ITE303 - Introduction to Programming

AUIS - Department of Information Technology

1 Course Information

Course ID ITE303

Course Title Introduction to Programming

Course Level Undergraduate

Course Design Required for all IT major/minor students

General elective for the rest

Number of Credits 3

Prerequisites ITE202, MTH235

Class Location B-F1-16

Meeting Time Sundays from 11:45 to 12:45

Tuesdays from 11:45 to 12:45 Thursdays from 11:45 to 12:45

2 Instructor Information

Instructor Yad Tahir, PhD

Email Address yad.tahir@auis.edu.krd

Office Location B-F2-15

Office Hours Thursdays from 8:45 to 11:45

3 Course Description

The purpose of this course is to introduce students to a disciplined approach to computer programming and problem solving, utilizing a high level programming language such as Java. Programming constructs such as sequential structure, selection structures, and repetition structures will be explained; through which students will have a grasp of Structured Programming notions as well. Variables, conditionals, loop structures: for/while/do-while, break/continue, one and multi-dimensional arrays, and basics of object oriented programming are covered. The practical part of the course focuses on programming and developing application programs that emphasis the concepts and the tools covered in the course.

4 Learning Outcomes

Upon successful completion of the course, students will be able to:

- Analyze problems and develop computer algorithms to solve novel problems.
- Define programming syntax, operators, expressions, and statements in order to write computer programs.
- Define and apply structured programming approaches in the chosen programming language syntax.
- Classify programming concepts, tools and best practices in terms of functional decomposition, top-down design, and bottom-up implementation strategies in the development of a problem solution, and implementation strategy.
- Build programs of increasing complexity and sophistication using user defined and builtin classes in Java.

5 Program Goals

- IT Core 1: Classify a problem and define computing requirements appropriate to its solution. [Knowledge],[Comprehension]
- IT Core 2: Apply knowledge of current techniques, skills, and tools necessary to support best computing practices within the Information Technology field. [Application]
- IT Core 4: Identify and recognize user needs in the selection, creation, evaluation and administration of computer-based systems. [Knowledge], [Analysis]

6 Materials and Access

Important material from the text and outside sources will be covered during our scheduled class meetings. Regular attendance and in-class note-taking are critical. This course requires a lot of time, effort and energy. Students are strongly encouraged to **do background reading before and after** each class to gain a better grasp of the material. Corresponding chapters for each lecture will be indicated. The primary references are:

Title Java How to Program – Late Objects, Global Edition, 10th Edition

Author(s) Harvey and Paul Deitel

Publisher Pearson, 2015 ISBN 1292019360

URL https://goo.gl/TFyzMa

Most of the material discussed in this course are well-explained in the title above. The reference is optional and can be replaced by any other online sources as long as the required topics are covered.

6.1 Slides

The PPT slides of this course are designed to assist the instructor **only**. They contain very limited information. Thus, relying merely on the slides is **NOT** sufficient to this course.

6.2 Required Software

Students are required to use the following software:

- Java Development Kit (JDK) 8 or higher.
- A text editor or Java IDE such as Eclipse or NetBeans

7 Grading Procedures

Assessment Type	$\mathbf{Grade}~\%$
Multiple Quizzes	10
Course Activities	5
2 Coursework Assignments (randomly chosen from out of 4)[a]	20
2 Periodic Exams (20% each)	40
Final Exam[b]	25
Total	100

[[]a] The selected coursework assignments are identical for the whole class. The scope randomness is **not** a per individual basis.

[[]b] The final exam for students with grade of 60+ is optional. They can choose to scale up their portfolio grade by 25%.

8 Grading Scale

Α (4.0)93 - 100 Superior A – (3.7)90 - 92B +87 - 89 Good (3.3)В (3.0)83 - 86 В 80 - 82 (2.7)C +77 - 79 (2.3)Satisfactory 73 - 76 \mathbf{C} (2.0)C -(1.7)70 - 72D +(1.3)67 - 69Unsatisfactory D (1.0)60 - 66F (0)Below 60 Fail

9 Attendance policy

Students are expected to attend all scheduled classes, arrive on time, and remain in class until dismissed. Tardiness and early departure are disruptive for students and the teacher and are unacceptable. Attendance will be taken at the beginning of each class.

As per university policy for classes that meet **three** times a week at the **eight** absence the student will be dismissed from the course with a grade of **F**. This cutoff is **absolute**. Per university policy as stated in the Academic Catalog, there are no excused absences. At the penultimate absence, the professor must notify students via e-mail that they are in danger of failing the course, with a copy to the Dean of Students.

10 Course Policies and Expectations

10.1 Classroom Conduct

In this course, a premium is placed on listening, discussion, and participation. These sorts of activities are only possible in a classroom where the person speaking is accorded respect. In short, we all should listen to the one person who is speaking.

