY 220: Biostatistics and Experimental Design
or
MA 117: Probability and Statistics may substitute for EV 228)

EV221: Environmental Inquiry (1 unit)
PR: Either (1) EV 128 and EV 228 or (2) EV 141 and EV 271 or (3) consent of instructor

Third Year

EV373/PS321: Public Policymaking (2 units)
PR: PS 101 or PS 103 or consent of instructor

EV 281: Environmental Ethics (also **PH 246** Environmental Ethics) (1 unit)
or
EV 275 Nature & Society OR **EV 273** American Environmental History OR **FG251**
Ecofeminism OR **EV130** Environmental Sociology may substitute for EV 281

EV321: Environmental Management (1 unit)
PR: EV221 or consent of instructor

Fourth Year

EV 421: Environmental Synthesis PR: EV321 or EV 499: Senior Thesis	(1 unit)
---	----------

EV 490: Senior Seminar (0 units)

PS 375/EC375: Introduction to International Political Economy PR: EC 150: Principles of Economics (2 units) or EC 151: Principles of Microeconomics and EC 152: Principles of Macroeconomics and a PS 200-level course or PS 306: Democracy and Markets or PS 253: Introduction to International Development or PS 356: Global Environmental Policy	(1 unit)
--	----------

EV 374/PS 324: Environmental Law and Policy for the Global Commons or EV 271: Environmental Policy PR: EV 100 or 200-level course or consent of instructor or PS 387: Environmental Health and Security	(1 unit)
---	----------

SW 301: Political Ecology of the Southwest or EV341/EC341/SW341: Ecological Economics and Sustainability PR: EC 150: Principles of Economics (2 units) or EV 141: Sustainable Development and EC 151: Principles of Microeconomics or EC 335: Global Environmental Economics or EC 390: Advanced Topics in Economics: Global Environmental Economics PR: EC 150: Principles of Economics (2 units) or	(1 unit)
--	----------

EC 337: Economic Development

or

EC 330: Public Finance

or

EC 342: International Trade

or

EC 404: Natural Resource Economics

PR: EC 207: Intermediate Microeconomic Theory

PR: MA 126: Calculus I and EC 150: Principles of Economics OR

EC 151: Principles of Microeconomics and EC152: Principles of Macroeconomics

TOTAL:

16 units

COURSE REQUIREMENTS FOR THE ENVIRONMENTAL ISSUES MINOR

As an alternative to a major in Environmental Science or Policy, students may consider a minor in Environmental Studies. This thematic minor is intended to be a core of courses for a student wishing to address environmental issues in their lives. The following three categories provide some of the broad distribution needed to understand the interdisciplinary nature of the environmental problems (at least 6 courses are required for this thematic minor):

- * Category One: Social and Philosophical Dimensions (2 courses requirement);
- * Category Two: Scientific Dimensions (3 courses requirement); and
- * Category Three: Environmental Focus (One course requirement).

For more complete details and lists of specific courses please see the Thematic Minor Handbook available at the Registrar Office and at the Environmental Program office (Tutt Science Building, Room 130A).

ADVICE ON SCHEDULING COURSES FOR AN ENVIRONMENTAL PROGRAM MAJOR

In most cases the system will allow you to sign up for a course if you do not have the listed prerequisites. The instructor may check to make sure you have all prerequisites, and ask you to take another class if you have not taken them before the block begins. Having the appropriate prerequisites is very important in EV courses. **You must plan ahead to be prepared.** The EV Director usually knows the block schedule before the registration process begins. Check with the program office or website for copies of the upcoming academic schedule.

Plan on taking all the required courses for the major. If you are transferring courses from another institution (e.g., study abroad program), you must petition the EV program faculty for credit *after you have completed the course(s)*. Keep in mind that poor planning does not justify exemption from taking all required courses for the major.

BYPASS EXAMS FOR INTRODUCTORY COURSES IN THE ENVIRONMENTAL PROGRAM

Many introductory courses can be replaced with AP or IB credit from high school. Many individual science departments have placement exams for introductory courses as well. Placing out of Chemistry 107 for example gives you a prerequisite for taking EV212 but does not give you a block of credit on your transcript. Other courses in the major that may receive AP or IB credit include MA126 Calculus, MA117 Statistics, EC151 Microeconomics, and EC152 Macroeconomics. In order to receive replacement for pre-requisites or credit for major courses, you must petition the EV faculty for approval.

