

Course Number and Name	Advanced Programming
Lecturer	MSc. Luong Tran Hy Hien
Contact	hien.th.luong@nttu.edu.vn
Office Hour	48

1. Learning Outcomes to be assessed/ Chuẩn đầu ra được đánh giá:

LO.1	Interpret the basic principles of programming Articulate the Object-Oriented Programming concepts.
LO.2	Identify the commonly used operations involving file systems and regular expressions.
LO.3	Implement database and GUI applications.
LO.4	Implement Machine Learning algorithms.

2. Summary of Assessment/ Tóm tắt phương pháp đánh giá

No.	Assessment	LO	Assessment Description	Percentage to Final Grade (%)
A1	Install tool for Development	LO1	Debug and run program. Install new package plugin	10%
A2	Basic OOP	LO1	OOP assignment with file	10%
A3	UI with Tkinter	LO2	Define layout and control from description	10%
A4	Visualization	LO3	Base on example to analyze and visualize data	20%
A5	Mini application	LO4	Design and Development application (Win or Web) for (Offline or Online) to manage work include CRUD	50%

3. Description of Assessment/ Mô tả đánh giá

A1. Install tool for Development



Task: Install Python, Visual Studio Code, PyCharm Community, packages,...

Date: Week 1 – Week 2

Grading:

F	D	С	В	A
<4.0	4.0 – 5.4	5.5-6.9	7.0-8.4	8.5-10
1 6	2 2 6	2 2 6	2 6	2 6
1 software	2-3 software	2-3 software	3 software	3 software
		1 tools online	2 tools online	more 3 tools online

A2. Basic OOP

Task: Practice with Statement Conditional, Programming with File, OOP Class

Date: Week 3 to Week 5

Grading: 10

Grading	(%)	D	С	В	A
Criteria		10.71			0.7.10
		4.0 - 5.4	5.5 - 6.9	7.0-8.4	8.5-10
Criteria 1:	40%	More 2 warning	1-2 warning	1 – 2 warrning	No warning
Build code		More 2 error	1 error systax	No error	No error
Criteria 2:	30%	< 3 algorithm and	3 algorithm and	3 algorithm and	More 4 algorithm
Coding Logic		duplicate variable	duplicate variable	clearn variable	and clearn variable
Criteria 3:	30%	Comment variable	Comment function	Comment	Comment code and
Style Coding				function (in – out)	function (in – out)

A3. UI with Tkinter

Task: Practice with UI Control in Tkinter

Date: Week 6 to Week 7

Grading: 10

Grading	(%)	D	С	В	A
Criteria					
		4.0 - 5.4	5.5 - 6.9	7.0-8.4	8.5-10

Criteria 1:	20%	More 2 warning	1 – 2 warning	1 – 2 warrning	No warning
Build code		More 2 error	1 error systax	No error	No error
Criteria 2:	10%	< 3 algorithm and	3 algorithm and	3 algorithm and	More 4 algorithm
Coding Logic		duplicate variable	duplicate variable	clearn variable	and clearn variable
Criteria 3:	10%	Comment variable	Comment function	Comment	Comment code and
Style Coding				function (in – out)	function (in – out)
Criteria 4:	30%	< 3 control	Only 3 - 5 control	6 - 8 control	More 9 control
Total Control					
Criteria 5:	30%	< 2 event	Only 2 - 4 event	5 - 6 event	More 7 event
Event Control					

A4. Visualization

Task: Base on given example to analyze and visualize data

Date: Week 8 to Week 10

Grading: 10

Grading	(%)	D	С	В	A
Criteria		4.0 – 5.4	5.5 - 6.9	7.0-8.4	8.5-10
Criteria 1: Build code	30%	More 2 warning	1 – 2 warning	1 – 2 warrning	No warning
		More 2 error	1 error systax	No error	No error
Criteria 2:	20%	Comment variable	Comment function	Comment	Comment code and
Style Coding				function (in – out)	function (in – out)
Criteria 3: Total Feature	50%	2 charts	3 charts	5 charts	8 charts

A5. Mini Application

Task: Winform Application or Webform/API Application

Date: Week 11 to Week 12

Grading: 10

Grading	(%)	D	С	В	A
Criteria		4.0 – 5.4	5.5 - 6.9	7.0-8.4	8.5-10



Criteria 1:	20%	Submit Doc	Submit Doc +	Submit Doc	Submit Doc (WBS,
Report			Video	(WBS, Infor) +	Infor) + Slide +
document				Video	Video
G :: 2	200/	1.1	1.1	1.1	NT 1
Criteria 2:	30%	1 bugs	1 bugs	1 bugs	No bugs
Demo and QA		1 Question	2 Questoin	3 Question	3 Question
Criteria 3:	50%	4 features	8 features	12 features	15 features
Total Feature					



Checklist for verification	Checked by the lecturer	Checked by the verifier	Comment
The learning outcomes are fully listed and correct as the syllabus.			
Chuẩn đầu ra được liệt kê và đúng như đề cương chi tiết.			
The summary of the assessment is clear.			
Tóm tắt phương pháp đánh giá rõ ràng.			
The assessment follows the regulations.			
Phương pháp đánh giá tuân thủ quy định			
The assessment is fit to the learning outcomes.			
Phương pháp đánh giá phù hợp cho chuẩn đầu ra.			
The tasks for the student are fully described.			
Nhiệm vụ giao cho sinh viên được mô tả chi tiết.			
Grading is described.			
Thang điểm được mô tả.			
Signed by the lecturer: Name:			Date:
Signed by the verifier: Name:			Date:



Instruction on using the form

- 1. The purposes of the assessment brief are:
- to provide the students with detailed information on the assessment (what task they are aksed to to, how should they do it, how their work will be graded) so that they could be well-prepared;
- to be a quality tool that assures the assessment aligned to the learning outcomes;
- 2. Requirements:
- The assessment brief should be verified/approved by the programme head/head of the Institute.
- The course taught by various lecturers should use the same assessment brief.
- The assessment brief should be given to the students in the first week of the course.
- 3. Language used:
- Eitheir Vietnamese or English could be used to fill in the form. It is encouraged that both the languages are used for courses in Year 1 and Year 2 while only English is used for courses in Year 3 and later.
- 4. Filling the form:
- Course number and name: the same as in the syllabus;
- Lecturer: the full name of the teaching staff;
- Contact: email address or telephone number of the teaching staff that the students can use to contact;
- Office hours: when and where in the campus that the students can talk face-to-face to the teaching staff;
- Learning outcomes: the same as in the syllabus;
- Summary of Assessment: a summary of the assessing tasks, how they will be graded and counted toward the final course grade.
- Description of Assessment: a detailed description of each assessment used in the course, describing what task/work the students have to do, when the task/work is due, and how it will be graded. Please be specific as much as possible about what is expected from the students' work. While describing the grading, except for assessment such as multiple-choice quiz or solving math problems, please use grading rubrics. For the guidelines on rubrics, the lecturer can refer to Quy định về đảm bảo chất lượng công tác kiểm tra đánh giá kết quả học tập của người học 761/QĐ-NTT (in Vietnamese) or the book by Walvoord and Anderson, tittled "Effective Grading: A Tool for Learning and Assessment in College".