وزارة التعليم العالي
المعهد العالي للهندسة والتكنولوجيا
بدمياط الجديدة

قسم الهندسة الكيميائية

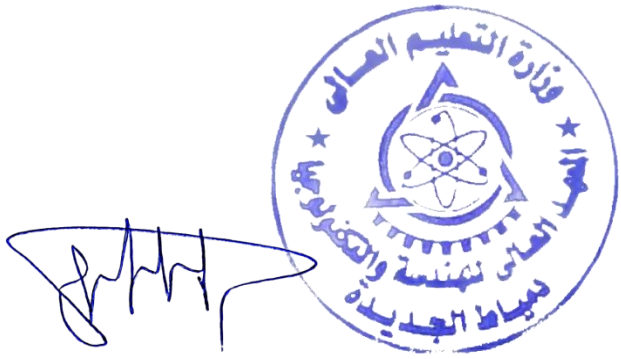
تقارير المقررات قسم الهندسة الكيميائية

إعتماد مجلس القسم لتقارير المقررات قسم الهندسة الكيميائية

بتاريخ 2023/8/28

إعتماد المجلس العلمي لتقارير المقررات قسم الهندسة الكيميائية

بتاريخ 2023/11/6



وزارة التعليم العالي
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2022- 2023

تقارير المقررات لقسم الهندسة الكيميائية

Head of the department	Quality Assurance Unit Manager	Dean of the institute
Assoc.Prof.Dr./ Hend Elsayed Gadow	Assoc.Prof.Dr./ Ramadan Abdelghany Elkateb	Prof.Dr./ Osami Elsaeed Rageh

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فرقة اولى

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Annual Course Report:
Mathematics 3

A. basic Information

Program Title	Chemical Engineering
Department offering the Program	Chemical Engineering Department
Department Responsible for the Course	Basic Science and Engineering Department
Course Code	BAS111
Year/ Level	Level 1
Specialization	Major
Authorization data of course report	2/2023
Exam Committee Selection Rule	Commissioning of the Institute of Management
External Revision of Examination	--
Lecturers Number:	1

Teaching hours	**Lectures**	**Exercise**	**laboratory**	**Student's load**
	2	2	-	4

B. Specialized information:

1. Statistics

Subject		**No.**	**Percentage**
Students attending the course		339	100%
Students completing the course		339	100%
Results	**Passed**	287	84.66%
	Failed	52	15.34%
Grading of successful students	**Excellent**	78	23%
	Very Good	52	15.3%
	Good	55	16.2%
	Pass	102	30.1%

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Annual Course Report:
Mathematics 3

2. Course Teaching:

No.	Topics	Lecture	Exercise	laboratory	Student load
1	maximum and minimum values in more than one variable	2	2	-	8
2	directional analysis the directional differential effects	4	4	-	10
3	multi integrations and its applications (the curved and the orthogonal axis)	4	10	-	10
4	Gauss- Stokes theory - the endless series and function expansion – basic concepts for the convergence and divergence.	10	4	-	12
5	The first order (the equations which can be separated, homogeneous, exact and linear) - the ordinary differential equations from the second order and higher orders (with constant and variable coefficients	4	4	-	8
6	systems from the ordinary differential equations– Laplace transfer and its applications in the solution of differential equations	4	4	-	8
Total		**28**	**28**	**-**	**56**

- Topics taught as a percentage of the content specified: 100 %
- Lecturers commitment of the course content: 100 %
- Coverage of exam topics to course content: 100 %
- Used Teaching and Learning Methods

No.	Teaching Method	Choice
1	Lectures	√
2	Discussion Sessions	×
3	Information Collection from Different Sources	√
4	Practical	×
5	Research Assignment	x

Annual Course Report:
Mathematics 3

6	Field Visits	×
7	Case Studies	x
8	Smart Sessions	×

- Student Assessment:

No.	Evaluation Method	Marks
1	Periodic exams	30
2	Student load	30
3	Final term examination	90
	Total	**150**

