

11th Grade Biology and Environmental Science

High Tech High Chula Vista

2015-2016 Syllabus

“Nature holds the key to our aesthetic, intellectual, cognitive and even spiritual satisfaction.”

— Edward O. Wilson

Instructor: Nick Ehlers
Email: nehlers@hightechhigh.org
Phone: 619-591-2500 ext. 25032
Office hours: Mondays 3:30-4:30pm

Location: Room: 159

Goals of the Course:

To earn the right to call yourself an **ECOLOGIST!** Ecologists are **PREPARED** for fieldwork, **OBSERVE** their surroundings, **QUESTION** their observations, form **HYPOTHESES**, and see **INTERACTIONS** in all they observe!

Essential Questions:

- What interactions take place in the ecosystems adjacent to our school?
- Are we as humans a part of or separate from these ecosystem interactions?
- As a society, what can we achieve for the betterment of the future through our knowledge of the local ecology?

Weekly Routines:

Mondays – Weekly Personal Reflection (WPR) circle, in-class reading, turn in journal, field research preparation.

Tuesdays – Field research (one Pod at a time and switch time of day each week).

WILD Wednesdays – Field research (whole team, periods 1-3, back in time for short advisory)/ journal.

Thursdays – iNaturalist data entry/analysis and final performance preparation.

Fridays – WPR to take home and present to parents/guardians, iNaturalist data entry/analysis, and final performance preparation.

Personal Reflections and Assessment:

In my classroom I would like to cultivate a culture of self-reflection and personal growth through Weekly Personal Reflections (WPRs) and student conversations with Mr. Nick (me) and parental guardian(s). In doing so, each student will keep a weekly log to reflect on how they have demonstrated in biology class their “areas of personal growth”. Every Friday, students will be given biology class time to fill out their WPRs. During the weekend, students are required to have a conversation with their parent(s) about their week in biology class. After this conversation, students (on their own – no parents involved please) will reflect on their week and provide a numerical value (out of 50) that demonstrates their weekly personal growth in biology class (taking into account their personal goals, project work time, participation, labs, assignments, homework, quizzes, and tests). This number is not absolute and may lead into a conversation between the student and me (taking into account my in-class observations and student work).

Late work policy:

When students are absent, they are responsible to get the agenda of what they missed by asking a peer. Students that are absent on the due date of a major assignment are expected to submit the assignment whether they are on campus or not. This can be achieved by peers or parents/guardians if the student cannot submit it themselves. If an assignment can be submitted by email it must be received on the due date. Technical difficulties are not a valid excuse. Assignments that are not printed and ready to go at the beginning of class will be considered late. If an assignment is late and you are willing to do the work, you can still turn in the late assignments for half credit. All class work is to be completed by the end of class unless assigned as homework.

Grade Breakdown

A=90-100%, B=80-89%, C=70-79%, D=60-69%, F=below 60%
(At HTHCV, both a D and F are not considered passing).

Honors Option

Each core class of junior year has an honors option. In my mind, Honors is a challenge that builds and deepens current project/class work understanding.

For further information on the specific Honors assignments and requirements please refer to the Biology Honors Contract. If you decide you are interested in earning honors credit for biology, sign the contract and return it to me by the specified date. Please note that once a student agrees to participate in Honors for the semester, they **CANNOT** drop out of Honors.

Tentative Course Outline (First Semester)

Due to the nature and design of Project Based Learning, the following timeline is subject to changes, additions, and revisions.

