

Course Specifications

| Course Title: | Research Project |
|---------------|--|
| Course Code: | 599PMIS-4 |
| Program: | Professional Master of Artificial Intelligence |
| Department: | Computer Science |
| College: | Computer Science and information systems |
| Institution: | Najran University |







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A. Course Identification

| 1. Credit hours:4 | | | |
|---|--|--|--|
| 2. Course type | | | |
| a. University College $$ Department $$ Others | | | |
| b. Required $$ Elective | | | |
| 3. Level/year at which this course is offered: 6 th level/ 2 th year | | | |
| 4. Pre-requisites for this course (if any): | | | |
| Department approval | | | |
| 5. Co-requisites for this course (if any): NA | | | |
| | | | |
| | | | |

6. Mode of Instruction (mark all that apply)

| No | Mode of Instruction | Contact Hours | Percentage |
|----|-----------------------|----------------------|------------|
| 1 | Traditional classroom | 40 | 100% |
| 2 | Blended | | |
| 3 | E-learning | | |
| 4 | Distance learning | | |
| 5 | Other | | |

7. Contact Hours (based on academic semester)

| No | Activity | Contact Hours |
|----|-------------------|----------------------|
| 1 | Lecture | 40 |
| 2 | Laboratory/Studio | |
| 3 | Tutorial | |
| 4 | Others (specify) | |
| | Total | 40 |

B. Course Objectives and Learning Outcomes

1. Course Description

After the project proposal is approved, the student will work on implementing proposed research project and finishing the research. The students will review the design specification and make any necessary enhancements. The students will identify and use programming techniques and tools to implement user interface and complete functionality of the proposed project. The students will develop the necessary test cases of the critical components of the system and perform complete testing to the project. At the end of their research project, the students will present their complete projects to their supervisor(s) and their peers.

2. Course Main Objective

After successful completion of this course students should be able to:

Developing a hypothesis, a research problem and related questions Framing the problem with the correct research methodology Collecting data that accurately addresses the research problem

3. Course Learning Outcomes

| | CLOs | |
|-----|---|------------|
| 1 | Knowledge and Understanding | |
| 1.1 | | |
| 1.2 | | |
| 1.3 | | |
| 1 | | |
| 2 | Skills | |
| 2.1 | Developing a hypothesis, a research problem and related questions | K3 |
| 2.2 | Framing the problem with the correct research methodology | S1 |
| 2.3 | Collecting data that accurately addresses the research problem | S3, C1 |
| 2.4 | Evaluating feasibility of research proposals | S4 |
| 2.5 | Using data to make decisions | S4 |
| 3 | Competences: | |
| 3.1 | Presenting data to support programs to decision makers | C1, C2, C3 |
| 3.2 | | |
| 3.3 | | |
| 3 | | |

C. Course Content

| No | List of Topics | Contact Hours |
|-------|--------------------------------------|------------------|
| 1 | Topic Paper | 1 |
| 2 | Research Project Outline | 1 |
| 3 | Literature review reading | 3.5 |
| 4 | Literature review draft | 3.5 |
| 5 | 1st Draft Research Paper | 3.5 |
| 6 | 1st Draft Research Paper corrections | 3.5 |
| 7 | 1st Draft Research Paper review | 3.5 |
| 8 | 32nd Draft Research Paper3.5 | |
| 9 | 2nd Draft Research Paper corrections | |
| 10 | 0 2nd Draft Research Paper review | |
| 11 | | |
| 12 | 3rd Draft Research Paper corrections | 3.5 |
| 13 | 133rd Draft Research Paper review1 | |
| 14 | 14 Final Draft 1 | |
| 15 | 15 Presentation | |
| Total | | |

D. Teaching and Assessment

| 1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessmen | t |
|---|---|
| Methods | |

| Methods | | | | |
|--|--|---|--|--|
| Learning Outcomes | Teaching Strategies | Assessment Methods | | |
| Knowledge and Understanding | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| hypothesis, a research related questions | TS-1: Relate Course Learning Outcomes (CLOs) to the topics | Written Report | | |
| problem with the correct nodology | TS-2: Giving Lectures in PPT, recalling the lecture through asking Questions. Clarifying | Written Report | | |
| ta that accurately research problem | doubts on Lecture. TS-3: Conducting a discussion of real life | Written Report | | |
| asibility of research | problems, among teacher, students TS-4: Cooperative | Written Report | | |
| make decisions | learning among the students. Encourage students to browse different journals, seminars or websites at their leisure time to have a better understanding about the course | Written Report | | |
| | | | | |
| ta to support programs to ers | TS-2: Giving Lectures in PPT, recalling the | Final oral Examination | | |
| | lecture through asking | | | |
| | Questions. Clarifying doubts on Lecture. TS-3: Conducting a discussion of real life problems, among teacher, students | | | |
| 6 | | doubts on Lecture. TS-3: Conducting a discussion of real life | | |

2. Assessment Tasks for Students

| # | Assessment task* | Week Due | Percentage of Total Assessment Score |
|--|------------------|-----------------------|---|
| 1 | Final Oral Exam | 9 rd week | 50% |
| 2 | Project Report | 11 th week | 50% |
| *A management to all (i.e. multitude to all the to and an anticide and a main and is at a second at a) | | | |

*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice :

- Weekly office hours + Appointments
- Weekly academic advising hours
- Extra weekly 2 office hours prior to exams.
- Tutorials are also provided to the students

F. Learning Resources and Facilities

1.Learning Resources

| Required Textbooks | No specific textbook is required. Papers and reading materials will be provided. |
|-----------------------------------|--|
| Essential References Materials | |
| Electronic Materials | |
| Other Learning Materials | |

2. Facilities Required

| Item | Resources | |
|---|---|--|
| Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.) | Room B-58 Laboratory A-16L | |
| Technology Resources (AV, data show, Smart Board, software, etc.) | Data show, PCs. | |
| Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list) | Printer is important in the lab to print reports and some snapshots. Projector and PC for the lab instructor is required | |

G. Course Quality Evaluation

| Evaluation Areas/Issues | Evaluators | Evaluation Methods |
|---|------------|--------------------|
| Online course survey | Students | Indirect |
| Focus group discussion with small groups of students. | Instructor | Direct |
| Extent of achievement of course learning outcomes | instructor | Direct |

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)

Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)

Assessment Methods (Direct, Indirect)

H. Specification Approval Data

| Council / Committee | Computer Science Departmental Council |
|---------------------|---------------------------------------|
| Reference No. | 14440203-0185-00002 |
| Date | 1st Sep, 2022 |