ZPRG C1202: Programming 2

Module Title:	Programming 2

Credits:	5

NFQ Level:	6

Module Delivered In	8 programme(s)

Teaching & Learning Strategies:	Combination of lectures and practical laboratory sessions. Lectures will take the form of traditional theory and workshop activities. Workshop activities entail interaction with students whilst building programs from scratch using data projector facilities. Laboratory sessions take the form of formative assessment sheets with individual interaction with students. There is a strong emphasis on writing code from scratch live in class on each new concept.

Module Aim:	To provide the student with: 1. the problem solving skills necessary for programming 2. the basic concepts of programming. 3. the capability to develop complete programs

Learning Outcomes	
On successful completion of this module the learner should be able to:	
LO1	Create programs to implement strings;
LO2	Create programs to implement arrays;
LO3	Comprehend and implement in programs, object-oriented programming concepts such as abstraction, encapsulation, inheritance and polymorphism;

Pre-requisite learning
Module Recommendations *This is prior learning (or a practical skill) that is recommended before enrolment in this module.*
No recommendations listed
Incompatible Modules *These are modules which have learning outcomes that are too similar to the learning outcomes of this module.*
No incompatible modules listed
Co-requisite Modules
No Co-requisite modules listed
Requirements *This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed.*
No requirements listed

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Module Content & Assessment

Indicative Content
Methods Methods, parameter passing, return types, arguments, parameters, call by value, call by reference.
Strings String manipulation, string classes and methods
Arrays Concepts, declarations, creation, sorting and searching arrays, multidimensional arrays
Objects Classes, objects, methods, instance & local variables, scope, method parameters & return types, pass by value parameters, reference variables, access modifiers, object creation, object initialisation & constructors, inheritance, super keyword, constructors.

Assessment Breakdown	%
Continuous Assessment	70.00%
End of Module Formal Examination	30.00%

Continuous Assessment

Assessment Type	*Assessment Description*	*Outcome addressed*	*% of total*	*Assessment Date*
Other	Lab 1: The student will be assessed on their ability to write a program that utilizes strings.	1	20.00	Week 6
Other	Lab 2: The student will be assessed on their ability to write a program that utilizes arrays	1,2	20.00	Week 9
Other	Written Assessment on Arrays of Objects & Methods	2,3	20.00	Week 12
Performance Evaluation	Active participation in the Lab	1,2,3	10.00	n/a

No Project

No Practical

End of Module Formal Examination

Assessment Type	*Assessment Description*	*Outcome addressed*	*% of total*	*Assessment Date*
Formal Exam	Written exam assessing knowledge of concepts covered throughout semester.	1,2,3	30.00	End-of-Semester

SETU Carlow Campus reserves the right to alter the nature and timings of assessment

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Module Workload

Workload: Full Time		
Workload Type	*Frequency*	*Average Weekly Learner Workload*
Lecture	12 Weeks per Stage	2.00
Laboratory	12 Weeks per Stage	3.00
Tutorial	12 Weeks per Stage	1.00
Estimated Learner Hours	15 Weeks per Stage	3.53
	Total Hours	125.00

Module Delivered In

Programme Code	Programme	Semester	Delivery
CW_KWCCD_B	Bachelor of Science (Honours) in Creative Computing and Digital Innovation	2	Mandatory
CW_KCCYB_B	Bachelor of Science (Honours) in Cyber Crime and IT Security	2	Mandatory
CW_KCCIT_B	Bachelor of Science (Honours) in Information Technology Management	2	Mandatory
CW_KCSOF_B	Bachelor of Science (Honours) in Software Development	2	Mandatory
CW_KCCYB_D	Bachelor of Science in Cybercrime and IT Security	2	Mandatory
CW_KCCSY_D	Bachelor of Science in Information Technology Management	2	Mandatory
CW_KCSOF_D	Bachelor of Science in Software Development	2	Mandatory
CW_KCCOM_C	Higher Certificate in Science in Computing Programming	2	Mandatory