# Montgomery County Community College ECO 117 Introduction to Environmental Economics 3-3-0

#### COURSE DESCRIPTION:

Students will learn how managing natural resources while maintaining a healthy environment presents a significant challenge in a capitalistic economy. Students will apply economic tools and principles to environmental policy making. The course integrates analysis of current economic policy, examination of human impact on the planet, ethical decision-making, and development of sustainable policy recommendations with the constraint of scarce resources in a market economy. Topics include water and air pollution, energy, climate change, national parks, and human health issues.

## **REQUISITES:**

Previous Course Requirements

- ENG 010A Basic Writing or ENG 011 Basic Writing II or ESL 011 Basic Writing II
- MAT 080 Fundamentals of Mathematics or MAT 011 Beginning Algebra or MAT 011B Beginning Algebra with Review of Arithmetic with a minimum grade of "C" within 5 years
- REA 011 Fundamentals of College Reading or REA 017 Vocabulary and Reading Comprehension Development II

# Concurrent Course Requirements None

LEARNING OUTCOMES Upon successful completion of this course, the student will be able to:	LEARNING ACTIVITIES	EVALUATION METHODS
Employ the vocabulary of environmental economics.	Lecture Primary Source Analysis Problem Solving Article Summaries Wikis Podcasts Class discussion Small Group Projects and Presentations Quizzes Examinations	Primary Source Analysis Problem Solving Article Summaries Wikis Podcasts Class discussion Small Group Projects and Presentations Quizzes Examinations

LEARNING OU	TCOMES	LEARNING ACTIVITIES	EVALUATION METHODS
2. Evaluate key environmenta economic co through the a of the economic decision make process.	/ al ncepts application mic	Primary Source Analysis Problem Solving Article Summaries Wikis Podcasts Class discussion Small Group Projects and Presentations Quizzes Examinations	Primary Source Analysis Problem Solving Article Summaries Wikis Podcasts Class discussion Small Group Projects and Presentations Quizzes Examinations
3. Explain the rincentives in results when environments the short-run run.	producing developing al policy in	Primary Source Analysis Problem Solving Article Summaries Wikis Podcasts Class discussion Small Group Projects and Presentations Quizzes Examinations	Primary Source Analysis Problem Solving Article Summaries Wikis Podcasts Class discussion Small Group Projects and Presentations Quizzes Examinations
4. Analyze the current environational and on the overa environment short- and lo	onmental e local, global level ll in the	Primary Source Analysis Problem Solving Article Summaries Wikis Podcasts Class discussion Small Group Projects and Presentations Quizzes Examinations	Wiki Blog Podcast Group Project or Presentation
5. Analyze and primary sour documents for Library of Country of country of country of country area of country of country area of country of cou	ce rom the ongress in onservation	Primary Source Analysis	Primary Source Analysis Wiki Blog Podcast Group Project or Presentation

LEARN	ING OUTCOMES	LEARNING ACTIVITIES	EVALUATION METHODS
6. Criti	ique the ethical	FTE Site Selection Activity	FTE Site Selection Activity
cons	sequences of	Primary Source Analysis	Primary Source Analysis
hum	nan decisions under	Problem Solving	Problem Solving
the o	condition of scarcity	Article Summaries	Article Summaries
and	their impact on the	Wikis	Wikis
loca	I, national and	Podcasts	Podcasts
glob	al environment.	Class discussion	Class discussion
_		Small Group Projects and	Small Group Projects and
		Presentations	Presentations
		Quizzes	Examinations
		Examinations	
7. Exp	lain that viewing the	Primary Source Analysis	Primary Source Analysis
envi	ironment as an	Problem Solving	Problem Solving
"eco	nomic good" is	Article Summaries	Article Summaries
relat	ted to cultural	Wikis	Wikis
pers	spective.	Podcasts	Podcasts
		Class discussion	Class discussion
		Small Group Projects and	Small Group Projects and
		Presentations	Presentations
		Quizzes	Quizzes
		Examinations	Examinations
	ically evaluate the	Primary Source Analysis	Primary Source Analysis
	of individuals as	Problem Solving	Problem Solving
	ens of the planet	Article Summaries	Article Summaries
	their civic	Wikis	Wikis
	onsibility to weigh	Podcasts	Podcasts
	costs and benefits	Class discussion	Class discussion
of sh	hort-term decisions	Small Group Projects and	Small Group Projects and
and	their long-term	Presentations	Presentations
cons	sequences.	Quizzes	Quizzes
		Examinations	Examinations

