CITY COLLEGES of CHICAGO
Harry S Truman
Education that Works

DEPARTMENT OF PHYSICAL SCIENCES & ENGINEERING

MASTER SYLLABUS

Harry S. Truman College: Our Mission dedicates us to deliver high-quality, innovative, affordable and accessible educational opportunities and services that prepare students for a rapidly changing and diverse global economy.

Course (Discipline): Environmental Studies 101
Proposed IAI Code – L1905

1. **Title, Number, and Classification**
   Man and Environment I
   840-0101
   College Credit – Requirement for AS Environmental Science

2. **Course Term**
   16 week Semester or 8 week summer term

3. **Credit and Contact Hours**
   Credit hours: 3
   Contact hours: 3 lecture

4. **Prerequisites**
   English 101 eligibility

5. **Catalog Description**
   Interdisciplinary study of humans, the environment, and their interrelationships, including resources, processes, wastes, growth, change, values and individual responsibility and involvement; emphasis on ecology of Chicago metropolitan environment; individual in relation to urban systems and urban systems in relation to world environment. Writing assignments, as appropriate to the discipline, are part of the course.

6. **Students for whom the course is intended**
   This is a course required for students seeking an AS degree with concentration in Environmental Sciences. It also serves students seeking to pursue careers in ecology, conservation biology, field biology, wildlife studies, or related fields.

7. **Course Objectives**
   The broad objectives of this course are to:
   1. Introduce the fundamental principles, concepts, and models of environmental science and their applications
   2. Improve the student's ability to apply the principles of environmental science and use scientific reasoning to understand current, important local, regional, national, and global environmental issues and evaluate/propose solutions to these issues

3. Foster student awareness of the relevance of environmental science to the choices they make in their personal, professional, and academic lives
4. Improve the students' ability to communicate effectively and think critically

8. Learning Outcomes

Upon completion of this course, students should be able to:

1. Describe the structure and function of environmental/ecological systems.
2. Demonstrate their understanding of ecosystem energetics and recycling of nutrients and chemicals in various systems of the environment.
3. Explain the biogeographical nature of habitats, loss of habitats and biodiversity, global climate changes, and the concept of sustainability.
4. Use the scientific method to identify and understand current environmental problems and propose or evaluate potential solutions.
5. Evaluate the impact that each one's way of life has on the environment.
6. Apply and communicate their understanding of the relationship between environmental issues and the choices they make.
7. Identify, participate in, and reflect on a service-learning activity that involves conservation or restoration in the local community

9. Topical Course Outline (suggested)

Week 1	Introduction and Overview of Environmental Science
Week 2	Human Population Growth
Week 3	The Biosphere: Populations, Communities, and Ecosystems
Week 4	The Biosphere: Biogeochemical cycles
Week 5	Evolution and Biodiversity
Week 6	Biomes on Earth
Week 7	The Dynamic Earth: General Physical Environment
Week 8	The Dynamic Earth: Natural Hazards
Week 9	People and Natural Resources
Week 10	Resource Conservation
Week 11	Principles of Pollution Control, Toxicology, and Risk
Week 12	Water and Air Pollution: Local and Regional
Week 13	Global Air Pollution: Destruction of the Ozone Layer and Global Climate Change
Week 14	Municipal Solid Waste and Hazardous Waste
Week 15	Historical and Cultural Aspects of Environmental Concerns
Week 16	Finals Week / Wrap Up

10. Texts and Materials (suggested)

Environmental Science, Earth as a Living Planet, 7th Edition by D. Botkin and E. Kelleer. ISBN: 978-0-470-11855-9 (Publisher: Wiley & Sons)

11. Methods of Instruction

Lecture and Notes: Lecture notes will be in the form of PowerPoint presentations and overhead sheets. These will be posted on Blackboard and/or websites.

Group Exercise: Documents on instructions and methodologies will be provided by the instructor. This will include group discussions, presentations, and writing on current global ecological issues.

Videos/CDs: The instructor will show or provide cd roms as deemed necessary.
Field Trips: It is imperative that students participate in field trips in and around the Chicago area.

12. Methods of Evaluation:

Formative Evaluations:

- Exams, Papers, Quizzes: There will be quizzes as well as midterm and final examinations.
- Research paper (essay): The instructor will assign a research topic and/or a critical question that will require independent research, writing, and synthesizing information. The topic or the research question will be on Blackboard. This could include service learning credits.
- Homework/class work: Homework and class works will be at the discretion of the instructor. He/she will assign homework and class work as deemed necessary for the topics outlined in the course objectives.
- Service learning: Service learning is an integral part of this course. Students shall participate in a service learning project through one of the AS Environmental Science program's community or academic partners. In order to officially gain your service learning credit, you will have to contact the Center for Civic Engagement and Service Learning at Truman College. All required documents will be posted on *Blackboard*. Each time you participate, this form should accompany you and signed by the authorized personnel of the project. The instructor will provide detailed information during the first day of class.

Summative Evaluations:

- The letter grades will be based on the percentages of the total cumulative points possible from the course:

Quizzes	200 points
Exams 1 & 2	250 points
Final Exam	250 points
Final Project	300 points
Total	1000 points

Cumulative Percentage: 90-100 = A; 80-89 = B; 66-79 = C; 50-65 = D; Below 50 = F

Authorized Signature and File

Date: _____