



# Independent Study | in Idaho

**ENVS 101  
INTRODUCTION TO  
ENVIRONMENTAL  
SCIENCE**

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The University of Idaho in statewide cooperation with  
Boise State University — Idaho State University — Lewis-Clark State College

# Course Guide

Independent Study | in Idaho

*Self-paced study. Anytime. Anywhere!*

## Environmental Science 101 Introduction to Environmental Science

University of Idaho  
3 Semester-Hour Credits



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## Table of Contents

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Welcome!.....	1
Policies and Procedures.....	1
Course Description .....	1
Course Materials .....	1
Course Delivery.....	1
Course Introduction.....	1
Learning Activities .....	2
Assessment .....	2
About the Course Developer .....	5
Contacting Your Instructor .....	5
Course Modules and Units .....	6
<b>Module 1. Introduction to Environmental Science.....</b>	<b>8</b>
Unit 1 Environmental Science and the Scientific Method.....	9
Unit 2 Environmental World Views & Ecological Footprint .....	10
Unit 3. Environmental Ethics and Planetary Boundaries.....	12
Homework 1 .....	12
<b>Module 2 Natural Systems .....</b>	<b>18</b>
Unit 4. Earth.....	19
Unit 5 - Life .....	20
Homework 2 .....	21
<b>Module 3 Human Systems.....</b>	<b>29</b>
Unit 6 - Population Ecology, Human Population Dynamics and Size .....	30
Unit 7 - Human Population Impacts and Feeding the Population.....	30
Homework 3 .....	31
<b>Module 4 Interactions.....</b>	<b>38</b>
Unit 8 - Land/Water Part 1 .....	39
Unit 9 - Land/Water Part 2 .....	39
Unit 10 - Land/Water Part 3 .....	40
Unit 11 - Energy Part 1 .....	41
Unit 12 - Energy Part 2 .....	42
Unit 13 – Pollution.....	44
Unit 14 - Global change .....	45
Homework 4 .....	47
Environmental World View Survey.....	53
Class Survey .....	53

## **ENVS 101 Introduction to Environmental Science Semester-Hour Credits: U of I**

### **Welcome!**

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Whether you are a new or returning student, welcome to the Independent Study in Idaho (ISI) program. Below, you will find information pertinent to your course including the course description, course materials, course objectives, as well as information about assignments, exams, and grading. If you have any questions or concerns, please contact the ISI office for clarification before beginning your course.

### **Policies and Procedures**

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Refer to the ISI website at [www.uidaho.edu/isi](http://www.uidaho.edu/isi) and select *Students* for the most current policies and procedures, including information on setting up accounts, student confidentiality, exams, proctors, transcripts, course exchanges, refunds, academic integrity, library resources, and disability support and other services.

### **Course Description**

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Introduction to basic principles in the biological, physical, and social science areas of environmental science. U of I General Education: Natural and Applied Sciences.

*11 graded assignments, 13 graded quizzes, 0 exams  
Available online only.*

ALL assignments must be submitted to receive a final grade for the course.

### **Course Materials**

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#### **Required Course Materials**

There is no textbook assigned to the course. For some modules and units, there will be assigned readings to be completed in preparation for a discussion or in place of a lecture.

### **Course Delivery**

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All ISI courses are delivered through Canvas, an online management system that hosts the course lessons and assignments and other items that are essential to the course. Upon registration, the student will receive a *Registration Confirmation Email* with information on how to access ISI courses online.

### **Course Introduction**

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Environmental Science is focused on the study of natural systems, human systems, and their interactions, such as pollution, energy, and global change. In Environmental Science, you will learn about ideas and issues important to your everyday life and your future, such as clean air and water. Environmental Science includes energy development issues and complex management challenges, such as extracting oil from the tar sands in Canada to clean water issues, such as in Flint, Michigan. You will learn about different viewpoints on environmental issues and will have the opportunity to interact with each other regarding your own ideas. You will learn how the environment impacts humans and how humans impact the environment.

Environmental science surrounds us in our daily lives with complex issues being debated and decided upon. So, read, listen, think, analyze, and then create your own ideas about the most effective ways to address current environmental issues and to live sustainably within our natural systems.

## **Learning Activities**

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### **Overview**

Environmental Science will help you better understand your world and provide you with the knowledge to form your own ideas about the environment in which you want to live in the future. During this course, you will be provided with opportunities to show what you have learned regarding:

- 1) Defining and understanding environmental science and its interactions.
- 2) Understanding and recognizing diverse environmental perspectives.
- 3) Improving your understanding of complex environmental issues.
- 4) Understanding how social issues and policy decisions impact the environment.
- 5) Applying science to assess current and controversial environmental issues.

