

LaGuardia Community College, The City University of New York- Spring I Semester, 2014

COURSE SYLLABUS- SCG 250, Environmental Science

Capstone Course

Dr. Holly A. Porter Morgan

Lecture Discussion Meetings: Tuesday, 11:45am-2:00pm and Friday, 11:45am-12:45pm (Room E-502)

Laboratory Meetings: Friday 1:00-4:25pm (Room M-234)

Office: M221D

Office Hours: Tuesday 2:00am-4:30pm and Thursday 3:30pm-4:30pm, or by appointment.

Email: hollyportermorgan@gmail.com

Course Materials:

1. **Textbook:** *Environmental Science: Toward a Sustainable Future* 12th edition. (2013) by Wright and Boorse, Pearson Benjamin Cummings, San Francisco, CA. ISBN-10: 0321682661; ISBN-13: 978-0321682666

Course Description:

The course integrates biological, chemical and physical concepts with service learning. Understanding the earth as a dynamic system and addressing local environmental issues will be emphasized. Laboratory sessions will focus on the design, conduction, and completion of intensive research projects, including analyses of locally-collected water, soil, and air samples.

Grading

The total grade is determined as follows:

4 Exams	40%
Weekly Homework	15%
Research Project and Related Work	<u>45%</u>
	100%

Exams:

Exams will be taken on the date they are listed on the lecture schedule. Any student who is more than more than 15 minutes late will **NOT** be able to take the exam and will receive a **zero** for that exam.

Make-up Policy:

There will be NO scheduled make-up exams. If a student has a valid excuse and must miss an exam, the professor must be informed BEFORE the exam. If the student brings a doctor's note or other written proof of why they missed the exam (accident report, etc.), a separate exam may be made available at a time and date determined by the professor. Otherwise, the student will receive a zero for that exam.

Attendance Policy:

Attendance at all laboratory and lecture sessions is essential for understanding and mastery of the course material. A student who is absent from more than one laboratory session seriously jeopardizes his/her grade for the course. If you choose to be absent or late, you choose the grades that result from these actions. Do not ask the professor to repeat announcements or course materials, if you are late. If you have an emergency or choose not to attend class, it is your responsibility to check the syllabus, blackboard, and discuss what you missed with other students.

Not all of the information in the text can be presented in the lecture slides. However you are responsible for all of the information in the text and anything added by the professor during the discussion section. These discussions are intended to give an overview of the material from the book and to cover material that may benefit from extra discussion.

It is your responsibility to complete all of the weekly activities in the allotted time.

Weekly Assignments:

Students will be responsible for completing weekly homework activities. Homework assignments are due every week on the date they are listed on the lecture schedule.

Research Project:

Students will be responsible for designing, implementing, and completing a substantive research project during the semester and much of the work will take place during laboratory sessions. While students' projects may fit into larger research efforts and students will work in teams, each student will have a portion of the project as their own, and will develop their own independent research plan. Each student will turn in a 10-15 page paper describing their research and results, present their project to other students and faculty, and complete an ePortfolio page describing their project. Assignments designed to keep students on track with completing these deliverables will be handed out over the semester.

Rules of Class Behavior:

Students are required to communicate with the instructor and other students in proper professional English in speech and in writing at all times- no abbreviations, no text-message slang, no use of all lowercase or uppercase, a proper greeting is required (for example, you should write 'Dear Professor', not 'Hey Prof'). If you do not know how to write a proper email, see the following website for netiquette rules-

www.albion.com/netiquette/corerules.html. No emails without a subject line will be opened.

During lecture and laboratory, no texting or other cell phone use is allowed. All phones should be set to vibrate prior to the start of class and placed IN YOUR BAG. The outlets in the laboratory are not to be used for plugging in cell phones.

Cheating:

The College's regulations regarding cheating will be strictly enforced. Review the definition of plagiarism and remember that if you use another person's words or ideas, you must cite them in your work. You can find more information here: <http://wpacouncil.org/files/wpa-plagiarism-statement.pdf>

Be aware of the consequence for plagiarizing and other forms of cheating. The CUNY policy on academic integrity is available at the following address:

<http://library.laguardia.edu/files/pdf/academicintegritypolicy.pdf>

Contacting your Professor:

The best method for contacting your professor is via email at hollyportermorgan@gmail.com

Emails will be answered within 24 hours. Weekend emails will be responded to by Monday afternoon of the following week. You are also welcome to attend the office hours, listed at the beginning of the syllabus.

Schedule: Lecture and Discussion - Tuesday, 11:45am-2:00pm and Friday, 11:45am-12:45pm (Room E-502)
Laboratory - Friday 1:00-4:25 (Room M-234)