3.Facilities Required for Teaching and Learning:

No.	Facility	Choice
1	Lecture Classroom	√
2	Lab Facilities	√
3	White Board	√
4	Data Show System	√
5	Visualizer	×
6	Smart Board	×

No.	Facility	Choice
7	Wireless Board	×
8	Presentation	√
9	Sound System	√
10	Wire-Internet	x
11	Wireless Internet	√
12		

4- Administrative Constraints:

No.	Constraints
1	----------

5- Student Evaluation Result of the Course:

No.	Evaluation Result
1	**81.59%**

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Annual Course Report:
Mathematics 3

6- Course enhancement suggestions

No.	Suggestions
1	**Integrating work experiences with education**

7- Comments from external evaluator(s) (if exists):

No.	Comments
1	**No comment**

8- What has been implemented of the student's suggestions in the previous year?

No.	Suggestions
1	**Increasing some scientific reference in the library of the institute**

9- What has not been implemented of the suggestions (give reasons)?

No.	Suggestions	Reasons
1	---	---

10- What has been implemented of the action plan in the previous year?

No.	Areas of development	Description of development	Completion date	Person responsible
1	Increase some of scientific reference in the library of the institute	Add more books in the electronic library of institute	2022-2023	Dr. Samar Madian

11 – Action plan for next academic year

No.	Areas of development	Description of development	Completion date	Person responsible
1	Add case studies in the lectures	Add engineering applications	2023-2024	Dr. Samar Madian

Course Coordinator: Dr. Samar Madian

Head of Department: Assoc. prof. Amal Behairy

Date of Approval: 2/2023

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Annual Course Report:
Electrical Engineering Fundamentals

A. Basic Information

Program Title	Chemical Engineering
Department offering the Program	Chemical Engineering Department
Department Responsible for the Course	Basic Science and Engineering Department
Course Code	BAS112
Year/ Level	Level 1
Specialization	Major
Authorization data of course report	2/2023
Exam Committee Selection Rule	Commissioning of the Institute of Management
External Revision of Examination	--
Lecturers Number:	1

Teaching hours	**Lectures**	**Exercise**	**laboratory**	**Student's load**
	3	**2**	**-**	**4**

B. Specialized information:

1. Statistics

Subject		**No.**	**Percentage**
Students attending the course		331	100%
Students completing the course		331	100%
Results	**Passed**	289	87.31%
	Failed	42	12.69%
Grading of successful students	**Excellent**	52	15.7%
	Very Good	58	17.5%
	Good	75	22.7%
	Pass	135	40.8%

2. Course Teaching:

No.	**Topics**	**Lecture**	**Exercise**	**laboratory**	**Student load**
1	Direct Current	3	2	-	4
2	Theory of electric circuits	8	6	-	12
3	Delta and Star connections	2	1	-	2
4	Sine A.C and D.C circuits	8	5	-	10
5	Time vectors diagram	3	2	-	4
6	Electric power and power factor in A.C circuits	3	2	-	4
7	3-Phase current - Electric machines - D.C machines	6	4	-	8

Annual Course Report:
Electrical Engineering Fundamentals

8	Transformers	3	2	-	4
9	Induction and synchronous machines	3	2	-	4
10	Fractional power machine	3	2	-	4
	Total	**42**	**28**	**-**	**56**

- Topics taught as a percentage of the content specified: 90 %
- Lecturers commitment of the course content: 90%
- Coverage of exam topics to course content: 95 %

- Used Teaching and Learning Methods

No.	Teaching Methods
1	Lectures
2	Discussion sessions
3	Information collection from different sources
4	Research assignment
5	Practical training/lab

- Student Assessment:

No.	Evaluation Method	Marks
1	Periodic exams	30
2	Student load	30
3	final examination	90
	Total	**150**

3. Facilities Required for Teaching and Learning:

No.	Facility
1	Lecture classroom
2	Presenter
3	White board
4	Data show system
5	Wireless internet
6	Sound system

Annual Course Report:
Electrical Engineering Fundamentals

4- Administrative Constraints:

No.	Constraints
1	-----

5- Student Evaluation Result of the Course:

No.	Evaluation Result
1	**77.5%**

6- Course enhancement suggestions

No.	Suggestions
1	Using online course material.
2	Provide training on how to use a new teaching technology in their classes.

