

Far Western University

Faculty of Education

Course Title: **Environmental Health Education**

Course No.: HP.Ed.123

Nature of Course: Theoretical

Level: Undergraduate

Credit: 3

Semester: Second

Teaching Hrs: 48

1. Course Description

This course is designed to develop the knowledge and understanding of the students on various aspects of environmental health education. It will establish a linkage between human health and environment. It covers a wide range of topics related to the environmental health, such as meaning, concept and importance of environmental health, approaches of environmental health education, role of technology, ecosystems and biodiversity, conflict between humans and the environment, climate change and its impact, natural disaster, global environmental issues and its impacts on health, sanitation, hygiene, healthy environment, environmental policies and sustainable development. Through critical thinking, brainstorming, lectures, discussions, case studies, and field visits, students will develop a comprehensive understanding of the complexities and interconnections between human activities and the environment. The course also emphasizes the importance of sustainable practices and the role of individuals and communities in promoting environmental conservation.

2. Course Objectives

- To make the students familiar with the concept, scope and relevance of environmental health, examining different approaches and evaluating the role of technology in enhancing environmental health education.
- To examine the concept of ecosystem and biodiversity, including- components, impact, loss of biodiversity and threats to biodiversity.
- To raise awareness about climate change and natural disaster, including-concept, impact and strategies for mitigating measures.
- To explore healthy environment and sustainable development, including-hygiene and total sanitation, effect of agrochemical, global environmental issues and policies regarding environmental health in Nepal.

3. Contents in Detail with Specific Objectives

Specific Objectives	Contents
<p>Unit-I Objectives</p> <ul style="list-style-type: none"> • Define the meaning and definition of environmental health. • State the scope of environmental health. • Articulate the importance and relevance of environmental health. • Explore the different approaches of environmental health. • Examine the role of technology in enhancing environmental health education, including the use of digital tools, and online resources to engage learners, promote environmental awareness. <p>Unit II Objectives</p> <ul style="list-style-type: none"> • Introduce the concept of ecosystems and their components. • Explain the meaning and importance of biodiversity. • Identify and discuss the threats to biodiversity in Nepal. • Explain the causes, consequences and conservation solutions of loss of biodiversity. • Suggest the conservative measures for ecosystems and biodiversity. • Discuss the conflicts that arise between humans and the environment. <p>Unit-III Objectives</p> <ul style="list-style-type: none"> • Define climate change and discuss its causes. • Explain the impacts of climate change. • Identify the measures to solve the climate change problems • Define natural disasters and their causes. • Point out the impact of natural disaster on human health and wealth. • Mention the stages of the disaster risk reduction management cycle. • Explore the strategies for mitigating and managing natural disasters. 	<p>Unit I: Introduction to Environmental Health (7 hrs.)</p> <p>1.1 Meaning and Definition of Environmental Health</p> <p>1.2 Scope of Environmental Health</p> <p style="padding-left: 20px;">Importance and Relevance of Environmental Health</p> <p>1.4 Approaches to Environmental Health Education</p> <ul style="list-style-type: none"> • Experiential Learning • Project-Based Learning • Place-Based Education <p>1.5 The Role of Technology in Environmental Health Education</p> <p>Unit II: Ecosystems and Biodiversity (10 hrs.)</p> <p>2.1 Introduction to Ecosystems and their Components</p> <p>2.2 Concept, Meaning and Importance of Biodiversity</p> <p>2.3 Threats to Biodiversity</p> <ul style="list-style-type: none"> • Habitat Loss • Introduced Species • Infectious Diseases • Pollution • Use of Pesticides • Climate Change • War and Conflict • Ultraviolet Radiation • Over Exploitation <p>2.4 Loss of Biodiversity: Causes, Consequences and Conservations Solutions</p> <p>2.5 Conservative Measures of Ecosystems and Biodiversity</p> <p>2.6 Conflict between Humans and the Environment</p> <p>Unit III: Climate Change and Natural Disasters (10 hrs.)</p> <p>3.1 Concept and Causes of Climate Change</p> <p>3.2 Impacts of Climate Change</p> <ul style="list-style-type: none"> • Agriculture-Food Security • Water Resources • Human Health • Settlements and Infrastructure <p>3.3. Measures to Solve the Climate Change Problems</p> <p>3.4 Concept and Causes of Natural Disasters</p> <p>3.5 Impacts of Natural Disaster on Human Health and Wealth</p> <p>3.6 Concept of Disaster Risk Reduction Management Cycle</p> <p>3.7 Strategies for Mitigating and Managing Natural Disasters</p>

