



University of Benha
Faculty of Commerce
English Section
Dept. of Economics

COURSE SYLLABUS

Resources and Environmental Economics

First Term 2019/2020

1. Instructor Contact Info.

Name: Dr. Walaa Wageh Diab

Office Hours: from 8:30 am to 9 am each Wednesday

Online Office Hours: Each Friday at 1pm to 3 pm

Class meets Wednesday

Email: Walaa.dyab@fcom.bu.edu.eg

Course website:

Lecture slides and exercises accessible through My official page:
<http://bu.edu.eg/staff/walaadyab4>

2. Course Materials

A.(Text Book)

Book 1:

Tietenberg, T. and L. Lewis. 2015 **Environmental and Natural Resource Economics**,10th Edition. AddisonWesley: Boston, MA.

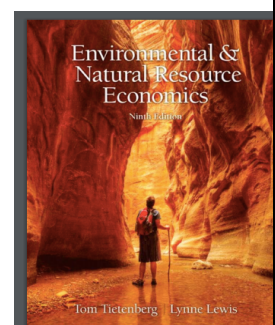
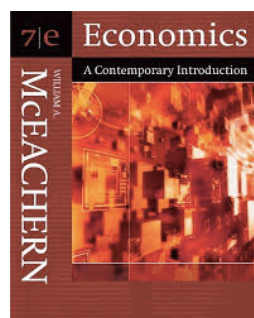
The 9th edition available at:

https://himayatullah.weebly.com/uploads/5/3/4/0/53400977/environmental_and_natural_resource_economics_by_tom_tietenberg_9th_edition.pdf

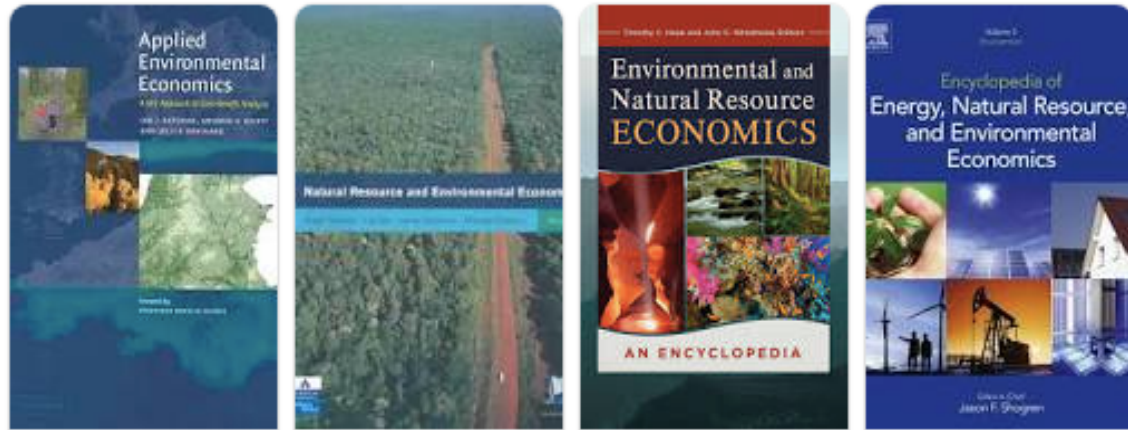
Book 2

Economics: A Contemporary Introduction,
7e William A. McEachern

Available at: <https://sangu.ge/images/Economics1.pdf>



B. Other Useful Books



3. Course Description

This course focuses on the Basic Economic Problem: Choice and the Allocation of Resources. Emphasis is placed on understanding economic concepts such as: resource scarcity, externalities, public goods, property rights, opportunity cost, market failure, social cost-benefit analysis, and sustainability. Special emphasis is devoted to analyzing the optimal role for public policy. The major objectives are for students to: (1) learn basic economic principles governing the allocation of various categories of scarce natural/environmental resources among competing uses; and (2) gain experience with basic analytical tools useful for applying these principles to real world allocation problems.

Thus, this course is designed to explore and analyze the use and management of natural resources. Since the natural world we live in contains natural resources that both a) allow our existence on the planet and b) provide for qualities of life we enjoy. These resources range from those above the ground— air, water, trees, fish, etc. to those beneath the ground— coal, natural gas, oil, water, etc. Uses of these resources are dynamic through time as human use and needs change. Economic analysis will reveal the “efficient” use of resources and identify the impact on natural systems.