7- Comments from external evaluator(s) (if exists):

No.	Comments
1	----------

8- What has been implemented of the student's suggestions in the previous year?

No.	Suggestions
1	Adding new applications and practical examples
2	Increasing student interaction and participation when implementing the course
3	The course is expanded from theoretical and software engineer views to include a piratical work view the course.

9- What has not been implemented of the suggestions (give reasons)?

No.	Suggestions	Reasons
1	Use the laboratory for teaching Electrical Engineering Fundamentals experiments	Practical part not present in the regulation of the institute.

10- What has been implemented of the action plan in the previous year?

No.	Areas of development	Description of development	Completion date	Person responsible
1	Fractional power machine	Increasing the number of lectures and diversifying more topics	2022-2023	Institute management

Annual Course Report:
Electrical Engineering Fundamentals

11- Action plan for next academic year

No.	Areas of development	Description of development	Completion date	Person responsible
1	Conducting field visits to electricity companies		2023-2024	Institute management

Course Coordinator: Dr. Rabab Reda
Head of Department: Assoc. prof. Amal Behairy
Date of Approval: 2/2023

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Annual Course Report:
Engineering Thermodynamics

A. Basic Information

Program Title	Chemical Engineering
Department offering the Program	Chemical Engineering Department
Department Responsible for the Course	Basic Science and Engineering Department
Course Code	BAS113
Year/ Level	Level 1
Specialization	Major
Authorization data of course report	2/2023
Exam Committee Selection Rule	Commissioning of the Institute of Management
External Revision of Examination	--
Lecturers Number:	1

Teaching hours	**Lectures**	**Exercise**	**laboratory**	**Student's load**
	3	**2**	**-**	**4**

B. Specialized information:
1. Statistics

Subject		**No.**	**Percentage**
Students attending the course		322	100%
Students completing the course		322	100%
Results	**Passed**	310	96.27
	Failed	12	3.73
Grading of successful students	**Excellent**	117	36.33
	Very Good	75	23.29
	Good	58	18.01
	Pass	60	18.63

2. Course Teaching:

No.	**Topics**	**Lecture**	**Exercise**	**laboratory**	**Student load**
1	Fundamental concepts - Properties of a pure substance	3	2	-	4
2	Equation of state -thermodynamic systems	3	2	-	4
3	Work and heat - First law of thermodynamics; Applications to Systems and Control Volumes	9	6	-	12

Annual Course Report:

Engineering Thermodynamics

4	Second Law of Thermodynamics; Principle of Carnot cycles; Heat engines, Refrigerators and heat pumps	6	4	-	8
5	Principle of the increase of entropy	6	4	-	8
6	Applications to systems and control volumes	9	6	-	12
7	Irreversibility and availability - Power and refrigeration cycles.	6	4	-	8
	Total	**42**	**28**	**-**	**56**

- Topics taught as a percentage of the content specified: 100%
- Lecturers commitment of the course content 90%
- Coverage of exam topics to course content: 100%

- Used Teaching and Learning Methods

No.	Teaching Methods
1	Lectures
2	Discussion sessions
3	Information collection from different sources
4	Research assignment

- Student Assessment:

No.	Evaluation Method	Marks
1	Periodic exams	20
2	final examination	75
3	Student load	20
4	Practical /oral	10
	Total	**125**

3. Facilities Required for Teaching and Learning:

No.	Facility
1	Lecture classroom
2	Presenter
3	White board
4	Data show system
5	Wireless internet
6	Sound system

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Annual Course Report:

Engineering Thermodynamics

4- Administrative Constraints:

No.	Constraints
1	-------

5- Student Evaluation Result of the Course:

No.	Evaluation Result
1	**89%**

6- Course enhancement suggestions

No.	Suggestions
1	Adding new applications and practical examples

7- Comments from external evaluator(s) (if exists):

No.	Comments
1	----------

8- What has been implemented of the student's suggestions in the previous year?

