

University of Halabja
Directorate of Quality Assurance



SUBJECT OUTLINE

Academic Year: 2023-2024

1. Information on the Programme

Higher education institution	University of Halabja
College	College of Science
Department	Computer
Field of study	
Cycle of study ¹	First Cycle
Specialization/ Study program	N/A
Form of education	Full time

2. Information on the Discipline

Discipline Name	Fundamentals of Programming	Discipline Code
ECTS	8	Language	English
Lecturer (Theory)	Peshraw A. Abdalla	Home page	https://tqa.uoh.edu.iq/uoh/profile/peshraw.abdalla@uoh.edu.iq/
Moodle Course link	https://moodle.uoh.edu.iq/course/view.php?id=310	Google Scholar	https://scholar.google.com/citations?user=hDSB67IAAAAJ&hl=en&oi=a0
E-mail	peshraw.abdalla@uoh.edu.iq	Tel	
Practical/Seminar / laboratory/ project Lecturer		Home page	
Moodle Course Link		Google Scholar	
E-mail		Tel	
Study Year	1	Semester	1 st
Assessment type ²	Exam	Discipline status	
Content ³	FD	Mandatory ⁴	MD

3. Prerequisites (if applicable)

Curriculum-related	None.
Skills-related	Mathematics, General Computer Skill

Decipline:	Subject Name			ECTS:	8.00											
Workload	215			Total Contact Hours:			69	Total Self Study Hours:			146					
No. of Weeks	1st Week	2nd Week	3rd Week	4th Week	5th Week	6th Week	7th Week	8th Week	9th Week	10th Week	11th Week	12th Week	13th Week	14th and 15th Week (Final)	Total	
Theoretical	3	3	3	3	3	3	3	3	3	3	3	3	3		39	
Practice	2	2	2	2	2	2	2	2	2	2	2	2	2		26	
Lab./Tutorial															0	
Fieldtrips/Visits															0	
Project					2					2					4	
Curriculum (articles+media+net)	5														5	
Curriculum (Books)		10	10		10	5		10		5	5				55	
Homework				2				5				5			12	
Quizzes		5				5			5		5				20	
Assignments			5		5			5			5				20	
Reports															0	
Presentation				3							3				6	
Midterm Exam (Thr. + Pr.)		7						7							14	
Final Exam (Thr. + Pr.)	3	3	3	3	3	3	3	3	2	3	3	3	3		14	14

5. Conditions (if applicable)

For the Theoretical	<p>Policy Statement on Extensions Extensions to the exams or project due dates will be given in the event of extenuating circumstances (such as illness, personal emergency, etc.) If you submit a brief written request to the lecturer as soon as possible after the circumstances arise. This request will be initialed (if approved) and will be returned to you. You must attach it to or cite it on the piece of work for which the extension was granted.</p> <p>Academic Dishonesty Academic dishonesty is regarded as a major violation of both the academic and professional principles of this community and may result in a failing grade or suspension. Academic dishonesty includes plagiarism, cheating (whether in or out of the classroom), and abuse or misuse of lab materials when such abuse or misuse can be related to course requirements.</p> <p>Class Attendance and Participation Policy Regular class attendance and participation is an essential component of this course and expected of all students. Class attendance and participation will be recorded. Please come to class having completed the assigned reading for the day and ready to discuss and unpack the material with your instructor and peers. Absences from class will be classified as "documented" or "undocumented." A documented absence is one where written documentation is submitted supporting the absence from class due to circumstances beyond the student's control. An undocumented absence is any other absence, including one that could qualify as documented if proper documentation were submitted. Multiple undocumented absences will impact your final course grade as follows:</p> <ul style="list-style-type: none">• Each student may take one (1) undocumented absence without penalty.• Each subsequent undocumented absence will cause the student's final course grade to be reduced by 2.5%.• Students with more than four (3) undocumented absences will automatically fail the course.• Students who arrive more than five (5) minutes late to class more than three (3) times during the semester will have each subsequent late arrival to class counted as a half undocumented absence for that class.
For the Practical/Lab. /Project	The same policy for the theory

6. Cumulated specific competences

Professional competencies	Problem-solving, Numerical solution, Modelling, Programming (Java), Error analysis
Transversal competences	Data analyzing, Problem-solving, Programming (Java), teamwork, and critical thinking.

7. Discipline objectives (based on the cumulated specific competencies)

General objective	General information will be posted on this website. Please check frequently for the latest announcements, lecture materials, assignments, and section notes. If you can't find what you need, post a technical question on the stream wall. Finally, if your issue is still not resolved or you have a general concern or question about the course, e-mail the instructor (me). I regret I cannot keep up with a high volume of direct e-mail so please use the other methods first.
Specific objectives (Learning Outcomes)	The aim of the course is to evaluate computer programming strategies/methods that could be required in software design.
	Introduction to the Course and Computer System, Introduction to Programming Languages Types, What is Java Programming, Language and First Java program with Anatomy of it, Variables and Data Types in java, Explain What are (Literals, Numeric Operators, Assignment Operators, and How to evaluate an Arithmetic Expression), Explain (Increment and Decrement Operators, Short Cut Operator, Numeric Type Conversion (Type Casting), and Software Development Process), Scanner in Java and their methods Project Presentation, Selections (Relational Operators, One-way if Statements, The Two-way if Statement, and Multi-Way if-else Statements), Selections (Nested if Statement in Java, Logical Operators, switch Statements, Conditional Operators, and Operator Precedence and Associativity), Loops (while Loop and do-while Loop), Loops (for Loop and nested for Loop), Final Term Exam (Theory & Practical)