Study and Research at Other Institutions

Students wishing to study abroad must follow the CC study abroad guidelines. Students need to obtain the signature of their EV advisor and the EV Director as part of the study abroad application process. **There are no upfront guarantees for EV credit prior to the start of the study abroad program. All majors must petition the EV faculty for any credit upon completion of the program.** Students are encouraged to attend CC approved programs for environmentally related coursework.

Off-campus research projects completed in such programs as the Woods Hole Ecosystems Center, the ACM Tropical Field Research Program in Costa Rica, a Hughes Undergraduate Research Program (HURP) grant-supported research at another institution, or other approved research experience at a laboratory or field station may be used for the research on which a senior thesis is based. Students should be aware, however, that sometimes research supervision in these programs is inadequate and they could end their off-campus program without having obtained suitable data for a senior thesis. **Students must submit their research prospectus to their research advisor prior to off-campus research experience.** When the student returns to CC after finishing the off-campus research, the primary thesis advisor will judge whether the results of the student's off-campus research project is worthy of a senior thesis. Students are additionally cautioned that the actual writing of the senior thesis based on off-campus research must be done by working closely with the CC EV Program faculty member who has agreed to be the student's primary research advisor. In this case the primary thesis advisor supervises the data analysis and writing of the thesis, rather than supervising the actual research.

Petitioning the EV Faculty for Course Credit

Students wishing to petition the EV Faculty for course credit must submit a list of courses, a rationale for receiving the credit, and course syllabi (and occasionally examples of relevant work, such as papers) as part of the petition. Your major advisor must first approve the petition. Your advisor to the EV faculty for vote usually submits the petition.

SENIOR THESIS INFORMATION AND GUIDELINES

Independent research is a valuable part of your Colorado College education, requiring significant planning and effort for its successful completion. The thesis option is one of two

options available as the Capstone experience for Environmental Program seniors: Senior Thesis (EV 499) or Environmental Synthesis (EV 421). In all cases you will be expected to collect and synthesize data on an environmental issue or system, complete a comprehensive written report, and present your final results to the department either in class or in the Environmental Seminar (EV 490).

Thesis Proposal Timeline

DATE	ACTION
Blocks 5-6, Junior Year	Juniors wishing to complete a senior thesis in their senior year must complete a “declaration of intent” form. Students are encouraged to meet with a prospective advisor among the Environmental Program faculty and develop three researchable topics and identify project logistics and time-line, including potential funding sources for conducting the research. Students can identify prospective advisors according to their research interests listed on the EV Program web site. The faculty advisor will identify a second advisor who will also evaluate the thesis prospectus.
First Monday of Block 7	Declaration of Intent form due. The two advisors and the Environmental Program Technical Director must sign the form.
First Friday, Block 8 (Optional)	<i>Any student wishing to conduct their thesis over the summer should submit their thesis prospectus by the first Friday of Block 8. EV Thesis faculty, Technical Director, and EV Program Director will meet during the second week of block 8 to approve thesis prospectus submissions. Students going abroad in Fall of Senior Year and wishing to use the abroad experience as part of their thesis must submit a thesis prospectus by first Friday of Block 8, junior year.</i>
Second Monday of Block 1, Senior year	Final deadline for formal submission of research prospectus. The prospectus must include a 3-4 page written report summarizing the hypothesis to be addressed by the thesis and a description of how the project will address this hypothesis. The prospectus must also include an estimated budget, justification, and identified funding sources. Where applicable, the research budget must include travel, laboratory, and field expenses, itemized with the best available cost estimates. The thesis advisors and EV Technical Director must preliminarily approve the proposed budget.
Second Week of Block 1	EV Thesis Faculty, Technical Director and Program Director meet to approve thesis prospectus. Students notified within 48 hours of the meeting.

Notes:

- A significant change in the thesis project during the senior year will require submission of a new prospectus to the EV Thesis Faculty for approval. The thesis advisor and EV Technical Director must approve all budget changes.
- Students must schedule use of lab and field equipment with the EV Technical Director
- Final thesis document requires two signatures.