No.	Suggestions
1	Introducing recent topics to the course on a permanent and continuous basis
2	Mention to sources, references and web sites to update the general material of the course.

9- What has not been implemented of the suggestions (give reasons)?

No.	Suggestions	Reasons
1	References need update	

10- What has been implemented of the action plan in the previous year?

No.	Areas of development	Description of development	Completion date	Person responsible
1	Self-learning	Enhance searching	2022-2023	Dr. Abdelnaby kabeel

Annual Course Report:

Engineering Thermodynamics

11 – Action plan for next academic year

No.	Areas of development	Description of development	Completion date	Person responsible
1	-Increase Case studies implementation according to social's needed		2023-2024	Dr/ Abdelnaby kabeel
2	-increase students' projects		2023-2024	Dr/ Abdelnaby kabeel

Course Coordinator: Dr. Abdelnaby Kabeel / Dr. Moataz Mostafa
Head of Department: Assoc. Prof. Dr. Aml Elbehery
Date of Approval: 2/2023

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وزارة التعليم العالى المعهد العالى للهندسة والتكنولوجيا بدمياط الجديدة

Annual Course Report: Technical English Language 2

A. Basic Information

Program Title	Chemical Engineering
Department offering the Program	Chemical Engineering Department
Department Responsible for the Course	Basic Science and Engineering Department
Course Code	BAS114
Year/ Level	Level 1
Specialization	Major
Authorization data of course report	2/2023
Exam Committee Selection Rule	Commissioning of the Institute of Management
External Revision of Examination	--
Lecturers Number:	1

Teaching hours	**Lectures**	**Exercise**	**laboratory**	**Student's load**
	2	-	2	3

B. Specialized information:

1. Statistics

Subject		**Percentage**
Students attending the course		100
Students completing the course		100
Results	**Passed**	89.23
	Failed	10.77
Grading of successful students	**Excellent**	16.63
	Very Good	24.9
	Good	24.6
	Pass	23.1

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Annual Course Report: Technical English Language 2

2. Course Teaching:

No.	Topics	Lecture	Exercise	laboratory	Student load
1	Water Lab skills in English : Lesson 1 Bob drives a hard bargain& Lesson 2 Bob's big coolie order& grammar topics	4	-	4	6
2	Chemical and physical properties. Lab skills in English Lesson 3 Amber comes over to bake cookies & Lesson 4Amber and Ted heat up the kitchen& grammar topics	4	-	4	6
3	Water cycle Lab skills in English lesson 5 Nicole practices her election speech& grammar topics	2	-	2	3
4	Human uses Lab skills in English : Grammar topics	4	-	4	6
5	Heat transfer Lab skills in English lesson 6 Bob brings the cookies to the village market& lesson 7 Carol tells Bob the good news& grammar topics	4	-	4	6
6	Graphic language Lab skills in English : lesson 8 Every one bakes cookies & lesson 9 Nicole's close election & grammar topics	4	-	4	6
7	Energy Lab Skills in English lesson 10 Bob gets any angry call from Carol & Grammar topics	4	-	4	6
8	Automatic Control Lab Skills in English Grammar topics	2	-	2	3
Total		**28**	**-**	**28**	**42**

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Annual Course Report: Technical English Language 2

- Topics taught as a percentage of the content specified: 90 %
- Lecturers commitment of the course content: 100 %
- Coverage of exam topics to course content: 95%
- Used Teaching and Learning Methods

No.	Teaching Method	Choice
1	Lectures	√
2	Discussion Sessions	×
3	Information Collection from Different Sources	√
4	Practical	√
5	Research Assignment	x
6	Field Visits	×
7	Case Studies	x
8	Smart Sessions	×