Students are expected to behave in a collegial manner at all times when in class. Rude, disrespectful, aggressive, or threatening language or behavior will not be tolerated, and students displaying this will be removed from class. Attire should be appropriate for university students. Distracting behavior will not be tolerated, and students behaving in this way will be asked to leave the class. Examples of distracting behavior include:

- \bullet Using a cell phone in any way, shape or form
- Side conversations while others are speaking

- Speaking languages other than English
- Eating in class
- Any other behavior which a student is warned against during class

Professionalism and ethical behavior are expected from students. Your instructor is not an encyclopedia, nor this course encourages memorization. Instead, this course aims to develop a deep understanding of the material. Students conduct should be guided by the AUIS Honor Code and the AUIS Academic Catalogue (both available online at www.auis.edu.krd).

10.2 Office Hours

All students are invited to visit the instructor in his office, outside of class time. Apart from office hours, students can **make appointments** to visit at other times. Visits during office hours may be used to ask questions about the course material and content, clarify assignments or graded tests, explore ideas or topics related to or extending from the course material, and other course-related matters.

10.3 Makeup Exams and Extra Credit Policy

There are no makeup exams or extra credit available in this course.

10.4 Expectations of Student Time

AUIS adheres to the United States federal definition of a credit hour, as established by the US Department of Education. As a four credit-hour course, you are expected to attend four hours of direct instruction per week, and spend a minimum of eight hours out of class per week in homework, studying, preparing, and otherwise engaging with the material of this course.

10.5 Late or Missed Submissions

Time-management and the meeting of harsh deadlines are part of the soft skills expected of all AUIS graduates. As a result, students should submit all coursework by the published deadline.

A coursework submitted within **72 hours** after the deadline is considered as a **late submission**. Each student can have **two** late submissions. A **penalty of 25 percentage marks** will be applied to each late submission, i.e. the submitted coursework will be graded out of 75%. Any additional late submissions will be awarded a mark of **zero** and there will be no make-ups offered for missed assignments.

10.6 Grade Disputes

Any questions about a grade earned on an assignment or test should be brought to the instructor. All assignments may be discussed in details during office hours, and any disputes concerning grades may be addressed at that time. If there is a dispute concerning the final grade for the course, students have the right to make a formal grade appeal. Details on this process can be found in the Academic Catalog.

10.7 Moodle

This course has a Moodle site that will be used for announcements and posting extra material. Enrollment is **mandatory**. Please make sure that you have enrolled yourself into the right section. The **deadline** is January 31st and the enrollment code will be provided during the first class meeting.

11 Academic Integrity

Academic Integrity is honest behavior in a school setting. Academic integrity is more than the absence of cheating. It is necessary for students to truly learn new skills and develop as human beings. By struggling with her own studies and by making honest mistakes and discoveries, a student learns about the world and herself. Using another's work inappropriately prevents this intellectual and emotional growth.

Academic Dishonesty (i.e, "cheating") is any form of deceit, fraud, or misrepresentation in academic work. Academic dishonesty is the opposite of learning, because it prevents the student-writer from genuinely learning and responding to material. Plagiarism is one of the most serious forms of academic dishonesty.

Plagiarism is using other people's ideas and/or words without clearly acknowledging the source of the information. If a student uses content or grammatical structures from the internet, a professional writer, or another student and does not inform the reader, he plagiarizes. A student who allows another student to use his writing without attribution is also guilty of plagiarism.

Cheating will not be tolerated in this class. All major written assignments completed outside of class time must be submitted via www.turnitin.com. A student found to be cheating for the first time will receive a zero for the assignment and the Dean of Students will be notified. In the event of a second offense confirmed by the Dean of Students, the student will fail the course. A third instance of cheating will result in that student being dismissed from the American University of Iraq, Sulaimani. Students are directed to the AUIS Honor Code and the Academic Integrity policy section of the Academic Catalog (available online at www.auis.edu.krd). These documents provide

guidance in cases of academic dishonesty, so we should all be familiar with them.

12 Revisions to the Syllabus

This syllabus is designed around the course description proposed and announced to the students. It is subject to change. It is the duty of the instructor to inform students of changes in a timely fashion. Students are obliged to be cognizant of any change.

13 Course Schedule

Week	Starting Date	Topic
1	Jan. 20, 2019	Introduction to Problem Solving
2	Jan. 27, 2019	Introduction to Programming
3	Feb. 3, 2019	Variables
4	Feb. 10, 2019	Java Operators - Part 1
5	Feb. 17, 2019	Java Operators - Part 2
		Assignment 1 deadline on February 17th at 9 A.M.
6	Feb. 24, 2019	Control Statement - Part 1
7	Mar. 3, 2019	Control Statement - Part 2
		Assignment 2 deadline on March 3rd at 9 A.M.
8	Mar. 10, 2019	Methods
		Exam 1 on March 10th - During Class Time
9	Mar. 17, 2019	Nawroz, Spring break
10	Mar. 24, 2019	Arrays
		Assignment 3 deadline on March 24th at 9 A.M.
11	Mar. 31, 2019	Classes and Objects - Part 1
12	Apr. 7, 2019	Classes and Objects - Part 2
		Assignment 4 deadline on April 7th at 9 A.M.
13	Apr. 14, 2019	Classes and Objects - Part 3
		Exam 2 on April 14th - During Class Time
14	Apr. 21, 2019	Comprehensive Review and Course Closure