**Course Specification**

(CS 396 Selected topics in Software Engineering)

|  |  |
| --- | --- |
| **University:** | Helwan University |
| **Faculty:** | Faculty of Computers & Information |
| **Department:** | Computer science |

**1. Course Data**

|  |  |
| --- | --- |
| **Code:** | CS 396 |
| **Course title:** | Selected topics in computer science II |
| **Level:** | 3 |
| **Specialization:** | Computer Science |
| **Credit hours:** | 3 hours |
| **Number of learning units (hours):** | (3) theoretical |

**2. Course Objective**

Determined by the department.

**3. Intended Learning Outcomes:**

**A- Knowledge and Understanding:**

A14. Describe Social impacts of software engineering.

A16. Elaborate tools for software engineering production and engineering.

A21. Apply Software project management.

A22. Apply applications of software systems to business environment.

1. **Intellectual Skills**

B9. Solve the problems encountered in software design and production.

B11. Select appropriate tools and technologies used in software engineering.

1. **Professional and Practical Skills**

C6. Use software tools in order to collect and interpret data.

C13. Manage software projects.

1. **General and Transferable Skills**

D3. Communicate effectively.

**4. Course contents**

Determined by the department

**Mapping contents to ILOs**

Determined by the department

**5. Teaching and Learning Methods**

Class Lectures

Paper readings

**6. Teaching and Learning Methods for students with limited capability**

Using data show

e-learning management tools

**7. Students Evaluation**

**a) Used Methods**

Written Exams

Assignments

**b) Time**

Assessment 1: Test 1 Week 4

Assessment 2: Test 2 Week 7

Assessment 3: Midterm Exam Week 10

Assessment 5: final written exam Week 16

**c) Grades Distribution**

Mid-term Examination 20 %

Final-Year Examination 60 %

Semester Work 20 %

Total 100%

Any formative only assessments

**List of Books and References**

**a) Notes**

Course Notes

- Handouts

**b) Mandatory Books**

**Title:**

**Author(s):**

**Publisher:**

**ISBN:**

**c) Suggested Books**

**d) Other publications**

**Course Coordinator:**  A.Prof. Dr. Mohamed Hagag

**Chairman of the Department:** Prof. dr. Iraqy Khalifa

**Course Specification**

(CS 498 Project)

|  |  |
| --- | --- |
| **University:** | Helwan University |
| **Faculty:** | Faculty of Computers & Information |
| **Department:** | Computer science |

**1. Course Data**

|  |  |
| --- | --- |
| **Code:** | **CS 498** |
| **Course title:** | Project |
| **Level:** | 1 |
| **Specialization:** | Computer Science |
| **Credit hours:** | 6 hours |
| **Number of learning units (hours):** | (3) theoretical (6) practical |

**2. Course Objective**

Determined by the supervisor of the project

**3. Intended Learning Outcomes:**

**A- Knowledge and Understanding:**

A7. Integrate design of components, objects and patterns.

A11. Explain Software systems analysis.

A12. Recognize Software systems design.

1. **Intellectual Skills**

B4. Create and/or design software components, objects and classes.

B11. Select appropriate tools and technologies used in software engineering.

1. **Professional and Practical Skills**

C2. Use programming concepts for solving problems.

C3. Solve problems in software productions and adoption.

C9. Apply software engineering principle in developing software projects.

C10. Commercialize software engineering skills to market and industry.

C13. Manage software projects.

1. **General and Transferable Skills**

D1. Work efficiently in a team.

D2. Work in stressful environment and within constraints.

D3. Communicate effectively.

D6. Manage tasks and resources.

**4. Course contents**

Determined by the supervisor of the project

**Mapping contents to ILOs**

This mapping is dependant on the topic of the project

**5. Teaching and Learning Methods**

**-** Class Lectures

**-** Paper readings

**6. Teaching and Learning Methods for students with limited capability**

Using data show

e-learning management tools

**7. Students Evaluation**

**a) Used Methods**

Lab exam

Assignments

Lab work

Programming projects

**b) Time**

Assessment 1: Test 1 Week 4

Assessment 2: Test 2 Week 7

Assessment 3: Midterm Exam Week 10

Assessment 4: Practical Exam Week 14

Assessment 5: final written exam Week 16

**c) Grades Distribution**

Mid-term Examination 20 %

Final-Year Examination 50 %

Semester Work 20 %

Practical Exam 10%

Total 100%

Any formative only assessments

**List of Books and References**

**a) Notes**

Course Notes

- Handouts

**b) Mandatory Books**

**Title:**

**Author(s):**

**Publisher:**

**ISBN:**

**c) Suggested Books**

**d) Other publications**

**Course Coordinator:**  **All the department stuff**

**Chairman of the Department:** Prof. dr. Iraqy Khalifa