

DEPARTMENT OF ECONOMICS

HIMACHAL PRADESH UNIVERSITY

[NAAC Accredited 'A' Grade University]

Summer Hill, Shimla-171005



Regulations and Syllabus
ADD-ON COURSE (AOC)/ SHORT RUN COURSE TITLED
Environment Economics

Annexure 'A'

Approved by Board of Studies held on 10.06.2024

Approved by Faculty of Social Sciences 01.07.2024

DEPARTMENT OF ECONOMICS

Syllabus for Add-On Course (AOC)/ Short Run Course in Environment Economics

The following Add-On Certificate Course (AOC)/ Short Run Course in Environment Economics is to be offered by the Post Graduate (PG) Centre Department of Economics, prepared and proposed by the Department Council for implementation w.e.f. 2024- 25 onwards was considered and approved by PG BoS on 10/06/2024 and by Faculty of Social Sciences on 01/07/2024. The scheme is placed before the Academic Council/ Executive Council for consideration and approval.

Table1: Add on Certificate Course with Codes, Credits, Contact Hours and Marks Scheme

Semester	Nature of Course	Course Code	Course Name	Credits	Theory Contact Hours (L-5Hrs/Tutorial -1hour)		Marks Scheme	
					Lecture Credits	Tutorial	Theory	Internal Assessment
I	AOC	AOCEE11	Environment and Resource Economics	2	1	1	35	15
	AOC	AOCEE12	Theory and methods of environmental valuation	2	1	1	35	15
	SUBTOTAL-1			2	1	1	Marks=100	

NOTE: In Reference to Table1 the Following Points A) and B) are relevant:

A) Course code descriptions: The codes for courses on offer is explained as follows:

1. AOCEE11

Here in: AOC denotes Add-on Certificate Course; **EE** denotes Environment Economics. Similarly, **11** represents 1stSemester1st Course.

GENERAL INFORMATION

B (1) STUDENT INTAKE:

Total seats: 30

Subsidized seats: 20 + 02 + 02*

(Supernumerary 02 seats Reserved for Single Girl Child + EWS of H.P.)

Non-Subsidized seats: 05

Total seats in AOCEE: 20+02+03* + 05 = 30.

If the Economically Weaker Section (EWS) category for admission seats remain vacant than these seats neither be filled with other category nor will carry forward. Few Supernumerary seats for foreign National who apply through Indian Council for Cultural Relations (ICCR) are also available as per H.P. University Rules.

- B (2) Admission to the certificate course shall be made twice a year in the month of February/ March and June/ July. A student shall register for an Add-on Course offered by submitting a duly filled in Registration Form. The admission shall be made on the basis of merit of the marks obtained in the qualifying examination.
- B (3) **ELIGIBILITY:** Graduate in any of the social science subject can apply. Students pursuing master’s degree from Himachal Pradesh University can simultaneously opt for the certificate course. Besides 120 points roster system will be followed in the admission process.
- B (4) **Age limit:** Maximum age limit for admission to ACEE course is 23 years for general category, 25 years for girl candidates and a relaxation of 3 years for SC/ST category as on the 1st July of the year concerned. The Vice-Chancellor may permit age relaxation up to a maximum of six months.
- B (5) **Fee Structure**
FEES TO BE PAID: Subsidized and Non-Subsidized (Both) Seats: As per University rules, the tentative detail of Annual fees to be charged from the students during the admission of the month concerned.

Subsidized Fee			Non-subsidized Fee	Mode of Payment
Semester	Boys In Rs.	Girls In Rs.	Boys/ Girls (in Rs.)	Online
1 st Sem.	6000	3000	6000+10000	

Marks for attendance are given as per following criteria:

>75% but <80%	:	1Mark
80% to 85%	:	2Marks
>85% but <90%	:	3Marks
90% to 95%	:	4Marks
>95%	:	5Marks

- i. The duration of each paper will be one and half (1.5) hours.

IV GUIDELINES FOR ICDEOL (CDOE) STUDENTS

- (i) To pass a course, the candidate shall have to secure at least 40% marks separately, in internal assessment and End-Semester-Examination.