So, this course introduces the student to the consequences of the interaction of market activity to the environment. It enables the student to understand how environmental problems are the outcome of market failure and, consequently, the role of governments in addressing such problems. It introduces the student to theory and practice of alternative environmental regulatory policies and natural resource management policies at the national and international levels.

Concepts and Tools of Analysis includes but not limited to:

- Positive and normative economics
- Microeconomics and macroeconomics
- Scarcity, choice and opportunity cost
- Production possibility curve (PPC)
- Marginal cost, marginal benefit and its principle
- Maximization of utility
- Maximization of profit: $\text{Marginal Revenue} = \text{Marginal Cost}$
- Maximization of social welfare: $\text{Marginal Social Benefit} = \text{Marginal Social Cost}$

Useful links

- <https://quizlet.com/37185693/economic-resources-flash-cards/>
- <https://quizlet.com/37185693/test>
- <http://catdir.loc.gov/catdir/samples/cam032/98049529.pdf>
- <https://sangu.ge/images/Economics1.pdf>

- netec.mcc.ac.uk
- www.rff.org
- www.rpgogress.org
- www.rmi.org
- www.worldbank.org
- www.oecd.org
- www.epa.gov
- www.eea.eu.int

4. Course Aims and Objectives:

<p style="text-align: center;">Learning outcomes</p> <p>On successful completion of this course, student should be able to:</p>	<ol style="list-style-type: none">1. Define the nature of the economic problem (finite resources and unlimited wants);2. Define the factors of production (land, labor, capital, enterprise);3. Define opportunity cost and analyze particular circumstances to illustrate the concept;4. Demonstrate how production possibility curves can be used to illustrate choice and resource allocation;5. Evaluate the implications of particular courses of action in terms of opportunity cost;6. Evaluate the merits of the market system;7. Describe the concept of market failure and explain the reasons for its occurrence;8. Define private and social costs and benefits and discuss conflicts of interest in relation to these costs and benefits in the short-term and long-term;9. Demonstrate the Relation between Optimality and Efficiency;10. Comparing Benefits and Costs Across Time;11. Define and explain Dynamic Efficiency;12. Discuss sustainability
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5. Course Calendar:

At the end of this Syllabus is a Course Calendar. It outlines the topic for each class meeting and is subject to change at the discretion of the instructor and upon consideration of class dynamics.

6. Background Reading:

1. Pearce, D. W. and R. K. Turner. Economics of Natural Resources and the Environment. London: Harvester Wheatsheaf, latest edition.

7. Other Supplemental (optional) Readings:

A considerable portion of the course will cover topics related to many subjects in economics. You may wish to read a textbook on Environmental economics to improve your understanding of these topics like:

Further reading:

2. Field, Barry and Martha Field. Environmental Economics. McGraw Hill, latest edition.
3. Goodstein Eban, Economics and the Environment. Prentice Hall, latest edition.

As a large component of this course is macro-based, you may also wish to read a macroeconomics textbook to supplement your understanding. Numerous recommended macroeconomics books are available, such as Froyen, Gordon or Blanchard.

For better understanding of the course material, you can also read:

- Matthew Kahn, Fundamentals of Environmental Economics: Solving Urban Pollution Problems (Kindle Edition, available from Amazon.com at \$2.)
- Charles Kolstad, Environmental Economics (Oxford University Press, 1st edition 2000, or 2nd edition 2010)
- The RFF Reader in Environmental and Resource Policy (Wallace Oates Editor, 2nd edition 2006, RFF Press)

8. Assessment:

Attendance/Participation: Participation in class will be rewarded with up to 5 points. If you attend class consistently and occasionally answer questions during class, you'll be fine.

Lateness and Courtesy: Please arrive on time to class and please turn off all cell phones.

Attendance is not mandatory for the course. However, mature behavior in a course is a requirement. Engaging in behavior that disturbs the class will result in a reduction in the course grade.

There are four sets of requirements for this course:

ACTIVITIES	PERCENTAGES
In class participation	5%
Project	5%
Mid- term exam	10%
Final exam	80%

Group Project

You are expected to work on the group project in a group of 10 students.