<p>Unit IV- Objectives</p> <ul style="list-style-type: none"> • Define the concept of hygiene and sanitation. • State the meaning and definition of total sanitation. • Explain the elements of total sanitation • Describe the effect of agrochemical on human health and environment • Explain the global environmental issues and its impacts on health • Define the concept of sustainable development and point out its importance. • Mention the principle of sustainable development • Describe the strategies of sustainable development related to focusing on health. • Clarify the dimensions of sustainable development • Discuss on interrelationship between environment, sustainable development and health • Explore different environmental policies and programs implemented in Nepal. 	<p>Unit IV: Healthy Environment and Sustainable Development (18 hrs.)</p> <p>4.1 Concept of Hygiene and Sanitation</p> <p>4.2 Meaning and Definition of Total Sanitation</p> <p>4.3 Elements of Total Sanitation</p> <ul style="list-style-type: none"> • Use of Toilet • Use of Safe Water • Use of Safe Food • Practice of Hand Washing • Practice of Cleaning House and Surrounding • Keeping Hygienic and Clean Environment • Disposal of Solid and Liquid Waste <p>4.4 Effect of Agrochemical on Human Health and Environment</p> <p>4.5 Global Environmental Issues and its Impacts on Health</p> <ul style="list-style-type: none"> • Global Warming • Ozone Layer Depletion • Acid Rain <p>4.6 Meaning, Definition and Importance of Sustainable Development</p> <p>4.7 Principles of Sustainable Development</p> <p>4.8 Strategies Related to Sustainable Development, Specifically Focusing on Health.</p> <p>4.9 Dimension of Sustainable Development</p> <p>4.10 Interrelationship between Environment, Sustainable Development and Health</p> <p>4.11 Environmental Policies and programs for Sustainable Development in Nepal</p>
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4. Methods and Techniques

This course is theoretical in nature. Lectures, critical thinking, discussions, demonstrations, question-answer, brainstorming, presentation, guest speeches, library visits, home assignments, class interaction and project works are generally used in this course. The specific instructional techniques are as follows:

Unit	Suggested Instructional Techniques and Activities
I	<ul style="list-style-type: none"> • Organizing group discussion on the meaning and definition of environmental health, its scope and importance by using charts and resources materials. • Lecture and discussion on approaches to environmental health education by subject teacher. • Power point slide presentation on role of technology in environmental health • Engage students with assignment and class presentation
II	<ul style="list-style-type: none"> • Organizing group discussion on the concept, components and importance of ecosystem and biodiversity, threats and loss of biodiversity and conservative measures with using different resource books and PPT slide. • Organizing a field visit and talk program on the conflict between humans and the environment. • Student will visit to community and field for project work and discuss their observations in the class. Group work.

III	<ul style="list-style-type: none"> • Providing students articles for reading and understanding on climate change and its impact on health from latest news paper or research journals. • Assigning students to prepare charts and materials on concept, cause, impact and conservative measures to climate change followed by presentation and discussion on the class. • Showing documentary on natural disaster, its impact and disaster risk reduction management cycle. • Organizing a guest lecturer or climate change and natural disaster.(if possible). • Individual home assignment.
IV	<ul style="list-style-type: none"> • Visit the library and prepare report on concept and meaning of sanitation and hygiene, elements of total sanitation, effect of agrochemical on human health and environment and submit to the teacher. The teacher will make comments on the subject matter. • Showing documentary on global warming, ozone layer depletion, and acid rain followed by discussion. • Organizing lecture and group discussion on the sustainable development and environmental policies and programs by using different resource book and materials. • Organizing a guest lecturer on global environmental issues and impact of agrochemical. (If possible). • Assignment and class presentation by the students.

