

# Course Syllabus: Nature Walk: National Parks and Ecological Conservation

Course Name	Nature Walk: National Parks and Ecological Conservation		
Number	123456	Language	English
Credit	1	In-class hours	18
Type	Elective	Exam/Assessment	Assessment
Prerequisites	Introduction to Design, Introduction to Landscape Architecture		
Are there courses entirely in English?	Yes		
person in charge	Peng Wanting	Outline reviewer	Shen Jie

## I. Course Positioning and Basic Requirements

### 1. Course Positioning

“Nature Walk: National Parks and Ecological Conservation” is an interdisciplinary course that integrates scientific research with education. It responds to the development needs of the ecological civilization era and supports the cultivation of future “digital-intelligent, green-oriented, and integrative” outstanding engineers. As part of the curriculum reform in Landscape Architecture, this course serves as a professional elective.

The course introduces key ideas and historical evolution in nature conservation, environmental protection, and sustainability, and also addresses frontier topics such as the United Nations Sustainable Development Goals (SDGs), biodiversity conservation, global warming and climate change, and carbon neutrality. Through lectures, invited talks by domestic and international experts, and guided discussions, students will be encouraged to critically examine these issues and propose solutions.

The course consists of four main components:

Part I: Introduction: This section outlines major ideas in nature conservation, environmental protection, and sustainability, along with a brief history of related social movements and current frontier topics.

Part II: International Perspectives: This section selects representative countries to examine global trends in nature conservation and green development, as well as China’s progress in ecological civilization and nature conservation. Countries such as China, the United States, France, Germany, and South Africa are discussed in terms of the evolution of ecological conservation philosophies and theories, the composition and characteristics of their protected-area systems, and the relationships between protected areas and surrounding communities. Representative national parks, state parks, and urban parks from each country are used as case studies, and discussions of

frontier topics are integrated throughout.

Part III: Frontier Issues and Technical Methods: This section focuses on key research directions such as: evaluating conservation effectiveness of protected areas, co-management mechanisms with local communities, and climate change response. Students will also learn practical technical methods — including species distribution modeling, climate scenario projection, ecological monitoring, and assessment—and explore the potential of emerging technologies such as artificial intelligence and big data in ecological conservation.

Part IV: Practical Applications: Course field trips will be organized for students to visit protected areas and conduct assignments, enabling them to apply course concepts in real-world settings. Students will present their learning outcomes through formats such as AI-based productions, video creation, and exhibition design.

The course integrates lectures, field investigations, in-class exercises, discussions, and assignments to deepen students' understanding of ecological conservation and green development. It aims to cultivate their ability to contribute to building an ecological civilization and prepares them for future work in territorial spatial ecological planning and design, urban biodiversity conservation, national parks and protected areas, and natural heritage planning and management.

As a professional elective, this course is open to second-year and above undergraduate students majoring in Landscape Architecture, Urban and Rural Planning, Urban Design, Historic Building Conservation, and Architecture.

## **2. Course Objectives**

This course aims to guide students in developing a deep understanding of, and the ability to apply, the core concepts and practical skills of ecological conservation and green development. It seeks to cultivate students' capacity for independent thinking and problem-solving. The specific objectives are as follows:

### **Objective 1:**

To develop a comprehensive understanding of the fundamental concepts, major schools of thought, and core principles of ecological conservation and green development, and to gain an in-depth knowledge of the classification systems and characteristics of nature reserves.

### **Objective 2:**

To become familiar with the latest research findings, practical cases, and development trends related to ecological conservation and green development in nature reserves both in China and internationally, and to grasp the frontier dynamics of ecological conservation at the global scale.

### **Objective 3:**

To master cutting-edge methods and techniques in ecological conservation and green development—including resource surveys, ecological assessment, biodiversity and Earth big-data acquisition and application, the use of artificial intelligence in ecological protection and green landscapes, and coordinated planning for conservation and development—and to apply this knowledge to practical problem-solving.

### **Objective 4:**

To understand the relationship between ecological conservation and sustainable development, and to learn how to achieve green-development goals while protecting the ecological environment, balancing the needs of conservation with those of economic and social development.

### **Objective 5:**

To strengthen practical skills by understanding the framework of nature-reserve planning, acquiring basic competencies in nature education and ecological experience design, independently completing practical tasks, and demonstrating the ability to address real-world challenges.

### 3. Graduation Requirement Indicators Supported by This Course

No.	Indicator	Description of Graduation Requirement Indicator
1	Indicator 1.1	Ability to apply mathematics, natural sciences, humanities, engineering fundamentals, disciplinary knowledge, and related knowledge to appropriately formulate and express landscape architecture engineering problems.
2	Indicator 2.3	Ability to apply fundamental principles to analyze influencing factors in the problem-solving process and to justify the rationality of proposed solutions.
3	Indicator 3.1	Mastery of the basic knowledge of landscape planning and design, as well as the fundamental theories and practical methodologies of landscape architecture planning and design.
4	Indicator 3.4	Ability to integrate and apply planning and design theories and methods, and to demonstrate design innovation capability.
5	Indicator 4.2	Familiarity with relevant knowledge of landscape architecture history, society, economy, policy, and culture.
6	Indicator 4.3	Mastery of the development trends and cutting-edge knowledge of landscape architecture in China and abroad.
7	Indicator 4.4	Ability to analyze and assess topics related to landscape architecture, and to propose feasible solution strategies.
8	Indicator 5.1	Ability to express planning and design intentions and outcomes through written language, oral presentations, models, images, media, or other forms of communication.
9	Indicator 6.1	Ability to integrate foundational theories, professional knowledge, and essential skills into practical applications through participation in internships and professional practice, thus forming basic professional competence.
10	Indicator 6.2	Ability to independently engage in landscape resource conservation, planning and design, and construction management during internships or practice, and to enhance understanding and capability for real engineering projects.
11	Indicator 7.1	Full awareness of the impact of landscape architecture as a discipline and profession on natural ecology, cultural heritage, the environment, and sustainable social development.
12	Indicator 7.2	Familiarity with relevant laws and regulations concerning landscape resource conservation and environmental protection.
13	Indicator 8.1	Possession of a professional view of nature grounded in “the benign existence of nature as the ultimate basis,” and a value orientation that respects and sustains natural and cultural heritage.
14	Indicator 8.2	A strong sense of professional mission for maintaining environmental sustainability, providing high-quality living environments for humans and other inhabitants, and serving as guardians of the landscape.
15	Indicator 8.4	Commitment to ideal professional pursuits.
16	Indicator 9.2	Ability to take on roles as an individual member, team participant, or leader in multidisciplinary teams, and to cultivate strong teamwork skills.
17	Indicator 10.2	Possession of an international perspective, innovative spirit, awareness of sustainability in environmental protection and

		cultural heritage conservation, and healthy interpersonal skills.
18	Indicator 10.3	Ability to use foreign languages to a competent degree.
19	Indicator 11.3	Basic management skills related to landscape resources, planning and design, construction, and subsequent use and maintenance.
20	Indicator 12.2	Possession of foundational knowledge for lifelong learning, mastery of self-directed learning methods, and understanding of pathways for expanding knowledge and capabilities.

#### 4. Correspondence between course objectives and graduation requirements

Objectives Graduation Requirements	Objective 1	Objective 2	Objective 3	Objective 4	Objective 5
Indicator 1.1	✓				
Indicator 2.3	✓	✓			
Indicator 3.1			✓	✓	✓
Indicator 3.4			✓	✓	✓
Indicator 4.2	✓	✓			
Indicator 4.3	✓	✓	✓	✓	
Indicator 4.4				✓	✓
Indicator 5.1				✓	✓
Indicator 6.1					✓
Indicator 6.2					✓
Indicator 7.1	✓	✓		✓	
Indicator 7.2	✓	✓		✓	
Indicator 8.1	✓	✓		✓	
Indicator 8.2	✓	✓		✓	
Indicator 8.4	✓	✓		✓	
Indicator 9.2				✓	✓
Indicator 10.2				✓	✓
Indicator 10.3		✓			✓
Indicator 11.3			✓	✓	✓
Indicator 12.2			✓	✓	✓

## II. Course Content, Teaching Requirements, Hour Allocation, and Teaching Methods

No.	Knowledge Unit	Sub-No.	Knowledge Point / Competency	Requirement	Supported Course Objectives	Teaching Methods	In-class Hours	Out-of-class Hours
1	Introduction	1	Introduction to ecological conservation; overview of major global schools of thought,	Understand	Course Objectives 1 & 2	Lecture 80%, MOOC self-study 20%	2	0

			theoretical foundations, and key issues in conservation.					
2	Thematic Lectures	2	Conservation and green development in U.S. protected areas	Understand	Course Objectives 2, 3 & 4	Lecture 50%, Guest lecture 20%, MOOC self-study 30%	8	0
		3	Conservation and green development in German and French protected areas	Understand				
		4	Conservation and green development in developing countries	Understand				
		5	China's ecological civilization development and conservation process	Understand				
3	Frontier Issues & Technical Methods	6	Framework and technical methods for evaluating conservation effectiveness in national parks and protected	Master	Course Objectives 2, 3, 4 & 5	Lecture 50%, Discussion 20%, MOOC self-study 30%	4	0

			areas					
		7	Community co-management and concession mechanisms in national parks and protected areas	Master				
		8	Carbon-cycle accounting methods for national parks; multi-scenario climate adaptation planning methods	Master				
4	Practical Application	9	Planning and management practice ( field trip to urban greenspace or protected areas)	Familiarize	Course Objectives 2, 3, 4 & 5	Lecture 10%, Field teaching 50%, Assignment presentation 40%	4	0
		10	Practical application	Familiarize				

### III. Moral Education (“Lide Shuren”) in This Course

Aligned with China’s national strategy of ecological civilization, this course is committed to cultivating planning professionals with a strong sense of social responsibility. Students will apply the knowledge and skills acquired in this course to contribute meaningfully to the conservation of China’s landscapes, natural resources, and ecological environment. Through teaching activities that integrate knowledge transmission, skill development, and moral cultivation, the course fully embodies the core values of “Lide Shuren”—educating people with integrity and virtue.

The course aims to nurture talents in ecological conservation and green development who possess a strong sense of responsibility and mission, as well as comprehensive professional competencies, thereby contributing to the construction of a Beautiful China and promoting global sustainable development.

No.	Knowledge Unit	Integration Points for Ideological and Moral Education	Expected Educational Outcomes
1	Introduction	Major global schools of thought, history, and key issues in ecological conservation	Community of Shared Future for Mankind; Spirit of innovation and creativity
2	Thematic Lectures	China’s ecological civilization process; ecological conservation and green development in protected areas around the world	Ecological civilization; Contribution of the discipline to ecological protection and green development; Contribution to Beautiful China and carbon neutrality; Community of Shared Future for Mankind
3			
4			
5			
6	Frontier Issues & Technical Methods	Focus on frontier issues such as effectiveness evaluation, climate change, and community co-management; understanding the relationship between ecological conservation and sustainable development; mastering emerging technologies such as AI and big data	Spirit of innovation and creativity; Contribution of the discipline to Beautiful China and carbon neutrality; Community of Shared Future for Mankind; Contribution of the discipline to ecological civilization and sustainable development
7			
8	Practical Application	Mastery of basic competencies in nature education and ecological experience design; practice in planning and management of urban fringe and protected areas	Connections of the discipline to rural revitalization, ecological civilization, and Yangtze River conservation strategies

## IV. Assessment Methods, Grading, and Retake Requirements

Based on the course requirements, content structure, and teaching arrangements, the assessment for this course consists of both continuous assessment and a final assignment-based examination. Continuous assessment includes attendance and five topic-based assignments, accounting for 40% of the total grade. The final examination is primarily assignment-based, accounting for 60%. Students who fail to achieve a passing overall grade are required to retake the course with the next cohort. The specific assessment methods are outlined in the table below:

Assessment Method	Weight	Supported Course Objectives	Remarks
Attendance	10%	Course Objective 1	Evaluates students' attendance performance
		Course Objective 2	—
Continuous Assessment	30%	Course Objective 2	Includes regular assignments, class performance, self-directed learning, topic discussions, SPOC modules / quizzes, etc.
		Course Objective 3	—
		Course Objective 4	—
Final Assignment-Based Examination	60%	Course Objective 1	Includes final presentation (30%) and course paper (30%)
		Course Objective 2	—
		Course Objective 4	—
		Course Objective 5	—

## V. Evaluation Criteria

### 1. Attendance Evaluation Criteria

Supported Course Objectives	Evaluation Details & Scores	100–90	89–80	79–70	69–60	59–0
1, 2	Attendance performance	100% attendance	1 absence	2 absences	3 absences	4 or more absences

### 2. Continuous Assignment Evaluation Criteria

Supported Course Objectives	Evaluation Details & Scores	100–90	89–80	79–70	69–60	59–0
Course Objectives 2, 3, 4	Attendance and performance in assignments, MOOC learning, discussions, and analytical clarity	Full attendance; MOOC self-study time exceeds 90% of required total; MOOC quizzes submitted on time with accuracy above 90%; highly active in discussions; clear and well-structured	1 absence; MOOC self-study time $\geq$ 80% of total; MOOC quizzes submitted on time with accuracy $\geq$ 80%; active in discussions; problem analysis relatively clear;	2 absences; MOOC self-study time $\geq$ 70%; MOOC quizzes mostly submitted on time with accuracy $\geq$ 70%; fairly active in discussions; problem analysis generally clear;	3 absences; MOOC self-study time $\geq$ 60%; MOOC quizzes occasionally late but submitted; accuracy $\geq$ 60%; average discussion participation; problem analysis basically clear;	4 or more absences; insufficient MOOC learning time or no participation; quizzes not submitted or severely overdue with accuracy below passing level; inactive in discussions; unclear problem

		ed problem analysis; coherent and well-reasoned explanations	explanations relatively coherent	explanations generally coherent	explanations reasonably understandable	analysis; explanations unclear
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### 3. Final Presentation and Course Paper Evaluation Criteria

Supported Course Objectives	Evaluation Details & Scores	100–90	89–80	79–70	69–60	59–0
4, 5	Final presentation and written paper	Content is complete, highly logical, conclusions are innovative, meets academic standards	Content relatively complete, strong logical structure, conclusions clear and complete, academically compliant	Content generally complete, logically structured, conclusions clear but incomplete, mostly meets academic standards	Content incomplete, weak logical structure, conclusions generally identifiable	Content incomplete, poor logical structure, incomplete report, conclusions unclear

## VI. Textbooks and main reference books

Title of Textbook / Reference	Author(s)	Publisher	Edition	ISBN	Description	Category
<i>Nature Conservation</i>	Li Shuangcheng	China Environmental Press	1st Edition	9787511117564	Classic textbook for environmental disciplines in higher education	Textbook
<i>Introduction to Ecological Conservation</i>	Kong Fande	China Environmental Science Press	2nd Edition	9787511103000	Textbook series for environmental disciplines in higher education	Textbook
<i>Introduction to Nature Conservation</i>	Edited by Huang Baiyan	Wuhan: Huazhong University of Science and Technology Press	1st Edition	9787560941332	General education textbook series for universities	Major Reference
<i>Guidelines for Applying IUCN Protected Area Management Categories</i>	Zhu Chunquan, Ouyang Zhiyun, et al.	China Forestry Publishing House	1st Edition	978-7-5038-8388-0	Translated work	Major Reference
<i>Recreation Design in National Parks</i>	Translated by Wu Chengzhao et al.	China Architecture & Building Press	1st Edition	9787112056149	Translated work	Major Reference

<i>Research Series on National Parks and Protected Areas</i>	Yang Rui, Zhao Zhicong, Zhuang Youbo	China Architecture & Building Press	1st Edition	978-7-112-24530-7	National "13th Five-Year Plan" Key Publishing Project	Major Reference
<i>Wildland Recreation: Ecology and Management</i>	William E. Hammitt	Science Press	3rd Edition	978-7-03-058735-0	Translated work; major textbook used in U.S. universities	Major Reference