

RQ03013: LANDSCAPE DESIGN AND CONSTRUCTION 2

1. General information

- Term: 6
- Credits: **Total credits 2 (Lecture: 1,5 – Practice: 0,5) - Self-study: 6 credits**
- Credit hours for teaching and learning activities: 30 teaching hours
 - Lectures: 17 teaching hours (1 sections/week, 3 teaching hours/section, 50 minutes/teaching hour. Total in 6 weeks)
 - Presentation: 5 teaching hours (2 sessions, 2-3 teaching hours/section, 50 minutes/teaching hour).
 - Practice in project: 8 teaching hours (1 section/week, 6 teaching hours/section, 50 minutes/teaching hour)
- Self-study: 90 teaching hours (50 minutes each)
- Department conducting the course:
 - Department: Horticulture & Landscape
 - Faculty: Agronomy
- Kind of the course:

Foundation <input type="checkbox"/>		Fundamental <input checked="" type="checkbox"/>		Option 1 <input type="checkbox"/>		Option 2 <input type="checkbox"/>	
Compulsory <input type="checkbox"/>	Elective <input type="checkbox"/>	Compulsory <input checked="" type="checkbox"/>	Elective <input type="checkbox"/>	Compulsory <input type="checkbox"/>	Elective <input type="checkbox"/>	Compulsory <input type="checkbox"/>	Elective <input type="checkbox"/>

- Prerequisite course(s): RQ02012: Landscape design and construction 1.

2. Course objectives and expected learning outcomes

* *Course objectives:*

- Knowledge: the course provides students with knowledge about the process of creating, managing and constructing a landscape project.
- Skills: the course trains student skill in analytical and problem-solving, using information technology for landscape design, and construction for landscape works.
- Attitude: the course gives student attitude of environmental protection and updates their knowledge when there are opportunities; determine their own capacity in conveying design ideas into landscape construction.

* *Course expected learning outcomes*

Notation	Course expected learning outcomes (CELOs) After successfully completing this course, students are able to	Program performance criteria (PPC)
Knowledge		
CELO 1	Apply landscape knowledge to the selection of ideas in landscape works that meet specific cultural, social, environmental and economic needs.	3.1
CELO 2	Apply knowledge of landscape design to landscape construction to meet design standards.	3.3
Skills		
CELO 3	Transfer of technical advances and new technologies into landscape management.	8.2

Attitude		
CELO 4	Ready to learn and open to different and creative ideas.	10.3

3. Course description

PNH03013. Landscape design and construction 2. (2TC: 1.5 - 0.5 - 6): The course includes contents of principles and techniques of manipulating mountains and hills; principles and techniques of construction of lighting systems in the garden landscape; applying feng shui theory to create garden landscape; landscape project estimates.

4. Teaching and learning & assessment methods

CELOs	CELO1	CELO2	CELO3	CELO4
Teaching and learning				
Lecturing	x	x		
Practice in project	x	x	x	x
Presentation	x	x	x	x
Assessment				
Rubric 1. Practice in project (30%)	x	x	x	x
Rubric 2. Presentation (20%)			x	
Rubric 3. Final exam (50%)	x			

5. Student tasks

- Attendance and attitude: students must attend all lectures in class and practice.
- Prepare materials before going class (self-study): students must read or prepare materials related to the lesson in class following guidance of teacher.
- Assignment: All students attending this module must complete an individual essay assignment. Under the guidance of lecturers, students proceed to select essay topics, develop and write essay reports.
- Presentation: All students participating in this module must participate in individual assignment presentations and discussion of related issues.
- Practice in project: All students participating in this module must work on projects in groups. Under the guidance of the lecturer, students proceed to write the outline, deploy and write the project implementation report.
- Final exam: All students taking this course must take the final exam.

6. Text books and references

* *Text Books/Lecture Notes:*

- Lecture on Construction and landscape creation from 2- 2021.
- Young and Chris (2017). Encyclopedia of landscape design : planning, building, and planting your perfect outdoor space.
- Hutchison, Edward (2021). Drawing for landscape architecture : sketch to screen to site.
- Design principles of public architectural works, Ta Truong Xuan, Construction Publishing House, 2012.