5. Evaluation Scheme

Students will be assessed both through internal and external evaluation systems. Formative evaluation is used in internal evaluation whereas in external evaluation a theoretical examination will be conducted at the end of the semester by the Office of the Controller of Examinations of FWU. The full marks composition of both internal and external evaluation will be 40% and 60% respectively. The internal and external evaluation consists of the following tasks:

5.1 Internal Evaluation 40%

Activity	Marks
Attendance	5 marks
Participation in Class Activities	5 marks
Reflection Notes and Class Presentation	5 + 5=10 marks
Term Paper/Essay/Project Works and Interview	5 + 5= 10marks
Mid-term Exam	40 marks

Note: Reflective notes on 2 to 4 questions given by the teacher at the end of every unit and Presentation on any two questions among them. Logical essay/term paper/project on the topics chosen by students and approved by the teacher and interview.

5.2 External Evaluation (Final Examination) 60%

Types of questions	Total Questions to be asked	Number of questions to be answered and marks allotted	Total marks
Group A: Multiple-choice items	10 questions	10 x 1 mark	10
Group B: Short answer questions	6with 2 'or' questions	6 x 5 marks	30
Group C: Long answer questions	2 with 1 'or' question	2 x 10marks	20
Total			60



References

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- Dahal, M.K. & Dahal, D.R. (1998). *Environment and sustainable development: Issues in Nepalese perspectives*. Nepal Foundation for Advanced Studies. (Unit-II)
- FAO. (1992). *Sustainable development and the environment: FAO policies and actions*. Stockholm 1972 –Rio 1992.FAO. (Unit-IV)
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- Ghimire, K.B. & Pimbert, M.P. (Ed). (1997). *Social change and conservation: Environmental politics and impacts of National parks and protected areas*, Earth scan. (Unit-III)
- Hungerford, H. R., & Volk, T. L. (1990). Changing learner behavior through environmental education. *Journal of Environmental Education*. (Unit-I)
- Kapoor, B.S. (2001). Environmental Sanitation, New Delhi: S. Chand and Company LTD.
- Lekhak, H.D. & Lekhak, B. (2009), *Natural Resource conservation and sustainable development in Nepal*, Kshitiz Publication. (Unit-III)
- Palmer, J. A. (1998). Environmental education in the 21st century: Theory, practice, progress, and promise. *Routledge*. (Unit-I)
- Sauvé, L. (2014). *Educating for sustainability: Principles and practices for teachers*. UNEP. (unit 1)
- अधिकारी, जगन्नाथ, घिमिरे, शरद (२००३), *वातावरणीय न्याय श्रोत संगालो*, मार्टिन चौतारी र सामाजिक बिकास तथा अनुसन्धान केन्द्र। (Unit-III)
- चौधरी, रामप्रसाद, शर्मा, प्रकाशमणि, अधिकारी, बसन्तप्रसाद (२०६०), *दिगोबिकास र स्थापना समुदाय*, प्रोपब्लिक जनहित संरक्षण मञ्च नेपाल।(Unit-IV)
- लिवार्ड (२०६५), *जलवायु परिवर्तन*, जनाकारी पत्र लिवार्ड, पोखरा। (Unit-III)
- दुङ्गाना, हरिप्रसाद, घिमिरे, शरद, अधिकारी, जगन्नाथ (२०६५), *जैविक विविधता र जनजीविका*, मार्टिन चौतारी थापथली।(Unit-III)
- पर्यावरण (२०५२), *जलवायु परिवर्तन जानकारी पुस्तिका*, प्राक्टिकल एक्सन नेपाल।(Unit-III)
- बेलबासे, लेखनाथ, बेलबासे, नारायण(२०५६), *जैविक विविधता संरक्षण श्रोत संगालो*, प्रोपब्लिक जनहित संग्रक्षण मंच नेपाल।(Unit-II)
- भासिन, कमला (२०००), *दिगोबिकासबारे केहि चिन्तन*: स्त्री शक्ति नेपाल।(Unit-IV)
- शेरचन, लोकेन्द्र र उप्रेती, यदुराम (२०७५), *वातावरणीय स्वास्थ्य तथा स्वास्थ्य प्रवद्धना क्वेष्ट पब्लिकेशन*।(Unit I, III, IV)
- शेरचन, लोकेन्द्र र उप्रेती, यदुराम (२०७८) *स्वास्थ्य तथा शारीरिक शिक्षा* । क्वेष्ट पब्लिकेशन ।(Unit IV)