At the conclusion of each semester/session, assessment of the learning outcomes will be completed by course faculty using the listed evaluation method(s). Aggregated results will be submitted to the Associate Vice President of Academic Affairs. The benchmark for each learning outcome is that 70% of students will meet or exceed outcome criteria.

# **SEQUENCE OF TOPICS:**

- 1. Introduction to Course Expectations
  - a. Student Introductions
  - b. Introduction to Materials
  - c. Introduction to inquiry-based learning model with Primary Source Analysis

- d. Community Service Explanation
- 2. Introduction to Environmental Economics
  - a. What is environmental economics?
  - b. How are the economy and the environment related?
- 3. Tools for Environmental Economic analysis
  - a. What are supply, demand, equilibrium, and efficiency in economics?
  - b. How do markets achieve efficiency?
  - c. How is the environment an economic good?
  - d. How can environmental quality be analyzed using economic tools?
- 4. Environmental Analysis
  - a. What is Benefit-Cost Analysis?
  - b. How do we evaluate environmental policies?
  - c. What role do externalities, liability laws, property rights and voluntary action have in policy analysis?
  - d. Which allocates more efficiently and when: Command-and-Control vs. Incentive-Based Strategies.
  - e. How do we include ethical and cultural issues in the decision making process?
- 5. Sustainable Development & Environmental Policy: Local, State and National (Case studies, research and cooperative partnership with an outside partner).
  - a. Energy
  - b. Water
  - c. Land
  - d. Climate Change
  - e. Agriculture
  - f. Forests
  - g. Air
  - h. Toxic and Hazardous Substances
- 6. Global Impacts & Social Welfare
  - a. How is environmental policy impacted by economic development of developing and emerging countries?
  - b. What are the trade-offs associated with maximizing social welfare verses maximizing economic growth?
  - c. How can society make efficient environmental decisions?
  - d. Can we achieve sustainability and have economic growth without imposing our culture and values on other peoples in the global community?

### **LEARNING MATERIALS:**

Field, Barry & Field, Martha. (2012). *Introduction to Environmental Economics* (6<sup>th</sup> ed.). McGraw-Hill.

Rockliff, Mara. (2010). *Get Real: What Kind of World Are You Buying?* Running Press Kids. 978-0-76243745-0.

Primary Source documents from the Library of Congress website found at www.loc.gov.

Access to Wikispaces or Google for sharing Wikis created with partner students.

Other learning materials may be required and made available directly to the student and/or via the College's Libraries and/or course management system.

**COURSE APPROVAL:** 

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Prepared by: Jill Beccaris-Pescatore Date: 2/2011

VPAA/Provost Compliance Verification:

Victoria L. Bastecki-Perez, Ed.D. Date: 9/20/2011

Revised by: Jill Beccaris-Pescatore and Lee Bender Date: 3/2013

VPAA/Provost or designee Compliance Verification:

Victoria L. Bastecki-Perez, Ed.D. Date: 5/2/2013

Revised by: Lee Bender Date: 1/2014

VPAA/Provost or designee Compliance Verification:

Victoria L. Bastecki-Perez, Ed.D. Date: 1/16/2014

Reviewed by: Jill Beccaris-Pescatore Date: 11/13/2017

VPAA/Provost or designee Compliance Verification:

Victoria L. Bastecki-Perez. Ed.D. Date: 11/14/2017

Reviewed by: Jill Beccaris-Pescatore Date: 6/7/2023 VPAA or designee Compliance Verification: Date: 6/7/2023

This course is consistent with Montgomery County Community College's mission. It was developed, approved and will be delivered in full compliance with the policies and procedures established by the College.