هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

اعتماد NCAAA T4 2020

Course Specifications

Course Title:	**Graduation Project**
Course Code:	**2044201-3**
Program:	**Bachelor in Chemistry**
Department:	**Department of Chemistry**
College:	**College of Sciences**
Institution:	**Taif University**

Table of Contents

A. Course Identification

1. Credit hours:	**3 (2 Theoretical, 1 Lab)**
2. Course type	
a.	University ☐ College ☐ Department ☑ Others ☐
b.	Required ☑ Elective ☐
3. Level/year at which this course is offered:	**8th Level/ 4th Year**
4. Pre-requisites for this course (if any)**:**	**NA**
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**	2 Theoretical and 3 Practical hours/ Week	100 %
2	**Blended**	-	-
3	**E-learning**	-	-
4	**Distance learning**	-	-
5	**Other**	-	-

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	30
2	**Laboratory/Studio**	45
3	**Tutorial**	-
4	**Others** (specify)	-
	Total	**75**

B. Course Objectives and Learning Outcomes

1. Course Description

In this course the students will develop a complete solution for a scientific problem. Students will work in groups up to four students; each group will have a supervisor to guide them through the problem solving process using a specific methodology.

2. Course Main Objective

The course aims to enrich students with the proficiency of solving scientific problems and improve their cooperation skills and scientific ethics.

3. Course Learning Outcomes

	CLOs	Aligned PLOs
1	**Knowledge and Understanding:**	
1.1	Recognize the principles of scientific analysis methods.	K1
1.2	Understand the process of implementing research project.	K2
2	**Skills:**	
2.1	Apply the scientific knowledge skills in writing project proposal.	S1
2.2	Design the graduation project.	S2
3	**Values:**	

CLOs		Aligned PLOs
3.1	Illustrate the concept of personal responsibility for achieving duties by teamwork.	V1

C. Course Content

No	List of Topics	Contact Hours
1	Discussion with students the method of selecting the graduation project.	2 T
2	Determine the subject of the project assign references to students to read about the project.	4 T+ 6 P
3	Discussion with students the ways to build the project and set a timetable for project.	4 T+ 6 P
4	Theoretical explanation for the building and writing of the project and the preparation of the report	4 T
5	Open discussion with students about what has been accomplished over the previous period.	4 T+ 6 P
6	Implementation of the project (and processing requirements).	4 T+ 18 P
7	Showing initial outputs of the project.	2 T+ 3 P
8	Final presentation of the project.	4 T+ 3 P
9	Presentation to the projects committee for arbitration.	2 T+ 3 P
Total		**30 T+ 45 P**

T**: Theoretical,** P**: Practical**

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		
1.1	Recognize the principles of scientific analysis methods	Lecture	Quizzes
1.2	Understand the process of implementing research project	Lecture	Quizzes
2.0	**Skills**		
2.1	Apply the scientific knowledge skills in writing project proposal	Discussion	Oral discussion
2.2	Design the graduation project	Problem-Solving	Practical Tasks
3.0	**Values**		
3.1	Illustrate the concept of personal responsibility for achieving duties by teamwork.	Collaborative Learning	Graduation projects Presentation

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Quizzes	Throughout Semester	30%
2	Oral Discussion	Throughout Semester	20%
3	Practical Tasks	Throughout Semester	30%
4	Final Project presentation	15/16	20%

***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:

Commitment to the rules of the Academic Advising Department at the university in accordance with the academic guidance manual approved by the university and the attached forms, there are different arrangements made by teaching staff to support student consultations including;
- Office hours: 8 hours per a week for each academic member.
- Academic guidance: an academic member has a number of students to guide them throughout degree journey.

F. Learning Resources and Facilities

1. Learning Resources

Required Textbooks	Textbooks depend on project area.
Essential References Materials	Textbooks depend on project area.
Electronic Materials	• Saudi Digital Library (SDL) • http://web.mit.edu/nnf/education/wettability/index1.html • http://www.chem.qmul.ac.uk/surfaces/scc/
Other Learning Materials	-

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	• Lecture hall with 100 seats. • Equipped Lab with essential instrumentations.
Technology Resources (AV, data show, Smart Board, software, etc.)	• Laptop computer - projector system. • Data show and smart board.
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	• Tutorials should be included in the time frame of the course.

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Effectiveness of Teaching and assessment	Students	Survey (indirect method)
Extent of achievement of course learning outcomes	Program leader	Reports (Direct method)
Quality of learning resources	Peer referees Students	Reports (Direct method) Survey (indirect method)

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	**Department Council/ Quality assurance committee**
Reference No.	7-3-1445
Date	27/2/1445 HJ 12/09/2023 G