B.Ed. in Health and Physical Education

Course Title: Foundation of Physical Education

Course No. : HP.Ed.124

Level: Undergraduate

Semester: Second

Nature of course: Theory

Credit: 3

Teaching Hrs: 48

1. Course Introduction

Physical education is an integral part of education. Physical education is needed for a person to live healthy. Health education and physical education both are interdependent and inter-related subjects. The curriculum of these two subjects is combined designed as an integrated curriculum to the prospective teachers. This course is designed to acquaint prospective teachers with the knowledge on meaning, objectives, foundations and history of physical education as an integrated curriculum designed for the students of health and physical education. It is also intended to provide knowledge on movement education to the prospective teachers.

2. General Objectives

The general objectives of this course are as follows:

- To make the students familiar with the concept of physical education.
- To develop the knowledge on foundations of physical education.
- To enable the students in explaining the basic concepts of movement education and their elements.
- To develop the wider understanding of roles of some countries in developing physical education and sports.
- To make the students familiar with the history of physical education.

3. Contents in Detail with Specific Objectives

Specific Objectives	Contents
<ul style="list-style-type: none"> • Explain the need and importance of physical education. • Describe the aims and objectives of physical education. • Describe the Sports Development Act 2048 B.S. 	<p>Unit I: Introduction to Physical Education (10 hrs)</p> <p>1.1 Meaning and definition of physical education</p> <p>1.2 Aims and objectives of physical education</p> <p>1.3 Need and importance of physical education</p> <p>1.4 Role of Physical education and sports in nation development</p> <p>1.5 Major terms related to physical education: sports culture, physical training, athletics, drill, gymnastics, yoga, aerobic, anaerobic, games and sports</p> <p>1.6 Sports Development Act of Nepal, 2048 B.S.</p>
<ul style="list-style-type: none"> • Describe the philosophical foundations of physical education. • Show the relation between philosophy and physical education. • Explain the biological and physiological foundations of physical education. • Analyze the types of learning 	<p>Unit II: Foundations of Physical Education (15 hrs)</p> <p>2.1 Philosophical Foundation</p> <p style="padding-left: 20px;">2.1.1 Meaning of philosophical foundation</p> <p style="padding-left: 20px;">2.1.2 Some general philosophies (Idealism, realism, pragmatism, naturalism, existentialism) and their views towards physical education</p> <p>2.2 Biological and Physiological Foundation</p> <p style="padding-left: 20px;">2.2.1 Meaning of biological and physiological</p>

<p>related with the physical education activities.</p> <ul style="list-style-type: none"> Describe the laws of learning applied to physical education and sports. Describe the modes of social learning. List the social traits developed through physical education and sports. 	<p>Foundation</p> <p>2.2.2 Human potential and performance</p> <p>2.2.3 Evolution of life</p> <p>2.2.4 Biological basis of life</p> <p>2.2.5 Physical and motor growth and development with their principles</p> <p>2.2.6 Types of body (Krestchmer, Sheldon and Carl Jung's Classification)</p> <p>2.2.7 Suggestions from biology and physiology for physical education program</p> <p>2.3 Psychological Foundation</p> <p>2.3.1 Meaning of Psychological Foundation</p> <p>2.3.2 Learning and its types</p> <p>2.3.3 Perceptual motor learning</p> <p>2.3.4 Elements of learning</p> <p>2.3.5 Relation of learning with motivation, maturation, individual difference, reinforcement and intelligence</p> <p>2.3.6 Laws of learning</p> <p>2.3.7 Suggestions from psychology for physical education program</p> <p>2.4 Sociological Foundation</p> <p>2.4.1 Meaning of sociological foundation</p> <p>2.4.2 Values</p> <p>2.4.3 Human nature and human needs</p> <p>2.4.4 Modes of social learning</p> <p>2.4.5 Theories of play</p> <p>2.4.6 Role of play in life and education</p> <p>2.4.7 Sport as a socializing force</p> <p>2.4.8 Social traits developed through physical education</p> <p>2.4.9 Suggestions from sociology for physical education program</p>
<ul style="list-style-type: none"> Explain the concept of movement education Describe the importance of the elements of movement in physical education and sports. 	<p>Unit III: Movement Education (10 hrs)</p> <p>3.1 Meaning of movement</p> <p>3.2 Types of movement</p> <p>3.3 Basic concepts of movement education</p> <p>3.4 Elements of movement (Speed, Strength, Power, Agility, Flexibility, Endurance, Co-ordination and Balance)</p> <p>3.5 Importance and applicability of movement education</p>
<ul style="list-style-type: none"> Describe the ancient period of physical education. Explain the responsible factors for driving dark period of physical education. Discuss the importance of renaissance in the development of physical education. 	<p>Unit IV: History of Physical Education (10 hrs)</p> <p>4.1 Ancient period- Greece, Rome, Egypt, China and India</p> <p>4.2 Medieval and renaissance period</p> <p>4.3 Modern period</p> <ul style="list-style-type: none"> Western countries-Germany, USA, Sweden, Denmark Asian countries- Korea, India, China <p>4.4 Promotion of games and sports at international level</p>