8. Content

Theoretical- Number of hours	Teaching	Observation
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First week	Registration	3 hours
Second week	Introduction to the Course and Computer System, Introduction to Programming Languages Types	3 hours
Third week	What is Java Programming Language and First Java program with Anatomy of it.	3 hours
Fourth week	Variables and Data Types in java	3 hours
Fifth week	Explain What are (Literals, Numeric Operators, Assignment Operators, and How to evaluate an Arithmetic Expression)	3 hours
Sixth week	Explain (Increment and Decrement Operators, Short Cut Operator, Numeric Type Conversion (Type Casting), and Software Development Process)	3 hours
Seventh week	Scanner in Java and their methods	3 hours
Eighth week	Selections (Relational Operators, One-way if Statements, The Two-way if Statement, and Multi-Way if-else Statements)	3 hours
Ninth week	Selections (Nested if Statement in Java, Logical Operators, switch Statements, Conditional Operators, and Operator Precedence and Associativity)	3 hours
Tens week	Loops (while Loop and do-while Loop, for Loop and nested for Loop)	3 hours
Eleventh week	Java Methods	3 hours
Twelfth week	Arrays in Java	3 hours
Thirteenth week	Final Term Exam (Theory & Practical)	3 hours

Practical Works– Number of hours	Teaching	Observation
First week	Registration	2 hours

Second week	Introduction to the Course and Computer System Introduction to Programming Languages Types	2 hours
Third week	What is Java Programming Language and First Java program with Anatomy of it.	2 hours
Fourth week	Variables and Data Types in java	2 hours
Fifth week	Explain What are (Literals, Numeric Operators, Assignment Operators, and How to evaluate an Arithmetic Expression)	2 hours
Sixth week	Explain (Increment and Decrement Operators, Short Cut Operator, Numeric Type Conversion (Type Casting), and Software Development Process)	2 hours
Seventh week	Scanner in Java and their methods	2 hours
Eighth week	Selections (Relational Operators, One-way if Statements, The Two-way if Statement, and Multi-Way if-else Statements)	2 hours
Ninth week	Selections (Nested if Statement in Java, Logical Operators, switch Statements, Conditional Operators, and Operator Precedence and Associativity)	2 hours
Tenth week	Loops (while Loop and do-while Loop, for Loop and nested for Loop)	2 hours
Eleventh week	Java Methods	2 hours
Twelfth week	Arrays in Java	2 hours
Thirteenth week	Final Term Exam (Theory & Practical)	2 hours

9. Compulsory bibliography

1- **Introduction to Java Programming, Eleventh Edition** ©2018 Liang, Pearson Education, Ltd.

Lecture notes that will be delivered during the classes.

Optional bibliography

Arnold, Ken, James Gosling and David Holmes (2005). *The Java Programming Language*, 3rd edition. NJ: Prentice Hall.

Balagurusamy, E. (2007). *Programming with JAVA: A Primer*, 3rd edition. New Delhi: Tata McGraw-Hill.

Cadenhead, Rogers (2000). *Teach Yourself Java in 24 Hours*. New Delhi: SAMS Techmedia.

Deitel, Harvey and Paul Deitel (2003). *JAVA How to Program*, 5th edition. NJ: Prentice Hall.

Eckel, Bruce (2003). *Thinking in JAVA*, 3rd edition. NJ: Prentice Hall.

Flanagan, David (2002). *JAVA in Nutshell*. Sebastopol, CA: O'reilly Media.

Horstmann, Cay S. (2006). *Big JAVA*, 2nd edition. John Wiley.

Horstmann, Cay S. and Gary Cornell (2005). *Core JAVA 2*, 7th edition. NJ: Pearson Education.

10. Corroborating the discipline content with the expectations of the epistemic community representatives, of the professional associations and of the relevant employers in the corresponding field

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- 2.
- 3.
- 4.

11. Assessment

Type of Activity	Assessment criteria ²	Assessment type	Final grade Percentage
Final Exam	Written Exam	writing examination	50%
Practical/Laboratory	Practical	Lab exam	%25
Activity during semester	Oral Exam	Assignment(10), Seminars Quiz(10) & Projects(5)	%25
Minimum performance standards: Reading English well & Solving precalculus problems (Algebra) and having an introduction to Python basic commands			

Theoretical Lecturer	Asst. Lec. Peshraw A. Abdalla
Practice Lecturer	

Approved by the Curriculum Development Committee

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Head of the Department/ Dean	

Notes:

- 1 Cycle of studies - choose one of the three options: Bachelor «1», Master «2», Ph.D. «3»
- 2 (Exam: oral examination, written exam), and (Continuous Evaluation(CE), portfolio).
- 3 Discipline status (content) - for the Bachelor level, choose one of the options: FD (fundamental (General) discipline), PF (Preparatory Disciplines in the Field), SD (Specialty Disciplines), CD (Complementary Disciplines), DU (disciplines based on the university's options).
- 4 Discipline status (compulsoriness) - choose one of the options
 - MD (Mandatory discipline),
 - OD (optional discipline),
 - ED (Elective (Facultative) discipline).
- 5 Note: 1 ECTS = 27 hours workload; $ECTS = WL/27$, The first week is registration and introduction to the course.