- Student Assessment:

No.	Evaluation Method	Marks
1	Periodic exams	20
2	Student load	20
3	Practical examination	10
4	Final term examination	50
	Total	**100**

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Annual Course Report: Technical English Language 2

3. Facilities Required for Teaching and Learning:

No.	Facility	Choice	No.	Facility	Choice
1	Lecture Classroom	√	7	Wireless Board	×
2	Lab Facilities	√	8	Presenter	×
3	White Board	√	9	Sound System	√
4	Data Show System	√	10	Wire-Internet	x
5	Visualizer	×	11	Wireless Internet	√
6	Smart Board	×			

4- Administrative Constraints:

No.	Constraints
1	--------

5- Student Evaluation Result of the Course:

No.	Evaluation Result
1	**79.68%**

6- Course enhancement suggestions

No.	Suggestions
1	Improve lecture notes
2	Integrating work experiences with education.

7- Comments from external evaluator(s) (if exists):

No.	Comments
1	--------

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Annual Course Report: Technical English Language 2

8- What has been implemented of the student's suggestions in the previous year?

No.	Suggestions
1	Increase some English reference in the library of the institute

9- What has not been implemented of the suggestions (give reasons)?

No.	Suggestions	Reasons
	----	-----

10- What has been implemented of the action plan in the previous year?

No.	Areas of development	Description of development	Completion date	Person responsible
1	-Increase Case studies implementation according to social's needed	1. Divided Students' groups 2. Evaluation projects	2022-2023	Dr. Doaa Elsherbiny

11- Action plan for next academic year

No.	Areas of development	Description of development	Completion date	Person responsible
1	Using power point	Doing searches by using internet.	2023-2024	D/ Doaa Elsherbiny
2	Adding a lot of English language books in the library of the institute.	By adding a lot of English language books which encourage students for reading.		

Course Coordinator: Dr. Doaa Elsherbiny

Head of Department: Assoc. Prof. Amal Behairy

Date of Approval: 2/2023

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Annual Course Report:
Computer Programming

A. Basic Information

Program Title	Chemical Engineering
Department offering the Program	Chemical Engineering Department
Department Responsible for the Course	Basic Science and Engineering Department
Course Code	BAS115
Year/ Level	Level 1
Specialization	Major
Authorization data of course report	2/2023
Exam Committee Selection Rule	Commissioning of the Institute of Management
External Revision of Examination	--
Lecturers Number:	1

Teaching hours	**Lectures**	**Exercise**	**Lab.**	**Student's load**
	2	**----**	**2**	**4**

B. Specialized information:

1. Statistics

Subject		**No.**	**Percentage**
Students attending the course		216	100%
Students completing the course		216	100%
Results	**Passed**	200	92.59%
	Failed	16	7.41%
Grading of successful students	**Excellent**	34	15.7%
	Very Good	62	28.7%
	Good	54	25%
	Pass	50	23.1%

2. Course Teaching:

No.	**Topics**	**Lecture**	**Exercise**	**laboratory**	**Student load**
1	Basic concepts of programming. Practical: problem analysis& developing the programs charts& Structured programming	2	-	2	4
2	Introduction Java Applications Practical: Form of the Program& fundamentals of Java programming language and its syntax& Primitive data types, operators, variables &J option pane& scanner Classes.	4	-	4	8

Annual Course Report:
Computer Programming

3	Branching [Control Statements]. Practical: programs about (If statement, If -Else, Nested IF, Switch)	2	-	2	4
4	[Iterations] Control Statements. Practical: solved problems about (Repetition statements: for, while, do-while& Nested loop &Continue, Break.)	4	-	4	8
5	Concepts of object-oriented programming Practical: Examples Of Classes, Inheritance Concept.	2	-	2	4
6	Methods in java. Practical: problems of (Declare method& Message passing& Method overloading)	2	-	2	4
7	Arrays and Array list Practical: Create Array& Matrix& Array List.	4	-	4	8
8	Introduction to java Applets. Practical: java Applets programs.	4	-	4	8
9	Graphical user interface (GUI). Practical: GUI exercises.				
Total		**28**	**-**	**28**	**56**