<ul style="list-style-type: none"> • Explain the roles of some countries in the development of physical education. • Discuss the development of physical education and sports in Nepal. 	<ul style="list-style-type: none"> • Olympics • Asian Games • South Asian Games (SAG) <p>4.6 Development of physical education and sports in Nepal from ancient to modern period</p> <p>4.7 Role of National Sport Council in the development of sports in Nepal</p> <p>4.8 Role of Faculty of Education and Ministry of Sports in promoting physical education in Nepal</p>
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4. Methodology and Techniques

This course is totally a theoretical one in nature. Lecture, discussion, question-answer, observation, self-study, participation, presentation and library visit techniques are generally used in this course. The specific instructional techniques are as follows:

Unit	Suggested Instructional Techniques and Activities
I	<ul style="list-style-type: none"> • Lecture, discussion, question-answer, observation, self-study, and library visit
II	<ul style="list-style-type: none"> • Psychological Foundation: Lecture and Discussion Method • Biological & Physiological Foundation: Lecture and Presentation • Psychological Foundation: Lecture, question answer and discussion • Sociological Foundation: Lecture and Discussion
III	<ul style="list-style-type: none"> • Lecture, Discussion, observation, participation and presentation methods will be used to teach this unit.
IV	<ul style="list-style-type: none"> • Lecture, discussion, question-answer, self-study, presentation and library visit

5. Evaluation Scheme

Students will be assessed both through internal and external evaluation systems. Formative evaluation is used in internal evaluation whereas in external evaluation a theoretical examination will be conducted at the end of the semester by the Office of the Controller of Examinations of FWU. The full marks composition of both internal and external evaluation will be 40% and 60% respectively. The internal and external evaluation consists of the following tasks:

5.1 Internal Evaluation 40%

Activity	Marks
Attendance	5 marks
Participation in Class Activities	5 marks
Reflection Notes and Class Presentation	5 + 5=10 marks
Term Paper/Essay/Project Works and Interview	5 + 5= 10marks
Mid-term Exam	10 marks

Note: Reflective notes on 2 to 4 questions given by the teacher at the end of every unit and Presentation on any two questions among them. Logical essay/term paper/project on the topics chosen by students and approved by the teacher and interview.

5.2 External Evaluation (Final Examination) 60%

Types of questions	Total Questions to be asked	Number of questions to be answered and marks allotted	Total marks
Group A: Multiple-choice items	10 questions	10 x 1 mark	10
Group B: Short answer questions	6 with 2 'or' questions	6 x 5 marks	30
Group C: Long answer questions	2 with 1 'or' question	2 x 10 marks	20
Total			60

5. References

- Baruwal, H. B. (2065). *Historical development of physical education*. Pinnacle Publication. **(Unit IV)**
- Bucher, C. A. (1980). *Foundation of physical education*. St. Louis: C.V. Mosby Company. **(Unit I- IV)**
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