Environmental Science and Policy Thesis Rubric

Criteria	Level 1	Level 2	Level 3	Level 4
Rationale	no clear rationale or a weak rationale for the project	some rationale presented, begins to motivate the work	provides and discusses a suitable rationale	persuasive and creative rationale

Criteria	Level 1	Level 2	Level 3	Level 4
Dealing with Complexity in Framing Topic	frames complex questions as simple ones	invests question with some complexity, may over-simplify or over-extend	reasonable balance between focus and complexity	frames the topic with a full appreciation of its complexity while retaining appropriate focus
Approach	approach not clear what was done or why, or an inappropriate method	approach is generally appropriate and properly executed	clearly described and justified, well-chosen and appropriate, and well-executed	creative and sophisticated methods
Scholarly Context	author does not demonstrate awareness of the scholarly literature, may over-rely on too few sources	author demonstrates a reasonable awareness of the literature	author demonstrates broad awareness and situates own work within the literature	author does these things and makes a contribution to the field, or identifies a new direction for investigation
Position	does not take a clear or defensible position or draw a clear conclusion	clearly describes, or begins to support/test/extend/critique a position that is already in the literature	thoroughly and effectively supports, tests, extends, or critiques a position that is already in the literature	develops a clear and defensible position of his/her own, draws a significant conclusion
Argument	weak, invalid, or no argument, perhaps a simple assertion	some arguments valid and well supported, some not	main arguments valid, systematic, and well supported	arguments both well supported and genuinely compared to conflicting explanations
Use of Data/Evidence	draws on little or no evidence, mostly relies on assertions or opinions, or evidence not clearly presented	some appropriate use of evidence but uneven	feasible evidence appropriately selected and not over-interpreted	fully exploits the richness of the data and/or evidence/ideas, and is sufficiently persuasive
Insight, Seeing Patterns and Connections	treats related ideas or data as unrelated, or draws weak or simplistic connections	begins to establish connections and perceive implications of the material	brings together related data or ideas in productive ways, thoroughly discusses implications of material	develops insightful connections and patterns that require intellectual creativity
Usage, Grammar and Spelling	significantly impairs readability	frequent or serious errors	some minor errors	virtually no errors

Criteria	Level 1	Level 2	Level 3	Level 4
Organization	needs significant reorganization	structure is of inconsistent quality, may have choppy transitions and/or redundancies or disconnections	structure supports the argument, clearly ordered sections fit together well	structure enhances the argument, strong sections and seamless flow
Clarity, Style, Readability (as appropriate to disciplines)	gets in the way of reading for content	beginning to be comfortable with appropriate conventions, style is inconsistent or uneven	effective prose style, follows relevant scholarly conventions, emergence of voice	mastery of the genre, including elegant style, established voice

The option of undertaking a senior thesis must be initiated by the student and approved by an EV Program faculty member (primary research advisor), who will supervise the student's research and senior thesis. If the research is performed at another institute under direction of an off-campus advisor, the student must still have an on-campus advisor and reader. In addition, another faculty member (who may be in another CC department if the area of research falls under the other faculty member's area of expertise) must agree to act as a secondary advisor. Faculty members may decline to be thesis advisors because of other commitments. The primary and secondary research advisors comprise the thesis committee. The thesis committee will establish the format and requirements of the research and thesis, read and suggest revisions in the thesis, and can recommend whether the thesis is of sufficient quality to qualify for Graduation With Distinction.

Ideally, the decision to write a senior thesis should be made in the fall of the junior year, so that the spring may be devoted to a survey of the literature and planning for the research. The research itself should begin by the following summer. Work on the writing of the research must begin by the fall of the senior year. The senior thesis is based on original research done by the student. A literature review, although a necessary part of a senior thesis, is not in itself considered to be a thesis.

To best complete your senior research project, you must (1) develop a comprehensive research proposal to be submitted to your faculty advisor and project mentor; (2) complete the data collection and analysis well in advance of your final thesis block; and (3) present your completed research to the entire department (EV490).

Planning Your Senior Research

To help you plan your senior thesis or independent study project, EV juniors should meet with the EV faculty to learn about available research projects, research opportunities outside the college, and available student grants (e.g., Venture Grants, REU fellowships). By the late Spring of your junior year, a student should have a project organized and a summer research plan completed.

The first week of Block 8, students intending to write a senior thesis should submit a research proposal to the EV faculty. This proposal must include:

- (1) A summary of the research problem, describing its scientific merit and relevance to the EV major.
- (2) The hypothesis tested by your research. What specific problem will your work address?
- (3) A work plan for field, lab, or library research, including site selection, field observations, lab analyses, and required materials.
- (4) A work schedule for the timely completion of all field observations, lab measurements, and statistical analyses.