W & B = Wright and Boorse

BB = Blackboard

<u>Date/Week</u>	<u>Topics and Activities to Be Completed Before Class:</u>
<p>Week 1: Tuesday, March 4th Friday, March 7th</p>	<p>Topic: Science and the Environment; Economics, Politics, and Public Policy Read: Ch. 1 and 2 (W & B) Review: Lecture Sessions 1 and 2 (BB) Complete: Assignments 1 and 2 (BB) - due Fri., March 7th</p> <p>Laboratory: Introduction to the capstone project. Research teams meet and begin work on Project Overview Sheet and Timeline.</p>
<p>Week 2: Tuesday, March 11th Friday, March 14th</p>	<p>Topic: Basic Needs of Living Things; Population and Communities Read: Ch. 3 and 4 (W & B) Review: Lecture Sessions 3 and 4 (BB) Complete: Assignments 3 and 4 (BB) - due Fri., March 14th</p> <p>Laboratory: Water Analysis using a Photometer (Dr. Yearwood). Project Overview Sheet due. <u>Timelines completed.</u> Begin outline of Methods .</p>
<p>Week 3: Tuesday, March 18th Friday, March 21st</p>	<p>Topic: Ecosystems, Energy, Patterns & Disturbance; Wild Species & Biodiversity Read: Ch. 5 and 6 (W & B) Review: Lecture Sessions 5 and 6 (BB) Complete: Assignments 5 and 6 (BB) - due Fri., March 21st</p> <p>Laboratory: Project work begins. Methods outline due for comments.</p>
<p>Week 4: Tuesday, March 25th Friday, March 28th</p>	<p>QUIZ 1: Ch. 1, 2, 3, 4, 5, 6</p> <p>Topic: Use and Restoration of Ecosystems; The Human Population Read: Ch. 7 and 8 (W & B) Review: Lecture Sessions 7 and 8 (BB) Complete: Assignments 7 and 8 (BB) - due March 28th</p> <p>Laboratory: Project work continues. Annotated bibliography due.</p>

<p>Week 5: Tuesday, April 1st Friday, April 4th</p>	<p>Topic: Population and Development; Water & the Hydrologic Cycle Read: Ch. 9 and 10 (W & B) Review: Lecture Sessions 9 and 10 (BB) Complete: Assignments 9 and 10 (BB) - due April 4th</p> <p>Laboratory: Draft Introduction due. Project work continues.</p>
<p>Week 6: Tuesday, April 8th Friday, April 11th</p>	<p>Topic: Soil and Land Ecosystems; The Production and Distribution of Food Read: Ch. 11 and 12 (W & B) Review : Lecture Sessions 11 and 12 (BB) Complete: Assignments 11 and 12 (BB) - due April 11th</p> <p>Laboratory: Project work continues. Progress Report due.</p>
<p>Week 7 Friday, April 25th</p>	<p><u>SPRING BREAK - April 14-April 22</u></p> <p><u>QUIZ 2: Ch. 7, 8, 9, 10, 11, 12</u></p> <p>Topic: Pests & Pest Control Read: Ch. 13 (W & B) Review : Lecture Session 13 (BB) Complete: Assignment 13 (BB) - due April 25th</p> <p>Laboratory: Project work continues. Draft Methods due.</p>
<p>Week 8: Tuesday, April 29th Friday, May 2nd</p>	<p>Topic: Energy from Fossil Fuels ; Nuclear Power Read: Ch. 14 and 15 (W & B) Review: Lecture Sessions 14 and 15 (BB) Complete: Assignments 14 and 15 (BB) - due May 2nd</p> <p>Laboratory: Project work continues.</p>
<p>Week 9: Tuesday, May 5th Friday, May 9th</p>	<p>Topic: Renewable Energy; Environmental Hazards and Human Health Read: Ch. 16 and 17 (W & B) Review: Lecture Sessions 16 and 17 (BB) Complete: Assignments 16 and 17 (BB) - due May 9th</p> <p>Laboratory: Research teams meet and work on projects. Progress Report 2 due.</p>

<p>Week 10: Tuesday, May 13th Friday, May 16th</p>	<p><u>QUIZ 3: Ch. 13, 14, 15, 16, 17</u></p> <p>Topic: Global Climate Change; Atmospheric Pollution Read: Ch. 18 and 19 (W & B); Climate Change chapter (ch. 30) from Smith & Smith, to be provided on Blackboard. Review : Lecture Sessions 18 and 19 (BB) Complete: Assignments 18 and 19 (BB) - due May 16th</p> <p>Laboratory: Research teams meet and work on projects. Draft Results due.</p>
<p>Week 11: Tuesday, May 20th Friday, May 23rd</p>	<p>Topic: Water Pollution; Municipal Solid Waste Read: Ch. 20 and 21 (W & B) Review: Lecture Sessions 20 and 21 (BB) Complete: Assignments 20 and 21 (BB) - due May 23rd</p> <p>Laboratory: Research teams meet and work on projects. Draft Conclusions due.</p>
<p>Week 12: Tuesday, May 27th Friday, May 30th</p>	<p>Topic: Hazardous Chemicals, Pollution and Prevention Read: Ch. 22 (W & B) Review: Lecture Session 22 (BB) Complete: Assignment 22 (BB) - due May 30th</p> <p>Laboratory: Research teams meet. ePortfolio draft due. *Presentation draft due for students who want comments prior to submission.</p>
<p>FINALS WEEK Tuesday, June 3rd Friday, June 6th</p>	<p><u>Project Presentations- Tues. June 3rd</u> <u>Project Papers due, Mon. June 9th</u> <u>ePortfolio due- published online, Wed. June 11th</u></p> <p><u>QUIZ 4: Ch. 18, 19, 20, 21, 22m (June 6th)</u></p> <p>Laboratory: Students submit a corresponding written report and give a presentation of their work on the team research project.</p>