Week	Experiences and Curriculum Topics
W1: Aug 24	<ul style="list-style-type: none">- Welcome to your Junior year!- Introductions, get-to-know-you games, and activities.- WiLD Wednesday!! – bring outdoor shoes/clothes, reusable water bottle, hat, and sunscreen.- iNaturalist exploration- Building classroom culture.
W2: Aug 31	<ul style="list-style-type: none">- Chapter 13.1 (Ecologists Study Relationships).- Terrestrial Tuesday – bring outdoor shoes/clothes, reusable water bottle, hat, and sunscreen.- WiLD Wednesday!! – bring outdoor shoes/clothes, reusable water bottle, hat, and sunscreen.- iNaturalist data entry- Weekly Personal Reflection (WPR) #1 – it is required to share your WPR with your parent(s) and obtain their signature/comments. WPRs are turned in every Monday.
W3: Sept 7	<ul style="list-style-type: none">- 9/7 - Labor Day (no school)- Terrestrial Tuesday – bring outdoor shoes/clothes, reusable water bottle, hat, and sunscreen.- WiLD Wednesday!! – bring outdoor shoes/clothes, reusable water bottle, hat, and sunscreen.- Chapter 17.1 (Linnaean System of Classification)- iNaturalist data entry- WPR #2
W4: Sept 14	<ul style="list-style-type: none">- Chapter 13.2 (Biotic and Abiotic Factors)- Terrestrial Tuesday – bring outdoor shoes/clothes, reusable water bottle, hat, and sunscreen.- WiLD Wednesday!! – bring outdoor shoes/clothes, reusable water bottle, hat, and sunscreen.- 9/16 - Open House- iNaturalist data entry- WPR #3
W5: Sept 21	<ul style="list-style-type: none">- Chapter 13.3 (Energy in Ecosystems)- Terrestrial Tuesday – bring outdoor shoes/clothes, reusable water bottle, hat, and sunscreen.- WiLD Wednesday!! – bring outdoor shoes/clothes, reusable water bottle, hat, and sunscreen.- iNaturalist data entry- WPR #4
W6: Sept 28	<ul style="list-style-type: none">- Chapter 13.4 (Energy in Ecosystems)- Terrestrial Tuesday – bring outdoor shoes/clothes, reusable water bottle, hat, and sunscreen.- WiLD Wednesday!! – bring outdoor shoes/clothes, reusable water bottle, hat, and sunscreen.- iNaturalist data entry- WPR #5
W7: Oct 5	<ul style="list-style-type: none">- Chapter 13.5 (Cycling of Matter)- Terrestrial Tuesday – bring outdoor shoes/clothes, reusable water bottle, hat, and sunscreen.

	<ul style="list-style-type: none"> - iNaturalist data entry - Project benchmark (three ecological interactions) - 10/9 - Fall holiday (no school)
W8: Oct 12	<ul style="list-style-type: none"> - 10/12 - Staff day (no school) - Chapter 13.6 (Pyramid Model) - 10/14 - PSATs (morning), SLCs (afternoon) - 10/15 and 10/16 - SLCs (minimum days)
W9: Oct 19	<ul style="list-style-type: none"> - Chapter 14.1 (Habitat and Niche) - Living Coast Discovery Center (LCDC) field trip! - WiLD Wednesday!! – bring outdoor shoes/clothes, reusable water bottle, hat, and sunscreen. - iNaturalist data entry - WPR #6
W10: Oct 26	<ul style="list-style-type: none"> - Chapter 14.2 (Community Interactions) - Terrestrial Tuesday – bring outdoor shoes/clothes, reusable water bottle, hat, and sunscreen. - WiLD Wednesday!! – bring outdoor shoes/clothes, reusable water bottle, hat, and sunscreen. - iNaturalist data entry - WPR #7 - 10/31 - Dia de Los Muertos Exhibition (off campus only)
W11: Nov 2	<ul style="list-style-type: none"> - Chapter 15.1 (Life in the Earth System) - Terrestrial Tuesday – bring outdoor shoes/clothes, reusable water bottle, hat, and sunscreen. - WiLD Wednesday!! – bring outdoor shoes/clothes, reusable water bottle, hat, and sunscreen. - iNaturalist data entry - WPR #8
W12: Nov 9	<ul style="list-style-type: none"> - 11/11 - Veteran's Day (no school) - Terrestrial Tuesday – bring outdoor shoes/clothes, reusable water bottle, hat, and sunscreen. - iNaturalist data entry - WPR #9
W13: Nov 16	<ul style="list-style-type: none"> - Chapter 15.2 (Climate) - Terrestrial Tuesday – bring outdoor shoes/clothes, reusable water bottle, hat, and sunscreen. - LCDC field trip (choose performance locations) - iNaturalist data entry/analysis - WPR #10 - 11/18 - Advisory Olympics
W15: Nov 23 - 30	Thanksgiving Break - Enjoy Family and Friends!!
W16: Nov 30	<ul style="list-style-type: none"> - 11/30 - Staff day (no school) - WiLD Wednesday!! – bring outdoor shoes/clothes, reusable water bottle, hat, and sunscreen. - iNaturalist data entry/analysis - WPR #11 - 12/2 - Minimum day (staff day)
W17: Dec 7	<ul style="list-style-type: none"> - LCDC field trip (rehearsal) - Discussion of Learning (DOL) preparation - WPR #12 - LCDC Exhibition (final performances, Saturday 12/12)!!!
W18: Dec 14	<ul style="list-style-type: none"> - Discussion of Learning (DOL) preparation - 12/15 - 12/18 - DOLs (12/18 is a minimum day)
W19: Dec 21 – Jan 4	Winter Break - Enjoy Family and Friends!!

