ITE410 - IT Capstone Project

AUIS - Department of Information Technology

Fall-2018

1 Course Information

Course ID ITE410

Course Title IT Capstone Project Course Level Undergraduate

Course Design Required and offered only for IT major students

Number of Credits 3

Prerequisites All the courses from the last semester

Class Location B-B1-03

Meeting Time Sundays from 14:15 to 15:15

Tuesdays from 14:15 to 15:15 Thursdays from 14:15 to 15:15

2 Instructor Information

Instructor Yad Tahir, PhD

Email Address yad.tahir@auis.edu.krd

Office Location B-F2-15

Office Hours Sun 9:30-11:00

Thu 9:30-11:00

3 Course Description

The capstone module offers students the opportunity to develop their analytical and critical skills in an IT project based on a topic, selected by the student, which will be approved and supervised by a member of the teaching team. Project implementation requires the student to implement their design and make any justified modification to their chosen project using suitable tools and techniques.

4 Learning Outcomes

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

- Demonstrate skills that they have learned and gained as part of the program and courses that they have studied as IT majors at AUIS.
- Demonstrate skills that they can learn as continuation of the program and courses that they have studied as IT majors at AUIS.
- Asses, select, and define an IT solution to a real-life problem.
- Prepare, develop and present a prototype of an idea that forms part of the solution mentioned above.
- Work and progress under supervision and mentorship for a long-term project, compared to a normal coursework assignment.

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

6.1 Recommended Textbooks

Students may use the following concepts text:

Title Projects in Computing and Information Systems - 2nd Edition

Author(s) Christian Dawson

Publisher Pearson

ISBN 978-0273721314

URL https://amzn.to/2weLZp0

7 Teaching Methods

7.1 Meetings

Students are scheduled for a weekly three-hour meeting to brainstorm, review, and criticize ideas of their own or of the ones given by the professor. Once students are settled on a project idea, consequent meetings are conducted to review progress and direct students towards the project goals and required outcomes.

7.2 Submissions

Students work is assessed based on *multiple* submissions during the course of the semester. Submissions must demonstrate student's progress of the planned and approved project. Feedback is given with the grades for each submission.

8 Grading Procedures

| Assessment | Grade $\%$ |
|----------------------------------|------------|
| Part 1 - Project Foundations | 15 |
| Part 1 - Project Implementation | 25 |
| Part 1 - Project Completion | 10 |
| Part 1 - Project Demonstration | 10 |
| Part 2 - Course Final Submission | 40 |
| Total | 100 |

9 Grading Scale

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

10 Mentoring and Assessment Plan

Your performance in this course will be assessed in two main parts:

10.1 Part One

This part will be marked by your supervisor and consists of four submissions as shown in the following table:

| Covered Areas | Reference | | |
|---|----------------|--|--|
| Submission 1 - Project Foundations | | | |
| Choosing a project and writing a project proposal | Chapter 3 | | |
| Project planning and risk management | Chapter 4 | | |
| Literature searching and literature review | Chapter 5 | | |
| Submission 2 - Project Implementation | | | |
| Software/hardware and system development | Chapter 6 | | |
| Controlling your project | Chapter 7 | | |
| Submission 3 - Project Completion | | | |
| Written and/or Oral presentations | Chapters 8 & 9 | | |
| The future | Chapter 10 | | |

Submission 4 - Project Demonstration

Creating and sharing a video demonstration

10.2 Part Two

Unlike the first part, this part is marked by a judging panel consisting of three IT professors, not including your supervisor. The panel will be reviewing your final submission first. Then, you will present the project in front of the judging panel on an agreeable day in week fourteen of classes.

The judging panel will be using the following criteria for marking your project:

- General Considerations: Plans, time management, report, defense, trade-offs, completeness and so on.
- **Project Foundation**: Literature review, information retrieval, understanding of area, knowledge and so on.
- Project Approach and Methods: Technologies, software tools, hardware tools, research methods and so on.
- Results and Contribution: Interpretation of results, presentation of results, evaluation of outcome and so on.

11 Attendance

The instructor will strictly adhere to AUIS's policy on attendance. Therefore, one three hour meeting is equivalent to three meetings of classes that meet on Sunday, Tuesday, Thursday and to two meetings of classes that meet on Monday, Wednesday. Reporting absences are conducted according to the scaled meeting compared to normal classes.

12 Course Policies and Expectations

12.1 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.

12.2 Makeup Exams and Extra Credit Policy

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

12.3 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.

12.4 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 20th of September and the enrollment code will be provided during the first class meeting.

13 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.

14 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.

15 Course Schedule

| Week Num. | Starting Date | Submission |
|-----------|---------------|---|
| 1 | Sep. 5, 2018 | |
| 2 | Sep. 9, 2018 | |
| 3 | Sep. 16, 2018 | |
| 4 | Sep. 23, 2018 | |
| 5 | Sep. 30, 2018 | Project Foundations on 30th of September |
| 6 | Oct. 7, 2018 | |
| 7 | Oct. 14, 2018 | |
| 8 | Oct. 21, 2018 | |
| 9 | Oct. 28, 2018 | |
| 10 | Nov. 4, 2018 | Project Implementation on 4th of November |
| 11 | Nov. 11, 2018 | |
| 12 | Nov. 18, 2018 | Project Completion on 18th of November |
| 13 | Nov. 25, 2018 | Project Demonstration on 25th of November |