The proposal must be submitted in order to complete a senior thesis or independent study project. **All research proposals must be reviewed and accepted by the EV faculty in order to receive credit for EV 499 (no exceptions).**

Registering Your Senior Thesis

Following the proposal submission in Block 8, students must arrange for a thesis committee consisting of a primary research advisor (must be an Environmental Science Program faculty member) and a secondary advisor (may be in another academic department). An oral presentation advisor, normally the primary research advisor, is also necessary. The Thesis Committee must be chosen no later than Block 1 of the Senior Year.

By the end of Block 2, seniors completing a senior thesis should be registered for EV 499 (Senior Thesis) through the Registrar's Office. Enrolling in EV 499 and completing the Environmental Program's requirements will provide an official transcript record of the senior thesis. Note that EV 499 can be completed as a regular block course or as an extended format course. Students may enroll in one extended format course per semester for a half unit at no extra tuition cost. The instructor for EV 499 should be the primary thesis advisor.

Funding Your Senior Research

Travel and other research expenses can be significant, and students are encouraged to seek internal or external funding to cover these costs. Many students apply to the CC Venture Grant program in order to fund their senior research. If you are preparing an application, submit Venture Grant proposals to the appropriate faculty advisor **at least two weeks** prior to the proposal deadline. This will provide adequate time to review and revise your application. In addition to travel costs, you must accurately budget for laboratory or field consumables required to complete the research. Please contact the EV Technical Director for updated prices on laboratory consumables. Though the EV Program sometimes has restricted funds available for summer research projects, the program does not have funds budgeted specifically to support senior thesis travel.

Completing Your Senior Thesis or Independent Research

Students in Environmental Science generally require a minimum of two blocks to complete their thesis research project. The first block (EV 307 or EV 407) may include laboratory measurements, final field observations, and statistical analyses. The second block (EV 499)

primarily entails writing, and you will turn in the final report no later than the **first Friday of Block 8**.

For the successful completion of your lab and field-work, you might require EV equipment. All equipment must be checked out prior to use and immediately returned in good condition. Please do not take materials from the field storage closet or laboratories without communicating (1) who you are; (2) what you have taken; (3) where you have taken it; and (4) when it will be returned. Please do not take tools or other hardware for personal projects.

Students are **financially liable** for portable field and lab equipment, such as GPS units, digital cameras, tree corers, and measurement tapes. If the equipment is clearly abused or lost, the student must pay the replacement cost.

Students must also comply with the EV lab policies and be instructed in lab safety before starting a laboratory research project. This includes the Mobile Lab, air monitoring station, or any other EV facility. Lab safety instruction in Chemistry or other EV courses does not fulfill this requirement; the student must meet with the EV Technical Director to review lab policies. **Repeated violation of EV lab policies will result in the loss of lab privileges.** The student must then make new arrangements to fulfill their senior requirements. Research must be coordinated with lab use by other students and courses. If possible, please avoid lab use during Blocks 5 and 8, where heavy course use is expected.

Submitting the Senior Thesis

By the **first Friday of Block 8**, Senior year, a final, clean, and professional-looking original of the thesis, signed by the thesis committee (on a title page as shown in Appendix I of this handbook) must be turned in to the EV staff assistant. By signing, the thesis advisors have judged that the written thesis meets the standards of quality as set forth by the Environmental Science Program faculty. The copy will be kept on file by the EV Program and should be presented in a folder with a typed label (title, student's name). It is customary to give each advisor a copy of the thesis.

The thesis format must comply with the guidelines established by the Tutt Library and the Environmental Science Program. The latest library guidelines can be viewed at: http://www.coloradocollege.edu/library/libstaff/Periodicals/P_Thesisbinding.html. Here the key issues are reviewed, but you should double-check these guidelines prior to writing your thesis.

Theses should be double-spaced on 8 1/2 x 11 inch paper. The margins should be: 1 inch at top, bottom, and right side, and 1-1/2 inches on the left side for binding purposes. The font size should be 12 pt. Times New Roman. Citations should be written out in full rather than enumerated (e.g., Jones, 1998), and the bibliography should follow the Harvard scientific style format.

The library should receive the original printed copy of the thesis (no photocopies) printed on **ACID-FREE PAPER**. Students should put acid-free paper in a laser printer to print a copy of the thesis for the library. Acid-free paper is available at the CC Bookstore.

Each thesis must have a title page stating author, title, department, and graduation date (see Appendix I for a sample). Lengthy titles will be printed up to the colon or the first 65 characters (the maximum number of characters allowed by the bindery).

