



Course: **Environmental Science** Grade Level: 11 - 12  
Instructor: **Mr. Nick Lai** Pre-Requisites: Any level of chemistry  
School Year: 2021-2022 Level: UC/CSU Approved (Area D Laboratory Science)  
Length: One Year  
E-mail Address: Nick.Lai@jesuithighschool.org  
Office Hours: Tuesday/Thursday Community Periods 2:00-3:00pm  
After School – 3:00-5:00pm daily (August-September 17)  
Before School - 7:15-8:10am daily (After September 20)

### **Course Description:**

Environmental Science is a multidisciplinary science. This course provides students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and man-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them. An interdisciplinary field, environmental science incorporates elements of geology, biology, physics, environmental studies, chemistry, economics, and geography. In this class, students will apply knowledge from the basic sciences and mathematics to practical global problems and search for viable solutions to environmental problems. Topics covered will include; economics and policy, biodiversity and conservation, populations, soil and agriculture, water, atmosphere and climate, energy, and urbanization.

### **Major Standards:**

This course will adhere to the Next Generation Science Standards as outlined by the California Department of Education. <http://www.cde.ca.gov/pd/ca/sc/ngssstandards.asp>

### **Textbook(s):**

Healing Earth, <https://healingearth.ijep.net>

### **Required Materials:**

- Please bring pencils and a notebook to class every day. You do NOT need to bring your textbook to class.
- Computer, iPad, or other device that has the following:
  - Google Sheets or Excel
  - Google Docs
  - Camera
  - ability to download applications
    - You will need the application [Seek by iNaturalist](#)

### **Major Learning Activities:**

Major learning activities will consist of class lectures and discussions, individual or cooperative projects and lab activities, reading from textbook and articles, research, data analysis and simulations.

### **Student Responsibilities:**

Every classroom here at Jesuit is a place of mutual respect and deep care for each other; we honor everybody's right to learn and to be heard. We leave our egos at the door and become open to growth, which means being willing to make mistakes and learn from them—and from each other. Disruptions and distractions cannot interfere with our work, and that idea most obviously applies to things like our digital devices. Those are to be used for classwork only. Stay mindful. Stay focused. Be diligent in terms of monitoring your own effort, work ethic, and behavior. Most of all, I invite and encourage you all to *participate* frequently; be good listeners when it's time to listen, ask questions when you're unsure or curious, volunteer answers or ideas when you have them, give everything your best attempt, and, most importantly, come to me for help when you need it. I am not here to help you get an A. I am here to help you *learn*.

- Having a positive attitude goes a long way in class.
- Be in class on time and fully prepared.
- Complete all work diligently and with care.
- Follow ALL COVID-19 mitigation rules, particularly wearing a mask in class over the mouth and nose. We want to keep you and everyone else healthy, and masks are a proven way to prevent the spread of airborne diseases.

- Turn in assignments on time and in the proper format.
- Ask questions when you have them.
- Communicate with your teacher if you are having issues with technology, content, etc.
- Be respectful to your peers and your teacher.

If you are absent from class, be responsible and figure out what you missed from a classmate. If you are absent from class but are still able to learn from home, e-mail Mr. Lai and if appropriate, he will give you a Zoom link to attend class virtually for the day. This is not a possibility on lab or test days, and all labs, tests and quizzes must be made up when you are back on campus.

Some of the topics we will discuss may elicit different viewpoints. In order to keep our dialogue constructive, please remember the following:

1. Presume good intentions
2. Use “I” statements
3. Understand that the speaker’s experience is valid for him/her
4. Ask questions of others as individuals
5. Listen to understand, not to respond
6. Recognize that one’s intent may differ from one’s impact
7. Seek to raise the bar for yourself and others around you

### **Course Information:**

**Powerschool:** This is where you can check your grades online. Grades are posted and updated on Powerschool regularly—usually a couple times a week.

**Google Classroom:** Check Google Classroom often! All assignments, materials and announcements will be posted on Classroom.

**Assessments:** While there may be the occasional traditional test, this course will focus on your ability to gather, analyze and interpret information. More often, assessments will be in the form of lab reports, analyzing a data set and writing evidence based conclusions. You can expect assessments like these 2-3 times per unit.

