COURSE SYLLABUS

WINDOWS APPLICATION DEVELOPMENT

Course code: 220086

1. General information

Course type		*Number of credits*	*Number of learning periods*
General □ Basic □ Specialized ☑		Theory: 02 Exercise: 00 Practice: 01	Theory: 30 Exercise: 00 Practice: 30
Compulsory □ Elective ☑			

*Learners***:**

Level	Bachelor
Discipline	Information Technology

Course requirements:

Prerequisites	Database	Course code: ……..
	Object-Oriented Programming	Course code: ……..
Parallels	N/A	Course code: ……..
Other requirements	N/A	

2. Learning resources:

Prescribed textbooks	[1] Phạm Minh Đương (2014). *Lập trình ứng dụng trên Windows*. Trường Đại học Trà Vinh.
Recommended textbooks	[1] Phạm Hữu Khang (2008). *C#*. NXB LĐXH.
Other learning materials	*Microsoft Visual Studio.Net, Microsoft Sql Server*

3. Course description

The course provides students basic knowledge on developing applications. The course also aims to train students skills to approach and conduct software development projects. Additionally, the course develops students' appropriate awareness and attitudes on job markets and interpersonal skills such as teamworks and communication.

4. Course learning outcomes (CLOs)

After finishing the course, students will be able to:

		Satisfy LOs of the program	Satisfy LOs of the ABET
❖ *Topic 1: Disciplinary Knowledge and Reasoning*			**B.1.1**
L1.	Apply basic knowledge of C# and object-oriented programing methods to deal with specific problems.	1.3.4	**B.1.2** **B.1.3**
L2.	Use .NET Framework tools to develop pre-ordered applications	1.3.4 1.3.4	**B.1.4** **B.1.5** **B.1.6**
❖ *Topic 2: Personal and Professional Skills and Attributes*			
L3.	Identify and formulate problems	2.1.1	
L4.	Outline the models of specific problems.	2.3.1	
❖ *Topic 3: Interpersonal Skills: Teamwork and Communication*			
L5.	Organize teamworks	3.1.2	
L6.	Communicate in written form	3.2.3	
L7.	Present orally and negotiate	3.2.4	
❖ *Topic 4: Conceiving, Designing, Implementing and Operating Systems in The Enterprise, Societal and Environmental Context – The Innovation Process*			
L8.	Apply acquired knowledge to undertake project-based components	4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.3.1, 4.3.2, 4.3.3,	

			4.3.4, 4.4.1, 4.4.2	
L9.	Actualize the system based on the design		4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.4.1, 4.4.2	
L10.	Design system components		4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.4.1, 4.4.2	

5. Course content:

Course contents	CLOs	Number of learning periods		
		Theory	**Practice**	**Others**
Chapter 1. OVERVIEW OF .NET FRAMEWORK	**L1, L2**	**2**	**0**	
1.1. Introduction to .Net Framework				
1.2. History of .Net Framework				
1.3. Compiling and running programs in .Net Framework				
1.4. Components in .Net Framework				
1.5. Introduction to WPF (Windows Presentation Foundation)				
□ *Personal and Professional Skills and Attributes*	L3 (I) L4 (I)			

☐ *Interpersonal Skills: Teamwork and Communication*	L5 (I)			
☐ *CDIO in the enterprise, societal and environmental context*	L8 (I)			
Chapter 2. OVERVIEW OF C#	**L1, L2**	**4**	**5**	
2.1. Introduction to C#				
2.2. Input and output				
2.3. Variables and data Types				
2.4. Arrays				
2.5. Operators				
2.6. Control structures				
2.7. Functions and procedures				
2.8. Error handling				
☐ *Personal and Professional Skills and Attributes*	L3 (U) L6 (U) L7 (U)			
☐ *Interpersonal Skills: Teamwork and Communication*	L5 (U)			
☐ *CDIO in the enterprise, societal and environmental context*	L9 (T)			
Chapter 3. OBJECT-ORIENTED PROGRAMMING IN C#	**L1, L2**	**4**	**5**	
3.1. Classes and Objects				
3.2. Attributes				
3.3. Methods				
3.4. Inheritances				
☐ *Personal and Professional Skills and Attributes*	L3 (U) L6 (U)			