### **Expectations**

You are expected to be an **active participant in learning** by listening to class lectures/videos, completing quizzes and homework assignments, and other activities. If you are an active participant in learning, you will learn about environmental science and how it relates to your world. In return, I will provide feedback on your learning and address your questions in a timely manner. I will listen to your perspective and make myself available for one-on-one conversations. You should spend, on average, at least 2-3 hours per week for each class credit hour engaging in learning activities for this class.

### **Study hints**

Here are a few hints to help you succeed in this course.

1. Keep a copy of every homework assignment submitted.
2. Complete all reading and viewing of course material.
3. Set a schedule for course completion one month before your personal deadline.
4. Web pages and URL links are continuously changing. Contact your instructor if you find a broken web page or URL link.

Refer to the **Course Rules** in Canvas for further details on assignment requirements and submission.

## **Assessment**

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The course grade will be based upon the following considerations:

<b>Learning activity</b>	<b>Points per activity</b>	<b>Total points</b>	<b>Percent of final grade</b>
Introduce yourself (1)	20	20	2%

Quizzes (14)	20 (Quiz 14 is extra credit)	260 (+20 extra credit points)	29%
Homework assignments (4)	100	400	45%
World view survey (take 2 times)	20	40	5%
Journal entries (3)	50	150	17%
Class survey (1)	20	20	2%
<b>Total points**</b>		<b>890</b>	<b>100%</b>

\*\*There are up to 20 extra credit points possible, which can be obtained by taking Quiz 14. Grades will be assigned on the standard University of Idaho scale. All learning activities (see Assessment) must be submitted to receive a final grade for the course.

A = ≥ 90%  
 B = ≥ 80%  
 C = ≥ 70%  
 D = ≥ 60%  
 F = ≤ 60%

### **Academic integrity**

All students are expected to do their own work. Plagiarism—passing off someone else’s work as your own, without citing the source—will not be tolerated. This includes direct copying, rephrasing, and summarizing, as well as taking someone else’s idea and putting it in different words and/or improper citation of related work. See more information about plagiarism at the end of this document. Be sure to always fully cite your source(s) to make sure you are not plagiarizing someone else’s work.

### **Learning civility**

In any learning environment, it is essential that you feel as free and safe as possible in your participation. It is expected that you will be treated with respect and courtesy with an understanding that you will be respectful and civil to your instructor in discussion, in action, in teaching, and in learning.

If you feel class interactions do not reflect an environment of civility and respect, you are encouraged to contact ISI to discuss your concern. Additional resources for expression of concern or requesting support include the Dean of Students office and staff (208-885-6757), the UI Counseling & Testing Center’s confidential services (208-885-6716), or the UI Office of Human Rights, Access, & Inclusion (208-885- 4285).

### **Counseling and Testing Center**

The Counseling and Testing Center ([www.uidaho.edu/current-students/ctc](http://www.uidaho.edu/current-students/ctc)) offers students access to a wide range of counseling services, resources, and referrals, such as testing services, outreach

and consultation, and psychiatric services. Contact the Center by calling 208-885-6716 or emailing [ctc@uidaho.edu](mailto:ctc@uidaho.edu).

### **Center for Disability Access and Resources (CDAR)**

Reasonable accommodations are available for students who have documented temporary or permanent disabilities. All accommodations must be approved through the Center for Disability Access and Resources (CDAR). Notify your instructor(s) as soon as possible regarding accommodation(s) needed for the course.

- ☒ Phone: (208) 885-6307
- Email: [cdar@uidaho.edu](mailto:cdar@uidaho.edu)
- Website: [www.uidaho.edu/current-students/cdar](http://www.uidaho.edu/current-students/cdar)

### **Help and Resources**

The library website has many databases that will help you find relevant and reliable books, articles, images, and more. Don't hesitate to contact a librarian for research assistance.

- ☒ [UIDAHO Library](#)
- [Help – Reference Services](#)
- ☒ [Help for Distance Ed Students](#)

### **Technology Help**

The UI Help Desk provides many technology related services to UI students.