*** Additional references:**

- Pham Thi Bich Phuong, 肖国增, 陈中义. 越南顺化省安轩古典私家园林造园艺术研究[J]. 华中建筑, 2019, 000(012):103-106.
- Pham Thi Bich Phuong, 陈中义, 肖国增. 越南顺化园林与地域环境的协同表达[J]. 绿色科技, 2019, 000(021):1-3.
- Pham Thi Bich Phuong và Chen Zhongyi, 2020. Landscape art of Tuy Ly Vuong palace, Thua Thien Hue, Vietnam. Journal of Science Can Tho University. 56(6C): 271-279.
- Yi Mingmin, Pham Thi Bich Phuong, Chen Zhongyi, Xiao Guozeng, 2020. Research on historical and memorial landscape establishment of Dajiaochang in Nanjing city. Shanxi Architecture. 46(7):32-34.
- Pham Thi Bich Phuong, 2021. Actual situation of exploiting landscape trees at some locations in Hanoi city. Proceedings of the scientific conference in 2021, Faculty of Agronomy, Vietnam Academy of Agriculture. 44-50.

7. Course outline

Week	Content	Course expected learning outcomes
1	Chapter 1: Techniques for creating mountains and hills in the landscape	
	A/ Main contents: (2 hours) 1. Theories: (2 hours) 1.1. Non-structural construction techniques 1.2. Techniques for creating landscape hills 2. Practice: (0 hours)	CELO 1,2,3,4.
	B/ Self-study contents: (6 hours) <i>Overview of construction techniques for small landscape</i>	
2	Chapter 2: Lighting techniques in the landscape	
	A/ Main contents: (2 hours) 1. Theories: (2 hours) 2.1. His role shines in the landscape 2.2. Types of lighting in the landscape 2.3. Technical construction of lighting system 2. Practice: (0 hours)	CELO 1,2,3,4.
	B/ Self-study contents: (6 hours) <i>Basic knowledge of lighting and lighting</i>	
3	Chapter 3: Applying feng shui in creating landscapes	
	A/ Main contents: (4,5 hours) 1. Theories: (2 hours) 3.1. The concept and meaning of feng shui:	CELO1, 2,3,4,5.

	<p>3.2. The basic principles of feng shui: 3.2.3. <i>Eight trigrams</i></p> <p>3.3. Applying the principles of feng shui to the landscape: 3.4. Practice applying feng shui in the landscape</p> <p>2. Practice: (2.5 hours) - Project exercise 1: Choose a project topic and write an outline</p>	
	<p>B/ Self-study contents: (13,5 hours) General concept of applied feng shui</p>	
	<p>Chapter 4: Construction and creation of a roof garden</p>	
4	<p>A/ Main contents: (7 hours) 1. Theories: (2 hours) 4.1. Overview of the roof garden 4.2. Classification and characteristics of roof gardens: 4.3. Design, construction and maintenance of rooftop gardens 4.4. Choosing plants for the roof garden</p> <p>2. Practice: (5 hours) - Project exercise 2: Surveying the project and proposing the construction plan - Project exercise 3: Construct a landscape item and complete the as-built document.</p>	CELO 1,2,3,4
	<p>B/ Self-study contents: (21 hours) Types of roof gardens and features.</p>	
	<p>Chapter 5: Organizing the construction of landscape works</p>	
5	<p>A Main contents: (5 periods) 1. Theories: (2 hours) 5.1. The concept and role of construction organization 5.2. Models of construction progress 5.3. Construction organization methods 5.4. Planning progress and organizing construction</p> <p>2. Presentation : (3 hours) Group project report 1-3</p>	CELO 1,2,3,4
	<p>B/ Self-study contents: (15 hours) Methods of organizing the construction of landscape works</p>	
	<p>Chapter 6: Estimation of construction works</p>	
6	<p>A/ Main contents: (4 periods) 1. Theories: (2 hours) 6.1. The concept, role and content of the project cost estimate 6.2. Methods of determining project cost estimates</p>	CELO 1,2,3,4

	6.3. Method of determining construction cost 6.4. Project cost management 2. Presentation : (2 hours) Group project report 4-5	
	B/ Self-study contents: (12 hours) Methods of removing landscape works	
7	Final exam	CELO 1,2