**Homework:** Homework will be assigned daily; you can expect about an hour a night. Much of the homework in this class is reading or videos. Reading homework will then be assessed in the form of quizzes to make sure the student is keeping up. Expect a quiz whenever you come to class.

**Technology:** During class, laptop/tablets are to be used only for class-related work and should only be out when appropriate. Absolutely no games/socializing/browsing/messaging. Improper use of electronic devices results in disciplinary action. Also, please feel free to print at home anything that I have posted in Google Classroom (if you prefer a hard copy).

**Labs:** Misconduct during lab will not be tolerated. Students who do not follow the lab safety rules and behavioral expectations in the lab will not participate in the lab and will receive a zero on the assignment.

### **Grading Policy:**

Grades will be assigned according to the grading scale found in the Student-Parent Handbook:

90 - 92% = A-	93 - 96% = A	97 - 100% = A+	(Superior proficiency and achievement)
80 - 82% = B-	83 - 86% = B	87 - 89% = B+	(Above average)
70 - 72% = C-	73 - 76% = C	77 - 79% = C+	(Satisfactory)
60 - 62% = D-	63 - 66% = D	67 - 69% = D +	(Minimum proficiency and achievement)
< 60% = F			(No credit)

Grading will be on a Total Points scale, but a rough breakdown of percentages is listed.

<b><u>Graded Work</u></b>	<b><u>Value</u></b>	<b><u>Frequency</u></b>
Tests / Papers	30%	Approximately one per unit
Projects / Labs	35%	Approximately one per unit
Homework/Classwork	20%	Daily classwork and homework
Final Exam	15%	End of Semester

### **Extra Credit Policy:**

There will be no extra credit offered per the Science Department Policy. However, there may be bonus points that can be earned on assessments.

### **Late Work Policy:**

Any unexcused late work is automatically 50% credit. I will accept late work for the current unit up until the day of the test, after which I will not accept the late work. An absence for a retreat earns an extra “day” (and by “day” we mean “class

meeting”) to get your work turned in; other than that, you’re expected to keep up with assignments even if you are absent. Be pro-active when it comes to planned absences—such as sports or co-curricular dismissals—as all assigned work during your absence is still due upon your return the following class meeting. In cases of extended absences or severe illness, please meet with me to discuss a make-up plan. *If homework is announced and explained during class, you are expected to do it, even if I forget to post it on Google Classroom by 4pm, though I make every attempt to post it on time.*

### **Academic Code of Conduct**

Every Jesuit High School student is encouraged to use his intellectual talents to the best of his ability. The personal development of each student, however, is deemed more important than the achievement of academic success. Personal integrity is essential for building community and promoting social justice. To cheat is to act dishonestly or in violation of established rules, procedures or codes of conduct. In an academic environment, there are three principle forms of cheating: (1) violating the procedures of a test or assignment; (2) plagiarizing; and (3) knowingly enabling another student to cheat.

The second category, plagiarizing, pertains to the rights of intellectual property, the ownership of the content and form of one’s intellectual expression. Plagiarism is the appropriation of another’s ideas (content) and/or language (form), in part or in whole, without the necessary assignment of credit. Plagiarism includes copying homework or labs and quoting, paraphrasing, or summarizing another’s written work (including sources off the Internet) or oral statements without proper citation.

Cheating in any form violates the philosophy of Jesuit High School and will not be tolerated. Any student who cheats will fail the exam or work in question, and the Dean’s Office will be notified of the incident. A student who cheats on a quarter or semester exam is liable to receive a zero for that exam.

The Dean will notify the student’s parents and determine appropriate punishment, which may include detention, suspension, disciplinary probation or expulsion, depending on the severity of the offense.

I understand that academic dishonesty can be tempting when learning digitally. I encourage you to respect yourself, your others, and the class by having integrity and taking ownership of your own learning.

**Please acknowledge that you have read and understood the syllabus for Mr. Lai’s 2021-2022 Environmental Science course by filling out this [form](#).**