- ☒ Phone: (208) 885-HELP (208-885-4357)
- ☒ Email: [helpdesk@uidaho.edu](mailto:helpdesk@uidaho.edu)
- ☒ Website: [www.uidaho.edu/infrastructure/its](http://www.uidaho.edu/infrastructure/its)

### **Plagiarism**

“A fundamental goal of education is to produce students who can evaluate ideas – both analysis and synthesis – and who can produce significant original thoughts. Plagiarism is simply repeating words or thoughts of other people, without adding anything new. Therefore, submitting a plagiarized paper – in addition to the wrongful conduct – does not demonstrate the level of understanding and skill that an educated person is reasonably expected to have.” (R. B. Standler. 2000. [Plagiarism in colleges in USA](#))

“Plagiarism means using another’s work without giving credit. You must put others’ words in quotation marks and cite your source(s) and must give citations when using others’ ideas, even if those ideas are paraphrased in your own words.” (<https://ossja.ucdavis.edu/avoiding-plagiarism-mastering-art-scholarship>)

“Note that the intent of a plagiarist is irrelevant. It is no defense for the plagiarist to say “I forgot.” Or “It is only a rough draft.” Or “I did not know it was plagiarism.” (R. B. Standler. 2000. Plagiarism in colleges in USA. [www.rbs2.com/plag.htm](http://www.rbs2.com/plag.htm))

The University of Idaho Student Code of Conduct states that “Plagiarism includes, but is not limited to, the following:

- (1) using, by paraphrase or direct quotation, the published or unpublished work of another person without full and clear acknowledgment;
- (2) using materials prepared by another person or agency engaged in the selling of term papers or other academic materials without prior authorization by the instructor; or
- (3) engaging in other behavior that a reasonable person would consider plagiarism.

Some potentially useful web sites (in addition to those cited above):

<https://libguidehttps://libguides.uidaho.edu/c.php?g=495301&p=33895>

[96 Academic Integrity and Avoiding Plagiarism: Guide](#)

<https://www.scribbr.com/plagiarism/types-of-plagiarism/> Examples of what is and is not plagiarism

<http://www.plagiarized.com> Commercial site for detecting plagiarism

Plagiarism is a serious issue. Do your best to avoid it. If you are uncertain about how to cite sources, or have other questions about potential cases of plagiarism, visit with your course instructor prior to handing in an assignment.

### **About the Course Developer**

Hello and Welcome! I'm Dr. Jocelyn Aycrigg. I am an Assistant Professor in Landscape and Wildlife Ecology in the Department of Fish and Wildlife Sciences and Affiliate Faculty in Environmental Science and Geography at the University of Idaho. My research interests include landscape ecology, wildlife population ecology and large landscape conservation.

### **Contacting Your Instructor**

Instructor contact information is posted on your Canvas site under *Course Rules*.



## Course Modules and Units

You will find the Units and their associated learning activities within each Module on Canvas.

All assignments are highlighted and shown in bold type.

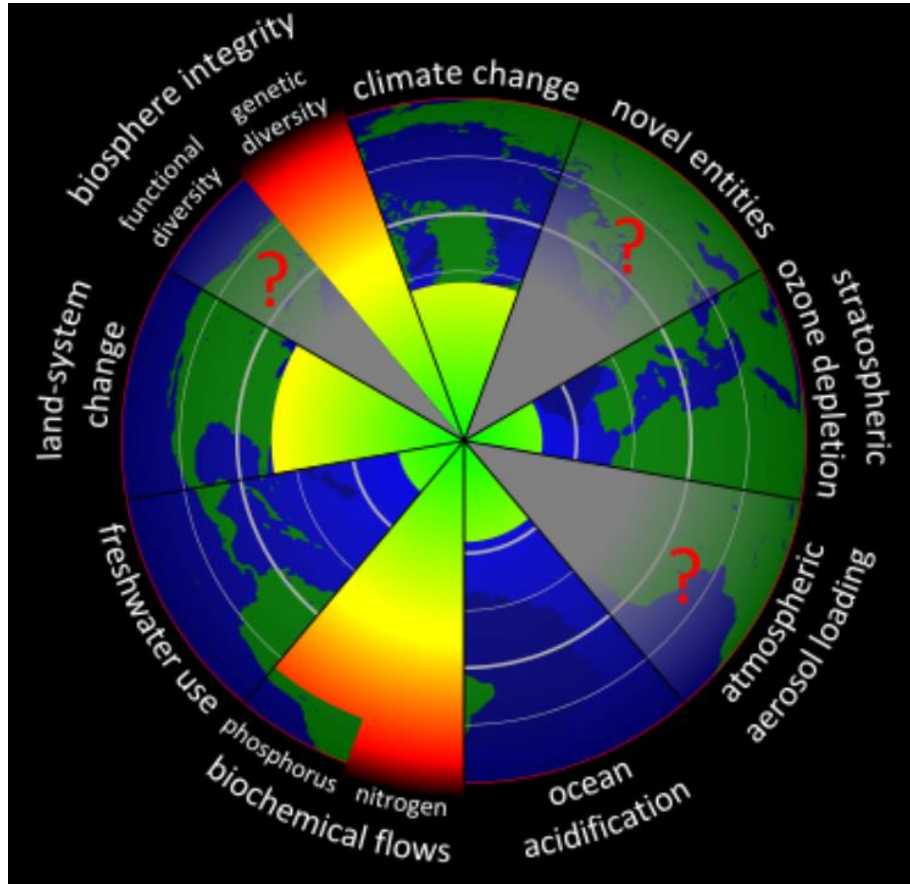
<b>MODULE 1 – Introduction</b>		
<b>Unit</b>	<b>Topic</b>	<b>Learning activity</b>
1	Introduction to Environmental Science 101	<b>Introduce yourself on the 'Introduce yourself' Discussion Board (20 points).</b>
1	What is environmental science?	<b>Answer World View Survey (20 points)</b>
1	Scientific method	<b>Quiz 1 (20 points)</b>
2	Ecological footprint	
2	Environmental philosophy	
2	Environmental policy	<b>Write journal entry on environmental policy and fracking (50 points)</b> <b>Quiz 2 (20 points)</b>
3	Environmental ethics/values	
3	Planetary boundaries	<b>Quiz 3 (20 points)</b> <b>Homework Assignment 1 (100 points)</b>