Each thesis should be placed in a **manila folder** to protect it during processing, one thesis per folder. Every thesis must also have a Thesis Bindery Information Form attached to it, available at the Tutt Library or from the EV staff assistant. Bindery shipments are sent out around the middle of the month and will be returned the middle of the following month. Shipping deadlines from early April to late August are given on the Tutt Library web site.

Presenting Your Senior Thesis Research

In addition to the written senior thesis, a student must make a high quality oral presentation of the thesis research and results. This presentation will be during Environmental Program EV Day or fall senior seminars (see below). The presentation is prepared under the supervision of at least one EV faculty member who is also part of the thesis committee. Normally the oral presentation advisor is also the primary research advisor for the senior thesis, unless circumstances dictate otherwise. The student's oral presentation advisor will help the student fit the presentation into the time available for the seminars, make suggestions about organization and the preparation of slides, and help set the level of the talk appropriate for the CC audience. The talk must be a well-planned, rehearsed, understandable, and professional presentation of scholarly work. Students who do off-campus research as a basis for their senior thesis are cautioned that they must work closely with their CC presentation advisor to prepare their talk, even if they have orally presented the results previously as part of their off-campus research experience. This will help ensure the presentation meets the EV Program's standards of quality.

SENIOR SEMINAR REQUIREMENT

As a graduation requirement, each senior must complete EV 490, Senior Seminar (0 credits). **Majors must sign up EV490 for two consecutive semesters while in residence prior to graduation.**

EV Program Seminars

Throughout the academic year, there are EV sponsored seminars. These include major's meetings, fall thesis presentations, Linnemann and Robert's Lectures, State of the Rockies presentations and many other environmentally related presentations. **All majors signed up for EV490 must attend EV sponsored seminars in order to receive a "pass" for the seminar requirement.**

Seniors Graduating in December

Seniors completing a thesis and graduating in December must present their research orally in either Block 3 or 4. December seniors are not required to participate in EV Day (see below), but are strongly encouraged to do so if available. **NO LATER THAN THE THURSDAY** prior to your presentation you must email the EV staff assistant a title and abstract so that we

can let others know of the event. Failure to meet this deadline will lead to your seminar being cancelled and you will have to reschedule. It is YOUR responsibility to check your Worner box and e-mail regularly and make certain that your abstract is submitted in a timely manner.

EV Day – First Saturday of Block 8

Starting Block 8, 2009, the Environmental Program will have an “EV Day,” where students present their senior thesis and EV421 Projects. Sophomores and juniors in EV are also encouraged to present research or internship experiences they may have completed during the previous year. EV Day presentations will follow a similar format found in many professional society annual meetings.

Senior thesis presentations may be either presented in an oral session or in a poster session. Students striving for distinction in EV are strongly encouraged to present their research in an oral session. Oral sessions are 15 minutes with 5 minutes for questions.

Non-seniors and those not seeking distinction may present a poster during EV Day. Posters are of professional quality and of approximately 30” x 40” in size.

Details regarding EV Day will be presented in the Block 6 major’s meeting.

ENVIRONMENTAL PROGRAM SENIOR HONOR AWARDS

Three Environmental Program Honor Awards are presented each year at the Senior Baccalaureate. Nominations are accepted from EV Faculty.

Outstanding Senior Academic Award in Environmental Science and Outstanding Senior Award in Environmental Policy

This award is provided to honor that student showing unusual academic excellence as well as a strong commitment to environmental science.

Distinguished Service Award in Environmental Program

This award is given to that senior (or sometimes junior) who has given exemplary service to the program and community and who also shows unusual promise to go on in the field.

LIFE BEYOND COLORADO COLLEGE

EV students have been very successful in various endeavors following college, including employment in the private and non-profit sectors, graduate study, travel abroad, and many other pursuits. To consider the opportunities beyond Colorado College, you should discuss your interests with the EV faculty, visit the Career Center, and read the alumni news on the EV web page. The transition between structured academics (e.g., classes, dorms, events) and the “real world” can be challenging at first, and you’re strongly encouraged to use all available CC resources to chart your next direction, whether that be an organic farm in Italy or research at Los Alamos National Laboratory.

