

Global Human Ecology
New Course Proposal
October 2013

I. Course Description

Course Title: Global Human Ecology

Course Number: TBD

Prerequisite: None

Hours: 5 blocks per week, quarter long or one semester

Credit: 1 or 2 elective credits, depending on whether quarter or semester long

Open To: Grades 9-12

II. Common Core

CCSS.ELA-Literacy.RST.11-12.1 Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.

CCSS.ELA-Literacy.RST.11-12.2 Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.

CCSS.ELA-Literacy.RST.11-12.3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.

Craft and Structure

CCSS.ELA-Literacy.RST.11-12.4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to *grades 11–12 texts and topics*.

CCSS.ELA-Literacy.RST.11-12.5 Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.

CCSS.ELA-Literacy.RST.11-12.6 Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved.

Integration of Knowledge and Ideas

CCSS.ELA-Literacy.RST.11-12.7 Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.

CCSS.ELA-Literacy.RST.11-12.8 Evaluate the hypotheses, data, analysis, and conclusions in a science or technical text, verifying the data when possible and corroborating or challenging conclusions with other sources of information.

CCSS.ELA-Literacy.RST.11-12.9 Synthesize information from a range of sources (e.g., texts,

experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.

Range of Reading and Level of Text Complexity

CCSS.ELA-Literacy.RST.11-12.10 By the end of grade 12, read and comprehend science/technical texts in the grades 11–CCR text complexity band independently and proficiently.

Maine Learning Results Content Standards aligned with ISSN Global Leadership Performance Outcomes

1. Collect and analyze one's data to draw bigger conclusions about the environment (LEAD09-10.INV1 Identify and describe a locally, regionally or globally focused issue and explore relevant questions about it).
2. Use a variety of resources such as articles and interviews to enhance your own data.(LEAD 09-10.INV2. Use multiple international and domestic sources to identify relevant evidence that addresses a globally focused question.
3. Connect your environmental research to other global affairs.
4. Ask questions about how the environment affects you and your surroundings. (LEAD09-10.PERS1 Describe a personal perspective on situations, events, issues or phenomena)

III. Learner Expectations from Deering High School's old mission aligned with ISSN Global Leadership Performance Outcomes

- Explore global issues. (LEAD 09-10.INV3. Analyze and integrate evidence collected to construct a response to a globally focused question.)
-
- Utilize technology and media to gather information and examine using math, science, and history.
-
- Investigate local, national, and international information in order to create multiple perspectives on global issues. (LEAD 09-10.INV4 Develop a position that considers multiple perspectives in response to a globally focused question.)
-
- Communicate different perspectives then evaluate knowledge in order to build upon a common goal. (LEAD 09-10.PERS2 Identify and describe the perspectives of other people, groups, or schools or thought.)
- Accept responsibility for taking action individually and cooperatively towards the set goal. (LEAD 09-10. ACT3 Act individually or collaboratively in responsible ways to contribute

to improvement locally, regionally, or globally.)

PPS Comprehensive Plan Framework:

All students will graduate from high school.

All graduates will be prepared for college.

All students will participate in activities that demonstrate service to the community, individual creativity and physical wellness.

ISSN mission:

DHS students to graduate globally competent, college and career ready.

IV. Rationale

The study of ecology is a perfect example of a study that increases global competence, which is part of Deering's new initiative with ISSN. Through studying ecology, students will have a heightened awareness of their role in an interconnected world and their ability to take action concerning the global issue of environmentalism. With the environmentalist movement continuously progressing throughout the world, it is imperative that students understand this issue and their role in sustainability. Currently, it is apparent that the school is lacking environmental concern. Students have shown to be inadequate at waste management and reduction. Moreover, Deering is currently on a dangerously increasing trend of energy consumption. Not to mention, both issues costs the school a greater amount of money than is necessary. It is crucial for students to increase their ecological knowledge in order to ameliorate this local, national, and global issue. Finally, this class will be a service learning classroom in which students will manage Deering's carbon footprint, consumption of resources, and output. Both Casco Bay High School and Portland High School offer *Environmental Science* as an elective. We are the only high school in the district to not offer it.

V. IMPACT ON THE MASTER SCHEDULE

The impact on the schedule should be negligible, as most of the students in question would be exchanging a study hall for this quarter or semester long elective. Offering more quarter-long courses also allows students to do something more productive with their "off-quarter" when paired with the required Health class, AP English, or other possible three quarter-long classes. Finally, it would be a great opportunity for Deering to offer more community partnerships, outreach programs, and service learning opportunities for students (S.A.G.E.)

VI. IMPACT ON ENROLLMENT IN OTHER COURSES

The impact on other courses should also be minimal if we are successful in rescheduling these students out of study hall. It may reduce the number of students signing up for other science electives but this

should not affect staffing if taught by a current science teacher. Cynthia Martin has already taught Environmental Science at Portland High School for twenty-six years. She is now here at Deering part time.

VII. IMPACT ON STAFFING

If current staffing decisions are based on projected enrollment and average number of credits attempted, this course will not have an impact on staffing. We have the highly qualified teachers already in the building. It is an interdisciplinary course that could potentially be taught by any teacher of any discipline as it involves literacy, numeracy, science, social studies, world languages, technology, and visual arts.

VIII. Anticipated Costs

Anticipated costs are zero as the course will be taught with little need for outside resources. Students will do all readings and research using the internet and databases. In fact, if this class is taught properly with the service learning component of overseeing Deering's own sustainability the class will be a savings to Deering and Portland Public Schools.

IX. Outline of Major Units of Study

1. Investigation of the environmental concerns around the globe.
2. Students will investigate their own daily impact on the environment.
3. Students will read articles on current environmental news.
4. Create projects to share their new-found knowledge.
5. Collect data, calculate, evaluate, and share their conclusions.
6. Organize, advocate, educate, and monitor Deering's own sustainability initiatives: reduced fuel, electricity, water, and paper consumption; recycling; redemption, and composting.
7. Student choice research project or paper around chosen issue, possible CAPSTONE project, an ISSN module that asks students to think globally, investigate the world, recognize perspectives, communicate ideas, and take action.
8. Students will work outside the school walls to observe and connect with other schools and businesses and their initiatives with reducing their carbon footprint. The community connection and student centered learning really both embrace community assets as something which supports and deepens learning experiences.

X. Sustainability

The environment is changing rapidly, and is only degrading with time. As the environment weakens, it is important to teach students the necessity of change. Awareness of climate changes is important, and the need for this course will increase with time. One of the greatest global competencies is each individual's role in global health. The class itself is as sustainable as any other Deering course with current enrollment and staffing; in fact, as we become more global and climate change increases, the course becomes

increasingly relevant.