<b>MODULE 2 – Natural systems</b>		
<b>Unit</b>	<b>Topic</b>	<b>Learning activity</b>
4	Earth – Geology	
4	Earth - The atmosphere	
4	Earth - Water resources	<b>Write journal entry on water resources (50 points)</b>
4	Earth - Soil and soil dynamics	<b>Quiz 4 (20 points)</b>
5	Life – Biodiversity	
5	Life - Energy flow in ecosystems	
5	Life - Natural ecosystem change	
5	Life - Biogeochemical cycles	<b>Quiz 5 (20 points)</b> <b>Homework Assignment 2 (100 points)</b>

<b>MODULE 3 – Human systems</b>		
<b>Unit</b>	<b>Topic</b>	<b>Learning activity</b>
6	Population ecology	
6	Human population dynamics	
6	Human population size	<b>Quiz 6 (20 points)</b>
7	Human population impacts	
7	Feeding the population	<b>Quiz 7 (20 points)</b> <b>Homework Assignment 3 (100 points)</b>

<b>MODULE 4 – Interactions</b>		
<b>Unit</b>	<b>Topic</b>	<b>Learning activity</b>
8	Land/water -Agriculture	
8	Land/water – Farm to table	
8	Forestry and rangelands	<b>Quiz 8 (20 points)</b>
9	Land/water – Land use	
9	Land/water – Fishing	<b>Quiz 9 (20 points)</b>
10	Land/water – Environmental economics	
10	Land/water – Ecosystems	
10	Land/water – Water quality and groundwater (dams and bottled water)	<b>Quiz 10 (20 points)</b>
11	Energy – Energy concepts	
11	Energy – Energy consumption	
11	Energy – Fossil fuel resources	<b>Write journal entry on fossil fuel resources (50 points)</b>
		<b>Quiz 11 (20 points)</b>
12	Energy – Hydroelectric power	
12	Energy – Energy efficiency/energy reduction	
12	Energy – Renewable energy	<b>Quiz 12 (20 points)</b>
13	Pollution – Air pollution	
13	Pollution – Water pollution	
13	Pollution – Solid waste	
13	Pollution – Health impacts of pollution	<b>Quiz 13 (20 points)</b>
14	Global change – Global climate change	
14	Global change – how much does global change cost?	
14	Global change – Stratospheric ozone/Ozone shield	
14	Global change – Loss of biodiversity	<b>Quiz 14 (20 extra credit points)</b>
		<b>Homework Assignment 4 (100 points)</b>
		<b>Take World View Survey a second time (20 points)</b>
		<b>Complete Class Survey (20 points)</b>

