

**11<sup>th</sup> Grade Biology and Environmental Science**  
High Tech High Chula Vista  
2014-2015 Syllabus

*“Nature holds the key to our aesthetic, intellectual, cognitive and even spiritual satisfaction.”*  
— Edward O. Wilson

Instructor: Nick Ehlers  
Email: [nehlers@hightechhigh.org](mailto:nehlers@hightechhigh.org)  
Phone: 619-591-2500 ext. 25032  
Office hours: Tuesdays 3:30-4:30pm

Location: Room: 159

Goals of the Course:

The main goal of the first semester is to CULTIVATE CURIOSITY by getting your hands (and feet) dirty. In Biology class this year, you will be introduced to the general characteristics of all living things. You will have the opportunity to EXCITE YOUR SENSES by exploring biological and environmental concepts through hands on activities, hikes, labs, field trips, professionals in the classroom, and projects! Biology is the study of life and there is life all around us to explore, so let's get to it!

Essential Questions:

- How does one use science to formulate ideas, solve problems, and build theories?
- How have we as humans affected the biology and ecology of other organisms?
- How has biological information, past and present, affected the environment?
- As a society, what can we achieve for the betterment of the future through our knowledge of biology and science?

Student Responsibilities:

In order to provide and maintain a learning environment that is comfortable, safe, enjoyable, and designed for learning, we will follow some very important guidelines.

1. RESPECT for everyone in the class.

Our classroom is to be a place where every student feels respected. We all have a right to learn and teach without unnecessary disruption. Be respectful and listen while others speak and use appropriate language at all times.

2. Follow all safety rules!

Safety is of upmost importance. When in doubt please ask me if you are unsure if you should do something or not. Safety violations will be taken very seriously.

3. Come to class on time, prepared, and ready to explore!

This includes making sure you have all materials and appropriate clothing for in and out of class research.

4. DO YOUR OWN WORK!

Cheating, copying, or stealing of other's work is unacceptable. Working together is encouraged but that does not mean one person doing the work and the others copying. Violations will result in no credit for either party and may mean suspension. Plagiarism will not be tolerated and violators will be dealt with accordingly.

5. Please put away your Cell Phones and Music Devices

This allows for maximum engagement and meaningful interactions with classmates.

6. Please spit out your Gum (in the trash!) prior to entering the class

Gum is a sticky subject:)...no gum keeps our classroom, your teeth, and our school beautiful!

Potential consequences for violations of the above:

1<sup>st</sup> offense: Warning and possible student teacher conference.

2<sup>nd</sup> offense: Student teacher conference and a phone call home.

Repeated Offenses: Student will be walked down to Ray (our Dean of Students) for a teacher/student/dean conference. Certain offenses are not tolerated at HTHCV. See your student handbook for more information.

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.

Personal 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 20) 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).

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 is representative of going above and beyond what is required.

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 25	<ul style="list-style-type: none"> <li>- Welcome to your Junior year!</li> <li>- Introductions, get-to-know-you games, and activities.</li> <li>- WiLD Wednesday!! – wear outdoor clothes, bring a sack lunch, water, sunscreen...</li> <li>- Building classroom culture.</li> </ul>
W2: Sept 1	<ul style="list-style-type: none"> <li>- <b>9/1 - Labor Day (no school)</b></li> <li>- Launch project <i>Shap, Shap, Chaparral</i> = Tuesday field research – Bring water and snacks, wear outdoor clothes...</li> <li>- Principles of Ecology (Chapter 13)</li> <li>- WiLD Wednesday!! – Bring a SACK LUNCH and water, wear outdoor clothes...</li> <li>- Weekly Personal Reflection (WPR) – it is required to share your WPR with your parent(s) and obtain their signature. WPRs are turned in every Monday.</li> </ul>
W3: Sept 8	<ul style="list-style-type: none"> <li>- Classification and Diversity - the importance of scientific nomenclature (Ch. 17 – 17.1, 17.2, and 17.4).</li> <li>- Tuesday field research – Bring water and snacks, wear outdoor clothes...</li> <li>- WiLD Wednesday!! – Bring a SACK LUNCH and water, wear outdoor clothes...</li> <li>- Weekly Personal Reflection (WPR) – it is required to share your WPR with your parent(s) and obtain their signature. WPRs are turned in every Monday.</li> </ul>
W4: Sept 15	<ul style="list-style-type: none"> <li>- <b>9/15 - Staff day (no school)</b></li> <li>- Tuesday field research – Bring water and snacks, wear outdoor clothes...</li> <li>- WiLD Wednesday!! – Bring a SACK LUNCH and water, wear outdoor clothes...</li> <li>- Exam 1 (Ecology and Classification) review and study guide.</li> <li>- <b>9/17 - Open House</b></li> <li>- Weekly Personal Reflection (WPR) – it is required to share your WPR with your parent(s) and obtain their signature. WPRs are turned in every Monday.</li> <li>- 9/19 – Museum of Contemporary Art field trip (Humanities).</li> </ul>
W5: Sept 22	<ul style="list-style-type: none"> <li>- Exam 1 – Ecology and Classification</li> <li>- Tuesday field research – Bring water and snacks, wear outdoor clothes...</li> <li>- <b>9/24 - Minimum day (staff day)</b></li> <li>- Weekly Personal Reflection (WPR) – it is required to share your WPR with your parent(s) and obtain their signature. WPRs are turned in every Monday.</li> </ul>
W6: Sept 29	<ul style="list-style-type: none"> <li>- Ecology – Interactions in Ecosystems (Ch. 14).</li> <li>- Tuesday field research – Bring water and snacks, wear outdoor clothes...</li> <li>- WiLD Wednesday!! – Bring a SACK LUNCH and water, wear outdoor clothes...</li> <li>- 10/2 California Wolf Center (CWC) field trip – all expenses covered! Please bring a sack lunch.</li> <li>- Weekly Personal Reflection (WPR) – it is required to share your WPR with your parent(s) and obtain their signature. WPRs are turned in every Monday.</li> </ul>
W7: Oct 6	<ul style="list-style-type: none"> <li>- Ecology – Interactions in Ecosystems (Ch. 14, continued).</li> </ul>

