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Day 21 Greenest 2020

3 Colleges with sustainability focused studies:

1. Clark University (Worcester, MA) - Their Environmental Sciences is a great program that has specializations in environmental and conservation biology, environmental science and policy, and earth system science. I was drawn to this project due to the hands-on learning that one experiences that would provide a student necessary knowledge for a future career in environmental sciences. Their program is unique in that they are able to work with worldwide governments and use resources/facilities that are unique to Clark. They also have a course called "Climate Change, Energy, and Development" which seems to be a really interesting and important course. To make it my dream class, I would like to add a convention of some sort that provides information about the environment to the rest of the campus and the community.
2. University of Pennsylvania (Philadelphia, PA) - This school offers several majors and minors in environmental studies, which allows students to choose their specialization and have a major more tailored to them. Their programs are unique because they run in depth research studies, which not every environmental program does. This program has existed for 20 years and includes courses such as "Global Climate Change" and many other interesting topics on the environment. If I could make it my dream class, I would add more in-field learning and experimentation.
3. University of Michigan (Ann Arbor, MI) - Their school has multiple courses in environmental Studies, including one that focuses on environmental issues. These courses are interesting and unique in that they have many specific and broad courses of study. One of these courses is "Climate and Climate Change," which is very important when it comes to helping the environment. If I were to be able to change this program, I would include more research opportunities and case studies.

Our original course list:

The themes that would be considered the most important in this course is the idea of community outreach to ensure that our activism is not limited to ourselves; zero-waste principles to minimize the damage we and other people do; and technological and scientific study, so that we use science and research to discover new solutions for our changing world. These are very broad and general themes, but there are lots of different subtopics that can be fit into these. For example, education and protesting would fall under community outreach; while incorporating plant-based foods would be under individual zero-waste initiatives. Here is a model of the syllabus:

1. Community Outreach:

- a. The goal of this section is to provide students with an accurate understanding of politics, law, and social work, to prepare them for a career in fighting for environmental policy. Skills include: writing, reading, public speaking, organization, and the humanities.
- b. Throughout this course students will be expected to produce several well made, and researched PSA's either in the form of video, digital, or posters to be posted.
- c. Mock debates will be held throughout the course to prepare students to engage in intellectual discourse
- d. Projects will be assigned throughout the year:
 - i. Pretend you are a state governor, and develop an environmental policy that is within reason to be passed by legislature
 - ii. Research a previous environmental plan passed in the US or in another country and present a well written thesis that explains in detail why it was or was not successful.
 - iii. Produce a short video/documentary that succinctly and accurately describes a current environmental issue, as well as possible solutions.
 - iv. Develop a presentation that will be given to your fellow classmates about an issue currently affecting the community and how we can solve it.
- e. Extra credit will be given if students attend protests,rallies, public hearings etc.
- f. As part of this class, service hours are **mandatory** at either an environmental affiliated organization or another approved humanitarian effort
- g. Guest Lectures: Autumn Peltier→ 1st nations activist who campaigns for Water is Life, she has been an activist ever since a very young age, and knows exactly what is on the line for 1st nations people. She will discuss how we can help minorities negatively affected by eco-damage.

2. Zero-Waste Plans:

- a. The goal of this section is to provide students with the knowledge and experience to reduce the environmental harm they themselves cause and how to promote these lifestyle choices and changes to other people around them. Skills that will be used include : historical analysis, reading and writing skills, critical analysis, and public speaking
- b. We will be watching, and discussing/writing about several films in this class to understand current and past events
 - i. The True Cost: A documentary about the fast fashion industry, and its effects on health and the environment
 - ii. The Story of Plastic: A documentary about the plastic crisis
 - iii. Food Inc: A documentary about the animal product industry
- c. Students will be expected to write and discuss about any lifestyle changes they make as a result of this course
- d. Research assignments will be given about topics such as veganism, plastic, fossil fuels etc. Presentations will be given in class
- e. Projects similar to section 1 will be assigned such as

- i. Develop a zero-waste initiative plan as a group, and present it to either a place of employment, home, or school
 - ii. Discuss with at least 3 other people **not** in this class about topics we have discussed in class, and attempt to persuade them about zero-waste plans
 - iii. Research a location in the world that is currently being negatively affected by the plastic crisis, include a possible waste mitigation plan as well as the root cause of the issue
 - f. In class discussion, as well as weekly assignments will constitute the majority of this grade.
 - g. Guest Lecture: Ed Markey→ Cosigner of the Green New Deal, he will be discussing with our class why we need this type of plan and how we can fight for it to be implemented in our nation.
3. Scientific and Tech Study:
- a. The goal of this section is to provide students with an understanding of new and future technologies meant to solve environmental issues, as well as an in-depth understanding of the science of the environment. Skills will be used are : scientific and mathematical reasoning, advanced understanding of physics, chemistry, and biology, and an understanding of mechanics.
 - b. Students will be research and learn about current renewable energy sources and how they work
 - c. This section has only 1 major project:
 - i. Come up with a novel type of renewable energy, and present a lab report detailing how it works, how cost efficient it would be, and how it could help the environment. You will be working in small collaborative groups.
 - d. Much of this section will be devoted to labs to drive students an understanding of chemistry, biology, meteorology, and other physical sciences
 - e. Students will also be asked to research current available technologies and discuss how *truly* beneficial they are to the environment by listing its pros, cons, and how it could be improved.
 - f. In this section we will be engaging with a lot of scientific literature, and there will be quizzes and exams meant to evaluate understanding of the material. Topics covered will include:
 - i. Climate Science
 - ii. Ecological Systems
 - iii. Mechanics of Renewable energy
 - iv. Chemistry of plastics
 - g. Students will also be asked to research a specific community negatively impacted by fossil fuel companies and will be asked to demonstrate their understanding of the science behind the issue.
 - h. Guest lecture: Al Gore→ Famous author of the Inconvenient Truth and celebrated Climate activist , who will discuss with us how to understand scientific models and what it means to defend the scientific truth from those who would detract.

Calendar of special events!

1. Month of October= Participate in PGC !
2. September and October= Voter registration drive
3. Monthly film screenings= every last thursday of the month
4. November 19th= Seminar on plant based cooking(week before thanksgiving)
5. December 16th= Special presentation on fast fashion, and how clothes are dealt with
6. January 2nd= Self care session, setting goals and intentions about environment for the new year
7. March 7th= Field study and tour of waste management facilities
8. Earth Day= Invasive species removal project
9. June 11th= Host a campus farmers market

Here is the feedback our teacher gave us:

Brayden,

This is amazing! I want to take this course. I'm especially excited to hear your guest speakers - such great choices! Could this be a co-taught class? Maybe a social studies teacher working with a science teacher? Could the final assessment for the course be a presentation in an Environmental Fair that was shared with the community to allow students to showcase their learning while also educating others? Finally, how about incorporating some history of environmentalism in this course? Rachel Carson is one of my favorites to study and there is some new controversy over her work now.

I hope that this feedback is helpful. Let me know if I can do anything else to help.

Best wishes,

Mrs. C-A