For ICDEOL (CDOE) students, internal assessment (IA) shall comprise only assignments. The students shall have to submit Tutor Marked Assignments (TMAs) as given in the following table:

Table 1: Number of TMA, Marks and Number of Questions for Students of ICDEOL (CDOE)

Sr. No.	Course Credits	Number of TMA	Marks per TMA	Total Marks	Number of Questions per TMA
1.	2	1	15	15	3 Questions of 500 words each

Note: TMA = Tutor Marked Assignment

ADD-ON COURSE/ SHORT RUN COURSE IN POST GRADUATE DIPLOMA IN POPULATION STUDIES (APGDP)

Programme Outcome

Throughout study, this course is expected to assist the candidate by:

- To understand Environmental Economics and various issues related to environmental economics.
- To measure the economic evaluation of environmental resources.
- To Know Cost-benefit analysis for environmental management.

Nature of Course: AOC
Course Code: AOCEE111
ENVIRONMENT AND RESOURCE ECONOMICS

Credit	Lecture	Tutorial	Practical
2	1	1	0

Course Outcomes

By the end of the course, students will be able to:

- Concepts of environment and ecology
- Able to understand eco-development, ecosystem
- To understand the Environmental costs of economic growth
- To know resource management in order to fulfill environmental, social and economic objectives

Section/ Block I

Unit-1 Economics and Ecology: Definition and Concepts. Economics, Ecology, Resources (their character/types and inter-relationships). Environment as a resource;

Unit–2 Environmental economics, Eco-development, Ecosystem, productivity and stability.

Unit-3 Environment pollution on (its types, sources and effects), Public goods and bads, unmarketed goods, externalities. Resource depletion, problem of social cost.

Section/ Block II

Unit-1 Economic Development and Environmental Quality; Environmental costs of economic growth.

Unit-2 Problem of rural environmental planning (rural industrialization, waste disposal, common property, resources degradation deforestation).
Relationship of conservation and development.

Unit-3 Special role of ecology in development planning. Resource management to fulfill environmental, social and economic objectives. Dilemma in environmental planning (poverty Vs. Environmental quality, social aspects, legal aspects, financial aspects).

----- SUGGESTED READINGS .

Baumol, W. J. & W. E. Dates, (1975). the Theory of Environmental policy. Prentice Hall Engle Weed. .

Dasgupta, P. (1982). The Control of Resources, Oxford University Press, Delhi. .

Dorfman, R. and N. S. Dorfman (Eds.) (1977). Economics of the Environment, W. W. Norton, New York. .

- Maeler, K. G. (1974). *Environmental Economics A Theoretical Enquiry*, Johns Hopkins University Press, Baltimore. ·
Amsterdam. · Nijkamp, P. (1980). *Environmental Policy Analysis; Operational Methods and Models*, John Wiley & Sons, New York. ·
- Pearce, P. W. (1976). *Environmental Economics*, Longman London. ·
- Squire, L & Vander Tak, H. (1975). *Economic Analysis of Projects*, John Honkins University Baltimore. 48 ·
- Pearce, D. W. and Turner, R. K. 1990. *Economics of Natural Resources and the Environment*. Harvester Wheatsheaf, New York. ·
- H. L. Gabel and H. Opschoor (eds.) (1996). *Principles of Environmental and Resource Economics*. Edward Elgar, Cheltenham, U. K. · Barbier,
- E. B. (1997). *The Economics of Environment and Development*. Edward Elgar, Cheltenham, U. K. ·
- World Bank, (1992). *World Bank Development Report, 1992; Environment and Development*. Oxford University Press, Oxford.

Paper Pattern for End-Semester Examination: There will be 3 Parts (A, B, C) and the Examiner shall set 5 questions from both the sections (I, II) in total.

1. Part A will have 2 questions from Section I of the syllabus of 10 Marks each and students shall have to attempt any one.
2. Part A will have 2 questions from Section II of the syllabus of 10 Marks each

and students shall have to attempt any one.

3. Part C will have 7 questions from Section (I and II) of the syllabus and students shall have to attempt any 5 questions. Each question will carry 3 Marks.

Note: The class test in all types of courses must be scheduled once 50% of the syllabus is covered. To pass a course, the candidate shall have to secure at least 40% marks separately, in internal and End-Semester-Examination.