	<ul style="list-style-type: none"> <li>- Tuesday field research – Bring water and snacks, wear outdoor clothes...</li> <li>- WiLD Wednesday!! – Bring a SACK LUNCH and water, wear outdoor clothes...</li> <li>- <b>10/10 - Fall holiday (no school)</b></li> </ul>
W8: Oct 13	<ul style="list-style-type: none"> <li>- <b>10/13 - Staff day (no school)</b></li> <li>- Tuesday field research – Bring water and snacks, wear outdoor clothes...</li> <li>- <b>10/15 - PSATs (morning), SLCs (afternoon)</b></li> <li>- <b>10/16 and 10/17 - SLCs (minimum days)</b></li> </ul>
W9: Oct 20	<ul style="list-style-type: none"> <li>- <i>Shap, Shap, Chaparral</i> project work time (data analysis and project presentations)</li> <li>- Tuesday field research – Bring water and snacks, wear outdoor clothes...</li> <li>- WiLD Wednesday!! – Bring a SACK LUNCH and water, wear outdoor clothes...</li> <li>- Weekly Personal Reflection (WPR) – it is required to share your WPR with your parent(s) and obtain their signature. WPRs are turned in every Monday.</li> </ul>
W10: Oct 27	<ul style="list-style-type: none"> <li>- Comparative Ecology - Marine Ecosystems (Ch. 15, section 15.4)</li> <li>- Tuesday field research – Bring water and snacks, wear outdoor clothes...</li> <li>- WiLD Wednesday!! – Bring a SACK LUNCH and water, wear outdoor clothes...</li> <li>- <i>Shap, Shap, Chaparral</i> data analysis and project presentation critique and refinement.</li> <li>- Weekly Personal Reflection (WPR) – it is required to share your WPR with your parent(s) and obtain their signature. WPRs are turned in every Monday.</li> <li>- <b>11/1 - Dia de Los Muertos Exhibition (off campus only)</b></li> </ul>
W11: Nov 3	<ul style="list-style-type: none"> <li>- 11/3 - 11/4 Dana Point Ocean Institute overnight field trip – all expenses covered!</li> <li>- <i>Shap, Shap, Chaparral</i> data analysis and project presentation critique and refinement.</li> <li>- Weekly Personal Reflection (WPR) – it is required to share your WPR with your parent(s) and obtain their signature. WPRs are turned in every Monday.</li> </ul>
W12: Nov 10	<ul style="list-style-type: none"> <li>- <b>11/11 - Veteran's Day (no school)</b></li> <li>- <i>Shap, Shap, Chaparral</i> data analysis and project presentation critique and refinement.</li> <li>- WiLD Wednesday!! – Bring a SACK LUNCH and water, wear outdoor clothes...</li> <li>- <b>11/14 - Advisory Olympics</b></li> </ul>
W13: Nov 17	<ul style="list-style-type: none"> <li>- Human Impact on Ecosystems (Ch. 16, sections 16.4 and 16.5)</li> <li>- <i>Shap, Shap, Chaparral</i> data analysis and project presentation critique and refinement.</li> <li>- <i>Shap, Shap, Chaparral</i> off-site project presentations!!!</li> <li>- Weekly Personal Reflection (WPR) – it is required to share your WPR with your parent(s) and obtain their signature. WPRs are turned in every Monday.</li> </ul>
W15: Nov 24 - 28	<b>Thanksgiving Break - Enjoy Family and Friends!!</b>
W16: Dec 1	<ul style="list-style-type: none"> <li>- Exam 2 (Interactions in ecosystems and Human Impact) review and study guide.</li> <li>- <i>Shap, Shap, Chaparral</i> data analysis and project presentation critique and refinement.</li> <li>- <i>Shap, Shap, Chaparral</i> off-site project presentations!!!</li> <li>- <b>12/3 - Minimum day (staff day)</b></li> <li>- <b>12/4 - Winter Exhibition</b></li> </ul>
W17: Dec 8	<ul style="list-style-type: none"> <li>- Exam 2 – Interactions in ecosystems and Human Impact</li> <li>- <i>Shap, Shap, Chaparral</i> off-site project presentations!!!</li> <li>- Presentations of Learning (POL) preparation</li> </ul>
W18: Dec 15	<ul style="list-style-type: none"> <li>- Presentations of Learning (POL) preparation</li> <li>- <b>12/16 - 12/19 - POLs (12/19 is a minimum day)</b></li> </ul>
W19: Dec 22 - Jan 4	<b>Winter Break - Enjoy Family and Friends!!</b>

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
3. A 3-ring binder with separate sections for:
  - a. Notes
  - b. Homework/Handouts
  - c. Quizzes/Exams
4. Several pencils and pens in an organizer.

#### 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 (**5/11/15 - 6/5/15**). 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.

## 11<sup>th</sup> 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:

---

---

---

---

---

---

---