	L7 (U)			
□ *Interpersonal Skills: Teamwork and Communication*	L5 (U)			
□ *CDIO in the enterprise, societal and environmental context*	L8 (T)			
Chapter 4. WINDOWS FORM PROGRAMMING	**L1, L2**	**10**	**10**	
4.1. Basic controls				
4.2. Properties				
4.3. Events				
□ *Personal and Professional Skills and Attributes*	L3 (U) L6 (U) L7 (U)			
□ *Interpersonal Skills: Teamwork and Communication*	L5 (U)			
□ *CDIO in the enterprise, societal and environmental context*	L8 (U) L10 (T) L9 (T)			
Chapter 5. PROGRAMMING WITH DATABASES	**L1, L2**	**10**	**10**	
5.1. Overview of ADO.Net				
5.2. Direct connection				
5.3. Indirect connection				
5.4. Report creating				
□ *Personal and Professional Skills and Attributes*	L3 (U) L6 (U) L7 (U)			
□ *Interpersonal Skills: Teamwork and Communication*	L5 (U)			

□ *CDIO in the enterprise, societal and environmental context*	L8 (U) L10 (T) L9 (T)
Summary of skills in course level	
□ *Personal and Professional Skills and Attributes*	- Being capable of dealing with specific problems at level 3.0
□ *Interpersonal Skills: Teamwork and Communication*	- Being capable of working in groups at level 3.0.
□ *CDIO in the enterprise, societal and environmental context*	- Being capable of designing, deploying, and operating systems at level 3.0.

6. Teaching and learning methods

ID	Teaching method/technique		Description
M1.	Lecturing	☑	Lecturing
M2.	Questions – Answers	☐	
M3.	Group-based Learning	☑	Group discussion
M4.	Problem-based Learning	☐	
M5.	Project-based Learning	☑	Undertaking project-based components
M6.	Case studies	☐	
M7.	Role play	☐	
M8.	Demo	☑	Demonstrating in labs.
M9.	Simulations	☐	
M10.	Debate	☐	
M11.	Game	☐	
M12.	Brainstorming	☐	
M13.	Think-Pair-Share	☐	

7. Course assessment

ID	Assessment activity		Quantity	Weight	LOs assessed
T1.	Text-based midterm exam	☐			
T2.	Text-based final exam	☐			
T3.	Practice midterm exam	☑			L2, L3
T4.	Practice final exam	☑			L2, L3, L4, L5
T5.	Report	☐			
T6.	In-class exercises	☑			L2, L3, L4, L5
T7.	Homework assignments	☐			
T8.	Question – Answer	☐			
T9.	Term Project	☑			L1, L2, L3, L4, L5, L6, L7, L8
T10.	Final Exam	☐			
Formula for Overall score	In-progress score accounts for 50% Final score = (In-progress score + End-of-course score)/2				

8. Course requirements and expectations

8.1. Requirements on attendance

- Students are responsible for attending all classes. In case of absence due to force majeure circumstances, there must be sufficient and reasonable evidence.
- Students who do not attend more than 20% of the class sections, whether for reason or not, are deemed not to have completed the course and must re-enroll in the following semester.

8.2. Requirements and expectations on student behaviors

- Students must show their respects for teachers and other learners.
- Students must be on time. Students who are late more than five minutes will not be allowed to attend the class.
- Students should not make noises and interfere with others in the learning process.
- Students should not eat, chew gum, and use devices such as cell phones, music players during class hours.
- Laptops and tablets can only be used in class for the purpose of learning.

- Students who violate the above principles will be asked to leave the class and considered absent from the class.

8.3. Requirements on learning issues

Issues related to applying for score reservation, scoring complaints, scoring, exam disciplines are done according to the Learning Regulation of Tra Vinh University.

9. Tentative course instructor

Trịnh Quốc Việt

DEAN   **DEPARTMENT HEAD**   **LECTURER**

Trịnh Quốc Việt