The final products will be a 15-20 minutes class presentation (divided equally among the members) and a paper between 8-15 pages not including references but everything else (font 12 and double spacing). The group presentations will be held during the last 3 lectures or so. The grade for the group project will be based on both the presentation and the paper itself. The group paper should have the following five sections: 1. Summary: a maximum of 1 page summary of your paper (be sure to include names of all authors) 2. Introduction. Please include the following subsections: (1) What is the issue (define the problem), and (2) why is this issue important? One way to establish your argument in the second subsection is to include quotes from major newspapers or magazines, such as the New York Times or the Wall Street Journal or the Economists, or some quote by some major public figure (politician etc.) that discusses the problem. 3. Economic analysis and findings. For an empirical project, this section should include data and empirical model. For a theoretical paper, it should include a theoretical model or theoretical arguments and derivations. Findings should be presented here. 4. Conclusion. Discuss briefly what lessons we can learn from the study (e.g., policy suggestions). 5. References. List all the references used in your article.

The paper has to be submitted in electronic format to:

Walaa.dyab@fcom.bu.edu.eg

9. Instructor Policies

(Honor Code): All work submitted for this course must be your own. Any evidence of cheating and/or plagiarism in any assignment or exam will be dealt with as specified by the Academic Integrity Policy. All students in violation of the honor code during an exam will receive an immediate grade of zero for that exam and the violation will be forwarded to the Honor Committee.

(Exam Policy)

The midterm and final exams cannot be made-up under any circumstance. If the midterm is missed due to a medical emergency, the final exam will be re-weighted. In the case of a medical emergency, the student must provide proof by the last scheduled lecture (i.e. not after the semester ends). Note that missing any exam due to non-emergency associated travel plans will render an exam score of zero.

Office Hours

I will hold office hours by appointment. Please e-mail me to schedule a time. I will also allocate Sunday and Wednesday mornings to answering e-mail questions about the course. If your question is urgent, please indicate this in the subject line and I will try to respond sooner.

Copyright Notice.

Students should assume that: the respective author copyrights all course material. The course instructor prohibits the reproduction of course material without consent. Violation of copyright is against the law and will be reported.

10.Course Calendar

Below is a tentative course calendar. It may change at discretion of lecturer and class dynamics.

PROJECTED TIMETABLE

Tentative Lecture Schedule and Readings (the week may change)

Week 1 & 2	Book 2: Chapter 1: The Economic Problem: Scarce Resources, Unlimited Wants Resources Goods and Services Economic Decision Makers Microeconomics and Macroeconomics Normative Versus Positive Book 2: Chapter 2 Opportunity Cost Book 1: Chapter 2 The Environment as an Asset
Week 3 & 4	Book 1: Chapter1 Future Environmental Challenges: Climate Change Water Accessibility Meeting the Challenges The Role of Economics: Ecological Economics versus Environmental Economics Book 1: Chapter 2 The Economic Approach
Week 4 & 5	Book 2: Chapter 1 The Art and Science of Economic Analysis A Simple Circular-Flow Model Rational Self-Interest Choice Requires Time and Information Economic Analysis Is Marginal Analysis

<p>Week 6 & 7</p>	<p style="text-align: center;">Book 2: Chapter 11</p> <p style="text-align: center;">Resource Demand Resource Supply Resource Management: Discounting the future Renewable resources Exhaustible resources</p> <p style="text-align: center;">Book 2: Chapter17</p> <p style="text-align: center;">Externalities and the Environment</p>
<p>Week 8 & 9</p>	<p style="text-align: center;">Book 2: Chapter16</p> <p style="text-align: center;">Public Goods and Public Choice</p> <p style="text-align: center;">Book 1: Chapter2 Public Goods Externalities as a Source of Market Failure Imperfect Market Structures</p> <p style="text-align: center;">Book 1: Chapter2 Government Failure</p>
<p>Week 10 &11</p>	<p style="text-align: center;">Book 1: Chapter3</p> <p style="text-align: center;">Normative Criteria for Decision Making Finding the Optimal Outcome Relating Optimality to Efficiency Comparing Benefits and Costs Across Time Dynamic Efficiency</p>
<p>Week 12</p>	<p style="text-align: center;">Book 1: Chapter2</p> <p style="text-align: center;">The Human–Environment Relationship Environmental Problems and Economic Efficiency Property Rights and Efficient Market Allocations</p>
<p>Week 13</p>	<p style="text-align: center;">Book 1: Chapter2</p> <p style="text-align: center;">Producer’s Surplus, Scarcity Rent, and Long-Run Competitive Equilibrium Benefit–cost analysis case study: Pollution Control Cost-Effectiveness Analysis Impact Analysis</p>
<p>Week 14</p>	<p style="text-align: center;">Book 1: Chapter5</p> <p style="text-align: center;">Dynamic Efficiency and Sustainable development</p>
<p>Week 15</p>	<p style="text-align: center;">Project Presentations</p>