The Constitution of the State of California requires that we provide a public education to you free of charge. Subject to certain exceptions, your right to a free public education means that we cannot require you or your family to purchase materials, supplies, equipment or uniforms for any school activity.

Many families have been asking what supplies their child may need during this school year. Below, I have a recommended list of supplies that your child may bring to school. **Please note that if your child does not bring the recommended supplies, the school will provide the supplies for him/her.** If you have any questions/comments about this, please contact me, or Lillian Hsu, our school director. Thank you.

Recommended Supplies:

1. A hiking wardrobe (supportive shoes, hiking pants, hiking shirt, and hat), sunscreen (if you can, please bring extras for our classroom sunscreen supply:), a day pack (normal school backpack works), and a re-usable water bottle that stays in our classroom for weekly use.
2. A Composition Lab Notebook for field research (provided).
3. Several pencils and pens.

Parent Support

Junior year is arguably the most challenging year in a student's high school career. In addition to academics, students will be balancing internships, community service, SAT/ACT test preparation and preparation for the college application process. This can be an overwhelming and stressful time for students, parents and teachers, which is why it is extremely important that students, parents and teachers work together to cultivate successful academic and social behavior. By providing a favorable study environment, accountability, encouragement and consistently (not excessively) accessing Powerschool, parents play a vital role in their student's education.

Internship

Junior Internship and all the work building up to it are graduation requirements at HTHCV. All juniors will go on a four-week academic internship in the spring semester (**5/9/16 - 6/3/16**). We are encouraging students to find their own internship, but we will work with students on how to do that. To help students prepare for internships, workshops will be held throughout the year during class time. Students who do not complete assignments and/or satisfactorily complete an internship hourly experience will not be allowed to graduate from HTHCV.

We are encouraging students (and family/friends) to start thinking about their networks and connections immediately to ensure a meaningful internship is secured in a timely fashion. There will be updates throughout the year, but it is most important for students to know how important this requirement is, and how much we rely on them to be positive representatives of our school while on internship.

11th Grade Biology and Environmental Science Student & Parent Agreement

Learning Contract

Please thoroughly review this class' syllabus (sent in an email). Then please complete and sign the following document and return it to Nick for entry into your student file.

For students:

I, _____ (*student*) fully understand the classroom expectations and agree to do my best to follow them in order to create an environment conducive to the learning of others and myself.

Signed,

_____ Date: _____

For parents/guardians:

I, _____ (*parent/guardian*) fully understand the classroom expectations and agree to do my best to support my student in following them. I also agree to communicate with Nick Ehlers if I have any questions or concerns.

Signed,

_____ Date: _____

Additional Questions, Comments or Concerns:
