Curriculum Ideological and Political Teaching Reform Based on the Concept of "Human Thought Design"—Take the Course of "Introduction to Human Habitat Environment Science" as an Example

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Abstract: Ideological and political education in courses plays a crucial role in cultivating college students' worldview, outlook on life, and values. The teaching of professional courses serves as the primary foundation for ideological and political education in courses. In the process of imparting professional knowledge, integrating professional ethical standards and moral education into the curriculum is an important aspect of ideological and political education. Starting from the perspective of users and designing for the people involved is the sole purpose of designing architecture. Taking "humanized design thinking" as the concept, exploring effective paths for ideological and political education reform in the course "Introduction to Human Habitat Environment Science" is of great significance for cultivating future practitioners in the construction industry with patriotism, professional ethics, scientific spirit, and craftsmanship.

Keywords: Ideological and Political Education; Humanized Design; Teaching Design

1. Research Background

In 2017, the Ministry of Education issued the "Outline for Enhancing the Quality of Ideological and Political Work in Universities," deploying nationwide efforts to promote classroom teaching reforms aimed at ideological and political education through curriculum development. In 2020, the Ministry of Education issued the "Guidelines for the Construction of Ideological and Political Education in Higher Education Institutions," explicitly stating the comprehensive promotion of ideological and political education in all universities and disciplines nationwide.^[1]

The theory and practice of human habitat environment science is one of the landmark achievements of China's 40 years of reform and opening up, inheriting and expanding the excellent traditional ecological culture of the Chinese nation living in harmony with nature. At the same time, human habitat environment science, as a crystallization of the excellent traditional culture of the Chinese nation, is imbued with strong patriotism and cultural confidence, containing rich ideological and political elements and resources. Integrating these ideological and political elements and resources into various aspects of education and teaching can help students develop correct values.^[2]

2. Course Characteristics and Teaching Pain Points

2.1 Course Introduction

The Introduction to Human Habitat Environment Science course is a compulsory general education platform for freshmen majoring in urban and rural planning and architecture. The recommended textbook is "Introduction to Human Habitat Environment Science." This book was authored by Academician Wu Liangyong based on years of theoretical reflection and construction practice, divided into two parts. The first part, "Interpretation of Human Habitat Environment Science," elaborates on the origin of human habitat environment science, the composition of human habitat environments, the basic concepts of human habitat environment construction, the methodology of human habitat environments.^[3] The second

part, "Introduction to Dosadias Human Settlements Studies," is a translation of the human settlements studies of Greek scholar Dosadias, guided by Academician Wu Liangyong.

2.2 Course Tasks

Human habitat environment science is a new discipline centered on the harmony between humans and nature, with residential environments as its research object, continuing, renewing, and deepening the experience and principles of harmonious coexistence between humans and nature. With people as the core and the essence of the people-oriented approach, the course is essential cultural knowledge and cultural cultivation for future practitioners in the construction industry.

The course mainly covers the reasons and processes of the development of human habitat environment science, the meaning of human habitat environment science, the basic framework, and methods of human habitat environment science research. Through the study of this course, students will understand the basic content, purpose, and structural framework of human habitat environment science, be familiar with its historical evolution and development changes, and master the basic principles and methods of human habitat environment science. It aims to cultivate students' observation, analysis, and speculative abilities toward the surrounding environment, enabling students to fully understand the important relationship between urban, residential buildings, and the surrounding environment, establish a preliminary knowledge base for harmonious coexistence between humans and nature, and improve students' cognitive level.^[4]

2.3 Course Objectives

The course objectives mainly include ideological and political education objectives and knowledge and ability objectives. Ideological and political education objectives: Establish a cognitive foundation for the harmonious coexistence between humans and nature and awareness of the community of human destiny. Knowledge and ability objectives: (1) Understand the basic content, purpose, and structural framework of human habitat environment science, be familiar with its historical evolution and development changes, and master the basic principles and methods of human habitat environment science; (2) Cultivate students' understanding of natural ecology, urban environment, and architectural space, enabling them to use the concepts of ecological civilization and sustainable development to understand urban and rural development and architectural design.^[5]

2.4 Teaching Pain Points

Human habitat environment science is a science that focuses on the relationship between humans and the environment in human gatherings (including rural areas, towns, cities, etc.). It has a vast research framework, strong theoretical nature, and students studying this course not only need basic knowledge of architecture but also need to understand background knowledge in sociology, philosophy, economics, management, etc., which poses a significant challenge for freshmen students.

Human habitat environment science is an open discipline system, a discipline group that, together with economics, sociology, geography, and environmental sciences, constitutes an open discipline system of human habitat environment science. The basic research framework of human habitat environment science is vast, always in a dynamic process, and is development-oriented. Its integration and development cannot be separated from the use of the results of various related disciplines. Human habitat environment science is highly theoretical, containing a large amount of philosophical thinking, emphasizing the study of philosophy and the training of thinking methods.

3. Approach to Course Ideological and Political Education Construction with the Concept of "Humanized Design"

In 1990, Mr. Wu Liangyong proposed "Human Habitat Science," emphasizing the core idea of human-centric construction of living environments. Putting people at the center and prioritizing the interests of the people are the core content of human habitat science. "Humanized design thinking" means designing everything from the perspective of users, designing for the people who will use it. Therefore, exploring effective reform paths for ideological and political education in the Introduction to Human Habitat Environment Science course with the concept of "humanized design thinking" is of great significance for cultivating the patriotism, professional ethics, scientific spirit, and craftsmanship of

future practitioners in the construction industry.

3.1 Core Concept of "Humanized Design Thinking"

The essence of architecture is to provide dwellings and spaces suitable for people's living and activities. Architectural design first satisfies the essential characteristics of human habitation and then seeks variations from various incidental characteristics. In this sense, design is for serving the people and should be people-oriented (Figure 1).

"Humanized design thinking" refers to the process of architectural design, based on people's habits, physiological structures, psychological conditions, and thinking modes, optimizing the performance of buildings while meeting the basic functional and performance requirements of the original design, so that users feel convenient and comfortable during use. It can be said that "humanized design thinking" is the respect for and satisfaction of people's psychological and physiological needs and spiritual pursuits in the process of architectural design, which embodies humanistic care in architectural design and respects human nature.



Figure 1: Humanistic Thought in Architectural Design Examples (Paimio Sanatorium and the Handrail of the Staircase) (Image Source: Industrial Design Club)

3.2 "Knowledge + Ability + Quality" Tripartite Teaching Method

Improving the urban and rural living environment is an active response to the people's growing need for a beautiful ecological environment. The science of living environments is increasingly in demand. How can we apply the methodologies of the introduction to living environment science into our designs? And how should future architectural practitioners contribute to the development of living environment science? These are key issues that should be addressed in the course.



Figure 2: Teaching Methods (Image Source: Self-drawn) (Left) Figure 3: Teaching Strategies (Image Source: Self-drawn) (Right)

In terms of teaching methods, students should be guided to focus on real-world problems, adopt a human-centered approach, integrate and innovate across disciplines, follow correct design ethics, and possess the qualities to identify, analyze, and solve problems[2,3]. Identifying problems involves focusing on real-world issues and resolving primary contradictions during architectural design; analyzing problems involves considering human needs with a human-centered approach; solving problems entails adopting the core methodology of living environment science: holism and considering issues from multiple perspectives. Ultimately, the goal is to achieve moral education objectives: adhere to design ethics, establish a cognitive foundation for harmonious coexistence between humans and nature, foster a

sense of a shared human destiny, and promote the spirit of science and craftsmanship(Figure 2).

3.3 "Cognitive + Affective + Behavioral" Teaching Strategies

Cognitive. Through lectures, students are helped to understand the origins, composition, basic concepts, and methodologies of living environment science. Research examples in living environment science are used to convey the importance of its construction and establish a sense of social responsibility in students. In-class activities like flipped classroom teaching stimulate students' critical thinking; group discussions encourage active reflection, expression of opinions and views; and small design assignments develop students' ability to transfer and transform knowledge(Figure 3).

Affective. Wu Liangyong is committed to "craftsmanship for the nation" and "planning for thousands of homes." People respect Wu Liangyong for his contributions to Chinese architectural education and admire his vision and sentiments: "A master becomes great by establishing himself in academia, taking joy in educating others, being steadfast in his ideals, and fighting for his beliefs." Sharing the story of Academician Wu Liangyong guides students to actively promote his spirit of national craftsmanship, enhancing their motivation to learn and adopt "planning for thousands of homes" as their mission(Figure 3).

Behavioral. By mastering the basic principles and methods of living environment science, students fully understand the important relationship between architecture and its surrounding environment, laying a preliminary knowledge foundation for harmonious coexistence between humans and nature. They fully recognize the impact of urban and rural planning practices and architectural design on environmental and social sustainable development(Figure 3).

4. Case Design Integrating Ideological and Political Elements

Chapter One: Focusing on Our Living Environment. This chapter introduces the basic concepts of the environment, its composition and classification, and the development of environmental problem research. Through major global environmental pollution events, students are inspired to pay attention to the human living environment and establish a strong consciousness for ecological and environmental protection(Figure 4).

Chapter Two: The Origin and Development of Human Settlement Environment Science. This chapter discusses the development history of human settlement environment science and the research history of related issues. By exploring excellent traditional cultures, it narrates the heritage and concepts of Chinese human settlement construction, enhancing students' cultural identity and confidence(Figure 4).

Chapter	Content	Class hour
One	Pay attention to our living environment	4
Two	The Origin and Development Overview of Sciences of Human Settlements	4
Three	Dossadias' Theory of Human Settlements	4
Four	Wu Liangyong's Theory of Human Settlements	4
Five	Cognition of urban Human Settlements	4
Six	Cognition of rural Human Settlements	4
Seven	Survey of Human Settlements	4
Eight	Case analysis of Human Settlements	4
Total		32

Figure 4: Content of Chapters in the Introduction to Living Environment Science (Image Source: Selfdrawn)

Chapter Three: The Dosadias Theory of Human Settlements. This chapter covers the basics and theoretical framework of human settlement science and Dosadias' contributions to it. Since the mid-1980s, we have actively absorbed the scientific aspects of Dosadias' theory, such as the use of multidisciplinary results, the application of basic principles, and the construction of academic frameworks. However, the post-war development of Third World cities, especially in Asia, presents new challenges that extend beyond the scope of "human settlement science." Using this as an example, students are guided to critically engage with Western academic thought from the perspective of China's national conditions,

embracing the essence and discarding the dross(Figure 4).

Chapter Four: Wu Liangyong's Theory of Human Settlement Environment. This chapter discusses the broader discipline of architecture, the basic meanings, construction principles, and components of the human settlement environment and human settlement environment science. "Teach thousands, plan for thousands of homes" reflects Academician Wu Liangyong's lifelong dedication to human settlements and his guiding principle for scientific investigation. Students are encouraged to aim high and act with determination, making "planning for thousands of homes" their guide and standard for action(Figure 4).

Chapter Five: Urban Human Settlement Environment Perception. Differences in urban human settlement environments, the concepts of livable and healthy cities are explored. By discussing domestic and international experiences and lessons in improving urban human settlement environments, students are guided to adopt a developmental perspective, recognizing that as cities evolve, old problems are solved and new ones emerge. The focus should always be on human-centered, humane design(Figure 4).

Chapter Six: Rural Human Settlement Environment Perception. This chapter covers the concept of rural human settlement environments and actions to improve and upgrade them. The shared ideal of human settlements in China is to have rich natural environments, harmonious and orderly societies, and a blending of human and natural elements that foster mutual enhancement. A beautiful living environment is not only the professional ideal of planners and designers but also a common goal for individuals, families, and society. Pursuing and creating beautiful living environments is both a right and a responsibility for everyone(Figure 4).

Chapter Seven: Human Settlement Environment Survey. The content and methods of human settlement environment surveys, and the writing of survey reports. Through surveys, students discover and solve practical problems encountered in daily life. Students are guided to view survey research as an essential skill for taking responsibility and fulfilling duties, making it a habit to approach design challenges with a problem-oriented, human-centered methodology(Figure 4).

Chapter Eight: Case Analysis in Human Settlement Environment Science. Cases such as the South-North Water Transfer Project resettlement villages and the renovation of Ju'er Hutong illustrate the importance of human-centered, humane design in architecture. For example, Ju'er Hutong was designed specifically for ordinary people, balancing Beijingers' preference for courtyard houses with comfort. This principle of Mr. Wu Liangyong's design for Ju'er Hutong guides students to maintain a humane approach in design, seeking welfare for the people(Figure 4).

5. Summary

Human settlement environment science represents the continuation, update, and deepening of the experiences and guidelines for harmonious coexistence between humans and nature. With the philosophy of "humane thought design," exploring the ideological and political education within the "Introduction to Human Settlement Environment Science" course contains rich ideological and political elements and resources. Integrating these elements and resources into all aspects of education and teaching guides students to establish correct design ethics and professional views. This is of great significance for cultivating future professionals in the architecture industry with a sense of duty to their country, professional ethics, scientific spirit, and craftsmanship.

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