



T-104  
2022

# Course Specification





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## Course Specification

Course Title: Applied Project
Course Code: 281 CIS- 3
Program: Computer department
Department: Technical support
College: Applied College
Institution: Najran University
Version: <b>T -104 2022</b>
Last Revision Date: 20/08/2023



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## A. General information about the course:

Course Identification	
1. Credit hours:	3(0+3)
2. Course type	
a.	University <input type="checkbox"/> College <input type="checkbox"/> Department <input checked="" type="checkbox"/> Track <input type="checkbox"/> Others <input type="checkbox"/>
b.	Required <input checked="" type="checkbox"/> Elective <input type="checkbox"/>
3. Level/year at which this course is offered:	5 <sup>th</sup> semester Third year
4. Course general Description This course introduces the scientific research methods under the supervisor guidance to focus on a specific project and students should search through information sources such as the library and the Internet. At the end of the semester, students should submit the final report of the project to the supervisor for reviewing.	
5. Pre-requirements for this course (if any): All the previous courses	
6. Co- requirements for this course (if any):	
7. Course Main Objective(s) <ul style="list-style-type: none"> <li>• To provide hands-on training to design a software product according to the procedure and practices as pictured in Software Engineering.</li> <li>• To develop the ability to synthesis information and knowledge in the field of Scientific and applied Research</li> <li>• To develop presentation skills and to speak with audience.</li> <li>• To Be able to work effectively as a member of a development team and under guidance.</li> </ul>	

### 1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	3 hours per week	100%
2.	E-learning		
3.	Hybrid <ul style="list-style-type: none"> <li>• Traditional classroom</li> <li>• E-learning</li> </ul>		
4.	Distance learning		





## 2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	
2.	Laboratory/Studio	45
3.	Field	
4.	Tutorial	
5.	Others (specify)	
	<b>Total</b>	<b>45</b>

## B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	<b>Knowledge and understanding</b>			
1.1	Identify solutions to real-world problems using the knowledge gained during the study.	K2	Seminar Discussion Presentation Searching Teamwork	Weekly Report
1.2	Understand the basic concepts of scientific research methodology	K1	Discussion	Follow up Form. periodic evaluation
2.0	<b>Skills</b>			
2.1	Develop software system to solve specific problem	S2	Seminar Discussion Presentations Brainstorming	Follow up Form. periodic evaluation
2.2	Design a system that solves the selected problem	S4	Discussion Presentations Lab work Project Brainstorming	Final Presentation
3.2	Analyze the data to get the results and then discuss them		Teamwork	Final report
3.0	<b>Values, autonomy, and responsibility</b>			
3.1	Ability to collaborate and teamwork	V3		Follow up. Final Presentation Report



## C. Course Content

No	List of Topics	Contact Hours
1.	Problem definition	3
2.	System Study/ Field Survey / Literature Survey.	3
3.	Requirement Analysis	6
4.	Data Flow Diagrams / Algorithm design/ Flow Chart design, Comparison Design	6
5.	Code generation for various modules and algorithms	6
6.	Testing of modules and refinements / Starting of experimental analysis	3
7.	Validation / consolidation of algorithms results.	3
8.	Integrating the modules in formulation of research / Experimental findings.	6
9.	Testing the software as one unit	6
10.	Writing professional documents and revised it & Project Defense	3
<b>Total</b>		<b>45</b>

## D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Student review of the supervisor	during the semester	5
2.	Student cooperation with co-workers	during the semester	10
3.	Refer the student to the sources and references	during the semester	5
4.	Student understanding of application development concepts	3	10
5.	The student's ability to analyze the problem to find solutions	7-6-5	5
6.	The ability of the student to design a system to solve the problem	10-12	8
7.	The student's ability to develop a software system	11	7
8.	search	13	10
9.	Discussion	14	40
	<b>Total</b>		<b>100</b>

\*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)



## E. Learning Resources and Facilities

### 1. References and Learning Resources

Essential References	Information Technology Project Management , Kathy Schwalbe, 7th edition, 2014
Supportive References	Modern System Analysis & Design- Jeffrey Hpffer, Joey George, Joseph Valacich, 6th edition, Pearson • Benjamin Rosenzwing, Elena Silvestrova, Oracle PL/SQL by Example, Printice Hall, Latest Edition. • Sommerville, Software Engineering, Edition 8, 2007 • Herbert Schildt The Complete Reference, JAVA 2, Latest Edition, McGraw Hill Publishing Company Ltd . • Data Structures and Algorithms in Java, 5th Edition, by Michael Goodrich and Roberto Tamassia. • B.A. Forouzan, Data Communications and Networking, fourth edition, McGraw – Hill • Electronic Commerce 2010, A Managerial Perspective, Prentice Hall, (latest edition). Efraim Turban, Jae Lee, David King and Michel Chung Ethical and Social Issues in the Information Age, Joseph M. Kizza Springer; 4th Edition, 2010
Electronic Materials	<a href="http://www.nu.edu.sa/web/guest/979">http://www.nu.edu.sa/web/guest/979</a> • Najran University E.Library Saudi Digital Library
Other Learning Materials	Searching the Internet

### 2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	General Lab Depending on the individual projects
Technology equipment (projector, smart board, software)	Depending on the individual projects, computational facilities will vary
Other equipment (depending on the nature of the specialty)	Depending on the individual projects, computational facilities will vary



## F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Head of the department / project coordinator	Directly
Effectiveness of students assessment	Students	End term Questionnaire
Quality of learning resources	Panel of senior faculty and experts.	Directly
The extent to which CLOs have been achieved		
Other		

**Assessor** (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify))

**Assessment Methods** (Direct, Indirect)

## G. Specification Approval Data

COUNCIL /COMMITTEE		
REFERENCE NO.		
DATE		