**Module 1.**  
**Introduction to Environmental Science**  
**Units 1, 2, and 3**



**Planetary boundaries**

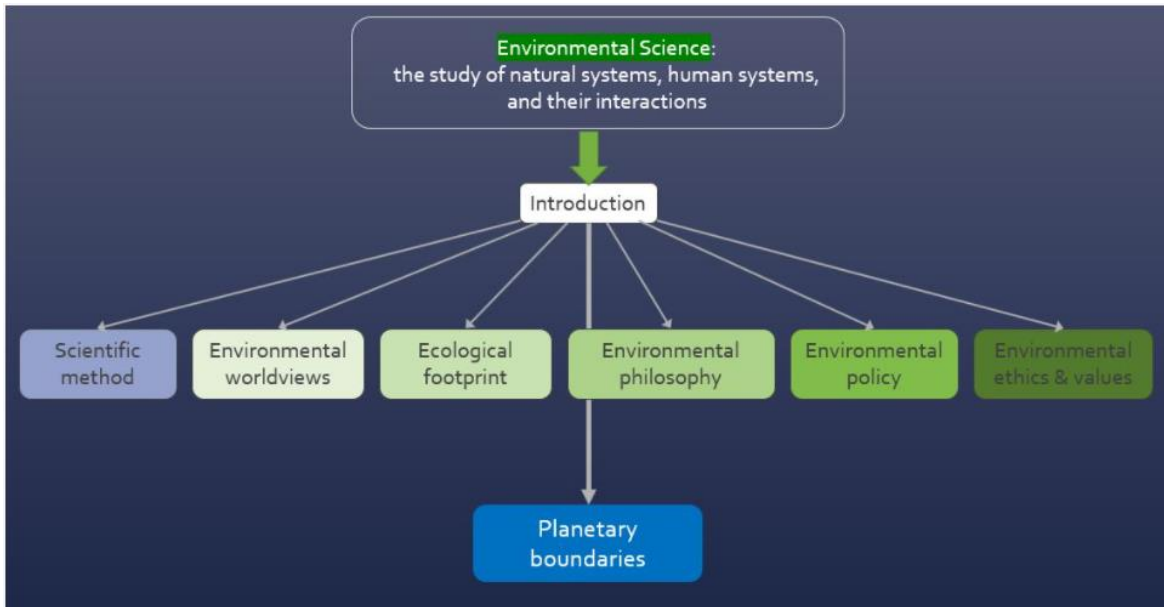
In this module, you will learn the definitions important to environmental science, get introduced to the scientific method, ecological footprint concept, and environmental philosophy, policy and ethics. We will also discuss the concept of planetary boundaries.

All of these concepts will set up the rest of the class so be sure to you understand the material in this module.

**Module 1 – Topics**

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Below is a schematic that shows all the topics that will be covered in Module 1 - Introduction



## **Module 1. Learning Activities**

For this module, do the following:

- **Complete Units 1-3.** Complete the specific learning activities inside each Unit.
- **Complete Homework Assignment 1.** You will not see Homework Assignment 1 until you have viewed the content of Units 1-3.

## **Module 1. Unit 1 Environmental Science and the Scientific Method**



### **Unit 1 Learning Activities.**

Complete the following learning activities

1. Introduce yourself in the '**Introduce Yourself**' discussion forum. 20 points.

Click the link above to go to a new web page. On this new web page, click 'Create Thread'. Please introduce yourself to me and your classmates by including the following in your post:

- A. Name
  - B. Photo of yourself
  - C. Your major, if you have one. If not, what interests you most in life?
  - D. What is something remarkable about yourself?
  - E. Why does environmental science matter to me?
2. Lectures: Watch and Listen to **Lectures 1—3**
  3. **Complete Quiz 1.** You need to take the quiz at least 1 time to be able to access the next Quiz. 20 points.

## **Module 1. Unit 1. Lectures 1—3 Introduction to Environmental Science 101**

### **Lecture 1 - Introduction to Environmental Science 101**

Here is an introduction to the course, myself, the course syllabus, and Canvas. It contains a lot of useful information and I encourage you to watch it. You will better understand what is expected of you during this course after you watch this video. <https://www.youtube.com/watch?v=O8PxZ09iVDE>

### **Lecture 2 - What is Environmental Science?**

Please watch the video below to get a good introduction to Environmental Science.

<https://www.youtube.com/watch?v=UqWgrBnJYVQ>

### **Lecture 3 - Learning how to practice science: the scientific method**

Watch this lecture and the video below to learn about the scientific method and how we can use it in environmental science. Duration: 4:06. YouTube URL: <https://www.youtube.com/watch?v=d6OV0o3XAYU>

**Watch the Scientific Method video.** <https://www.youtube.com/watch?v=SMGRe824kak>

### **Quiz 1 - 20 Points**

1. If you've reviewed Lectures 1-3 and completed the learning activities for this Unit, you should be ready for Quiz 1.
2. This quiz contains 10 questions total, each question is worth 2 points for a total of 20 points. Questions are taken from lectures, videos, assignments, and readings.
3. You can take this quiz up to 3 times. Your highest score will be recorded as your grade.
4. You need to take this quiz at least 1 time to access the next Quiz.