Application to Graduate Schools

Graduate study offers many stimulating and important opportunities following college. Now is the time to explore your interests and learn the exciting, new directions in a particular field(s). You should also consider your motivation for future research and teaching in environmental science. Would you be better suited to a two-year master's program or a five-year (or more) doctorate program? Both have their advantages in the current marketplace. For example, a two-year engineering program might open more doors in the private sector than a six-year natural science program, but the latter is nearly required in the academic sector.

What programs should you consider? Appendix II lists several excellent programs in Environmental Science, but you should also talk with your advisor and research various programs on the Internet.

Graduate programs generally require applications to be submitted in early or late fall. When you have narrowed your interests, seek the best available program and correspond with the faculty who best match your interests. Ask about the academic program, their current research interests, and available funding (graduate students are expensive, considering their annual stipend, tuition, and benefits). If possible, visit the school before your application is submitted, so you can discuss the program and research with the faculty, graduate students, and postdocs. Professional meetings (e.g., the American Geophysical Union, the Ecological Society of America, or the Geological Society of America) are also very useful for meeting many individuals in several academic programs.

Carefully discuss your future advisor with the other graduate students so you can best gauge your graduate school experience. Are the current students happy with their decision? Would they repeat their graduate experience? Are there adequate resources to complete the research projects? Better to walk away from a program or nefarious advisor **BEFORE** you start the graduate program, so careful research is well-advised.

Letters of Recommendation

Graduate programs, summer research programs, and prospective employers will likely ask you to submit letters of recommendation. As a courtesy to the EV faculty, please use the following guidelines:

- (1) Select a faculty member who is very familiar with your work and its high quality. You might have had the faculty in more than one course and completed independent research under their supervision.
- (2) Provide a written and signed request to the faculty member, including the proper forms, addresses, recipient names, and deadlines. Include a summary of the position and your qualification for it.
- (3) Submit the request at least two weeks prior to the deadline. Faculty members that are too busy will let you know you must ask someone else to write you a letter. Late Winter and early Spring is a very busy time for letter requests so the sooner you ask the more likely a faculty member will not have too many other requests.
- (4) Provide addressed, stamped envelopes for the completed forms.

A thoughtful letter of recommendation requires significant consideration, so be sure to thank the faculty member for their limited time.

The Graduate Record Exam

The Graduate Record Exam (GRE) should be taken in the Fall prior to your graduate school admission, as the scores must be sent with the application package (more information is available at <http://www.gre.org>). The GRE consists of both a general exam and a subject test depending on your field of specialization (Biochemistry, Biology, Chemistry, Computer Science, Literature, Mathematics, Physics, and Psychology). You are encouraged to take the two tests on separate days, and first check with your prospective graduate program whether the subject test is required.

ADDITIONAL DEPARTMENTAL INFORMATION

Senior Thesis and Graduation with Distinction in Environmental Program

The Environmental Program faculty recognize the educational benefits for any student of doing original research and presenting it in writing and orally. A senior EV major who (1) completes a high quality senior thesis; (2) presents it orally at the Environmental Program EV Day or in fall seminars; and (3) has a high grade point average will receive Graduation With Distinction.

All three requirements must be met for distinction. This honor will be recorded on the student's official transcript and noted on the commencement program at graduation. If a student meets the senior thesis and presentation requirements but does not have a high enough grade point average, the successful completion of the senior thesis requirements will be included on the student's transcript under EV 499 Senior Thesis.

Undergraduate Opportunities

The availability of research opportunities, internships, and careers in Environmental Science is constantly changing. Many individual positions are sent to the department every year, and you are encouraged to check the bulletin boards outside the faculty offices for new postings.

The internship program also provides real-world opportunities for EV undergraduates. Please contact EV Program faculty about the program. You must register and participate in EV 491 in order to qualify for these internships.

Department Alcohol and Drug Policy

The Environmental Program follows the College's alcohol and drug policy both on campus and field trips. According to the 2005 policy, "The unlawful use, possession, distribution, manufacture, or dispensing of illicit drugs or alcohol is prohibited on Colorado College property or as part of any of the college's activities...Disciplinary sanctions for the violation of this policy by an employee may include, but are not limited to, reprimand, reassignment, demotion, suspension, or termination of employment. Disciplinary sanctions for students may

include, but are not limited to, disciplinary warning, probation, suspension, or expulsion.” (2007 Pathfinder).

This policy will be strictly enforced on EV Program field trips. Students and employees are expected to conduct their activities in a socially responsible manner as representatives of Colorado College. If a student or students violate this policy, the instructor will return the individuals to campus by their own means of transportation. Students will be expected to follow federal, state, and local laws regarding alcohol and drug use, including their consequences if violated.

