ITE202 - IT Systems

AUIS - Department of Information Technology

1 Course Information

Course ID ITE202
Course Title IT Systems
Course Level Undergraduate

Course Design Required for all IT, SE major students

Elective for the rest

Number of Credits 3

Prerequisites CSC101 Class Location B-B1-01

Meeting Time Mondays from 9:45 to 11:15 (Section 2)

Mondays from 12:30 to 14:00 (Section 1) Wednesdays from 9:45 to 11:15 (Section 2) Wednesdays from 12:30 to 14:00 (Section 1)

2 Instructor Information

Instructor Yad Tahir, PhD

Email Address yad.tahir@auis.edu.krd

Office Location B-F2-15

Office Hours Sundays from 10:00 to 13:00

3 Course Description

This course introduces students to concepts of Information and Communication Technologies. ICT's key components for transforming data into information i.e. (Programming, Databases, Principles, DBMS and types). It also covers technologies required to transfer this information via World Wide Web i.e. (Networks and Networking technologies). This course is designed in such a way that helps students to make decisions regarding their major and minor selection based on realistic experience with the discipline and level of expectations. Therefore, this course works as an entry, rigorous, and filtering course to all other IT courses and as a prerequisite to all other IT courses.

4 Learning Outcomes

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

- Recognize the components of IT systems.
- Identify the functions, roles and benefits of IT in the global business arena.
- Demonstrate an understanding of basic programming concepts including data types, variables, parameters, and program control structures etc.
- Explain basic database concepts including various data models, entities, attributes, relationships, and constraints.
- Explain core principles of networking technologies i.e. (OSI, TCP/IP, IPs etc)

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]

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 Network Fundamentals - CCNA Exploration Companion Guide

Author(s) Mark A. Dye, Rick McDonald, and Antoon W. Rufi

Publisher Cisco Press ISBN 978-158713-208-7

URL https://amzn.to/35CzSCv

Title Information Technology: Principles, Practices, and Opportunities - 3rd Edition

Author(s) James A. Senn Publisher Prentice Hall ISBN 978-0131436268

URL https://amzn.to/2ZoQEAx

Title C How to Program - 6th Edition Author(s) Paul Deitel and Harvey Deitel

Publisher Pearson

ISBN 978-0136123569

URL https://amzn.to/21IQwhm

Most of the material discussed in this course are well-explained in the titles above. These references are 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:

- C Compiler.
- Your favorite text editor, e.g. Sublime, MS Visual Studio Code, Emacs, VIM, etc.

7 Grading Procedures

Assessment Type	$\mathbf{Grade}~\%$
Multiple Quizzes	10
Course Activities	5
2 Coursework Assignments (randomly chosen from out of 3)	20
2 Periodic Exams (20% each)	40
Comprehensive Final Exam [a]	25
Total	100

[a] 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 **two** times a week at the **sixth** 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:

- Speaking languages other than English
- Using a cell phone in any way, shape or form

• 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 **48 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 right section. The enrollment code will be provided during our 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

\mathbf{Week}	Starting Date	Topic
1	February 9, 2020	Introduction
2	February 16, 2020	Concepts of Programming
3	February 23, 2020	Pseudo Code and Control Statements
4	March 1, 2020	Loops
5	March 8, 2020	Functions - Part 1
		Assignment 1 deadline on March 9th, at 9 A.M.
6	March 15, 2020	Functions - Part 2
		Exam 1 on March 16th
7	March 29, 2020	Computer Networks - Part 1
8	April 5, 2020	Computer Networks - Part 2
		Assignment 2 deadline on April 6th, at 9 A.M.
9	April 12, 2020	Computer Networks - Part 3
10	April 19, 2020	Database Concepts - Part 1
		Assignment 3 deadline on April 20th, at 9 A.M.
11	April 26, 2020	Database Concepts - Part 2
12	May 3, 2020	Database Concepts - Part 3
		Exam 2 on May 4th
13	May 10, 2020	Course Closure