Internal Assessment

1. Internal Assessment (15 Marks)
2. Attendance = 05 Marks
3. Class Test, Assignments and Presentations = 10 Marks
4. A minimum attendance of 75% in each paper, in each semester shall be mandatory failing which the student will not be permitted to write the End-Semester-Examination. The rules for the relaxation in the requirement shall be in accordance with the University Ordinance.

Nature of Course: AOC
Course Code: AOCEE112
THEORY AND METHODS OF ENVIRONMENTAL VALUATION

Credit	Lecture	Tutorial	Practical
2	1	1	0

Course Outcomes

By the end of the course, students will be able to:

- To know the importance of environment in welfare
- To understand the economics of renewable resources
- To understand the problems of urban environmental planning
- To measure cost and benefits of environmental resources

Section/ Block I

Unit-1 Environment as an important component in welfare; application of welfare economics to environmental issues such as pollution, urban congestion and the provisions of public goods, common property, externalities, and the distribution of income.

Unit-2 Economic Development and Environmental Quality; Environmental costs of economic growth. Economics of Renewable resource harvesting (optimal policy of fisheries, optimal rotating forest).

Unit-3 Problems of urban environmental planning (Industry, transport, housing, slum clearance, sewerage, and waste disposal). Problem of

rural environmental planning (rural industrialization, waste disposal, common property resources degradation deforestation).

Section/ Block II

Unit-1 Economic Evaluation of Environmental Resources Measuring environmental damage (Valuation Methodologies). Externalities and valuation of resources on public lands.

Unit-2 Measurement of benefits from the environmental resources. Irreversibility and the optimal use of natural environments (irreversibility in economic processes, irreversible Decisions and exhaustible resources, irreversible investment, and project evaluation, determining the discount rate, inter-generational transfers determining the discount rate, inter-generational transfers, and uncertainty).

Unit-3 Divergence between social cost and private. Divergence between social cost and private cost. Cost-benefit analysis for environmental management.

----- SUGGESTED READINGS .

Brown, I. R., et. Al. State of the World, (A World-Watch institute Report, Prentice Hall of India New Delhi. .

Clark, C. W. (1976). Mathematical Bioeconomic: Optimal management of Renewable Resources, John Willey & Sons, New York. .

- Cooper, Charles (1980). *Economic Evaluation and the Environment*, Hodder and Stoughton, London. ·
- Faber, M. And R. Manstetton, (1996). *Ecological Economics* Edward Elgar, Cheltenham, U.K. · Folmer, H.,
- Krutilla, J. V. and A. C. Fisher (1975). *The Economics of Natural Environmental*, Johans Hopkins University Press, Baltimore. ·
- Nijkamp, P. (19770. *theory and Application of Environmental Economics*, North-Holland Publishing Co.,
- Pearce, P. W. (1976). *Environmental Economics*, Longman London. ·
- H. L. Gabel and H. Opschoor (eds.) (1996). *Principles of Environmental and Resource Economics*. Edward Elgar, Cheltenham, U. K. · Barbier,
- World Bank, (1992). *World Bank Development Report, 1992; Environment and Development*. Oxford University Press, Oxford.

Paper Pattern for End-Semester Examination: There will be 3 Parts (A, B, C) and the Examiner shall set 5 questions from both the sections (I, II) in total.

1. Part A will have 2 questions from Section I of the syllabus of 10 Marks each and students shall have to attempt any one.
2. Part A will have 2 questions from Section II of the syllabus of 10 Marks each and students shall have to attempt any one.
3. Part C will have 7 questions from Section (I and II) of the syllabus and students shall have to attempt any 5 questions. Each question will carry 3 Marks.

Note: The class test in all types of courses must be scheduled once 50% of the syllabus is covered. To pass a course, the candidate shall have

to secure at least 40% marks separately, in internal and End-Semester-Examination.

Internal Assessment

1. Internal Assessment (15 Marks)
2. Attendance = 05 Marks
3. Class Test, Assignments and Presentations = 10 Marks
4. A minimum attendance of 75% in each paper, in each semester shall be mandatory failing which the student will not be permitted to write the End-Semester-Examination. The rules for the relaxation in the requirement shall be in accordance with the University Ordinance.