Department Field Trip Policy

Field trips offer a unique learning experience in the EV program, and students are expected to behave responsibly during each trip. Please leave a positive image of CC and EV at each campsite, hostel, or place the department visits (we want to be invited back). Please show respect to field speakers and guests, even though you may not necessarily agree with their ideas or positions. Some field trips may be physically demanding, so please inform your instructor if you have a physical limitation, food allergy, or any health concerns.

The intensity of living together with faculty and other students can be challenging, and you are encouraged to recreate, study, and reflect during your time off. Please show respect for other students and local residents despite the close quarters. Finally, a helping hand is always appreciated and will often be required; don't hesitate to help with cooking, cleaning, and packing during your EV field trips.

Course Evaluations

To improve the Environmental Science and Policy curriculum, students are strongly encouraged to provide evaluations of both courses and faculty. Instructors will ask for course evaluations at the end of the block, using your suggestions to improve course materials or structure.

You may also receive a mailed request for an evaluation of a specific professor under third year or tenure and promotion review. Please take adequate time to provide thoughtful and candid answers to the review questions; any responses are greatly appreciated, however brief.

Appendix I: Sample Thesis Title Page

Have Migration Rates Affected Economic Growth in Portugal?

A Thesis

Presented to

The Faculty of the Environmental Program

The Colorado College

In Partial Fulfillment of the
Requirements for the Degree

Bachelor of Arts

By

Jane Doe

April 2009

Date _____

Approved by:

Primary Thesis Advisor

Secondary Thesis Advisor

Appendix II: Example Graduate Programs in Environmental Studies

The following is a **partial** list of Environmental Science graduate programs to get you started on a program search. Many similar lists are available on the Internet, such as a current compilation at Western Washington University by Virginia Stone:

<http://www.ac.wvu.edu/~lrobbins/gradschools.html>.

University	Program	Contact
Arizona State University	Center for Environmental Studies and Institute for Sustainability	URL: http://ces.asu.edu/CES/index.htm PO Box 873211 Arizona State University Tempe AZ 85287-3211 (480) 965-2975
Boston University	The Center for Energy and Environmental Studies	URL: http://www.bu.edu/cees/ 675 Commonwealth Avenue, Rm. 141 Boston, MA 02215 (617) 353-3083
Brown University	Center for Environmental Studies	URL: http://envstudies.brown.edu/env/index.php 135 Angell St. Providence, RI 02912 401-863-3449
Columbia University	Earth and Environmental Sciences Lamont-Doherty Earth Observatory	URL: http://eesc.columbia.edu/ 61 Rte. 9W P.O. Box 1000 Palisades, NY 10964 (845) 365-8633
Colorado State University	Programs are offered in Forest Science, Atmospheric Science, Ecology, and many other fields	URL: http://welcome.colostate.edu/ Colorado State University Fort Collins, CO 80523 (970) 491-6909

Harvard University	Department of Public Health, Center for Global Health and the Environment, Environment and Natural Resources Program, many others	URL: http://www.hsph.harvard.edu/Academics/eh/index.html HSPH Landmark Center, Box 15677 401 Park Drive West Boston, MA 02215 (617) 384-8822
Stanford University	Stanford Institute for the Environment	URL: http://environment.stanford.edu/ Encina Modular C, 429 Arguello Way Stanford, CA 94305-6030 (650) 725-5778
University of California, Berkeley	Program in Environmental Law, Department of Environmental Science, Policy, and Management, Energy and Resources Group	URL: http://espm.berkeley.edu/ Department of Environmental Science, Policy and Management 137 Mulford Hall #3114 Berkeley, CA 94720-3114 (510) 643-7430
University of Colorado, Boulder	School of Law, Department of Environmental, Population, and Organismic Biology, Cooperative Institute for Research in Environmental Sciences	URL: http://www.colorado.edu/envirostudies/ Environmental Studies Graduate Program Campus Box 397 Boulder, Colorado 80309-0397 (303) 492-5478
Yale University	School of Forestry and Environmental Studies	URL: http://environment.yale.edu 205 Prospect Street New Haven, CT 06511 (203) 432-5100
Duke University	School of Forestry and Nicholas School of Environment and Earth Sciences	URL: www.nicholas.duke.edu Duke University Durham, NC. 27708 (919) 684-8111