- Topics taught as a percentage of the content specified: 100 %
- Lecturers commitment of the course content: 90 %
- Coverage of exam topics to course content: 90 %

- Used Teaching and Learning Methods

No.	Teaching Methods
1	Provide regular quality feedback.
2	Use Direct Instruction.
3	Break learning tasks into small steps.
4	Moodle
5	Forming small groups of two or three students within the class grouped according to their level can help with personalizing the teaching while not sacrificing class instruction time

Annual Course Report:
Computer Programming

- Student Assessment:

No.	Evaluation Method	Marks
1	Periodic exams	20
2	final examination	50
3	Practical examination	10
4	Student load	20
	Total	**100**

3. Facilities Required for Teaching and Learning:

No.	Facility
1	Lecture Classrooms with Sound Systems.
2	Computer Laboratories
3	Presenter
4	White board
5	Data show system
6	Wire and Wireless Internet Connections
7	Moodle

4- Administrative Constraints:

No.	Constraints
1	------

5- Student Evaluation Result of the Course:

No.	Evaluation Result
1	**72.33%**

6- Course enhancement suggestions

No.	Suggestions
1	Improve lecture notes
2	Integrating work experiences with education.
3	Transplant And Assess Pedagogy Utilizing Such Technologies to Enhance Students' Learning.

7- Comments from external evaluator(s) (if exists):

No.	Comments
1	----------

Annual Course Report:
Computer Programming

8- What has been implemented of the student's suggestions in the previous year?

No.	Suggestions
1	Mention to sources, references and web sites to update the general material of the course.
2	Adding new applications and practical examples
3	Increasing student interaction and participation when implementing the course

9- What has not been implemented of the suggestions (give reasons)?

No.	Suggestions	Reasons
1	More field visits for more learning about the course.	No places near by the institute

10- What has been implemented of the action plan in the previous year?

No.	Areas of development	Description of development	Completion date	Person responsible
1	Updating the course's educational resources		2022-2023	Institute management
2	-Increase Field Visits -Increase Case studies implementation according to social's needed -increase students' projects	1- Divided Students' groups 2- Identify project names According social's needed and field visits 3- Using suitable program Evaluation projects		

11- Action plan for next academic year

No.	Areas of development	Description of development	Completion date	Person responsible
1	The Z transform and discrete time LTI systems	زيادة عدد المحاضرات لتغطية مواضيع اكثر	2023-2024	Institute management

Course Coordinator: Dr/Amira Elsonbaty
Head of Department: Assoc. Prof. Amal Behairy
Date of Approval: 2/2023

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Annual Course Report: Inorganic chemistry

A. Basic Information

Program Title	Chemical engineering
Department offering the Program	Chemical engineering department
Department Responsible for the Course	Chemical engineering department
Course Code	CHE 111
Year/ Level	One
Specialization	Major
Authorization data of course report	2/2023
Exam Committee Selection Rule	Commissioning of the Institute of Management
External Revision of Examination	--
Lecturers Number:	1

Teaching hours	Lectures	Exercise	laboratory	Student's load
	2	-	2	5

B. Specialized information:

1. Statistics

Subject		Percentage
Students attending the course		100%
Students completing the course		100%
Results	**Passed**	73.26%
	Failed	26.74%
Grading of successful students	**Excellent**	18.6%
	Very Good	1.2%
	Good	14%
	Pass	39.5%

2. Course Teaching:

No.	Topics	Lecture	Exercise	laboratory	Student load
1	Comparative study for the following groups of materials with focusing on the compounds which are important to the industry Practical • Introduction in investigation for Acidic and basic Radical in sample salts • Dilute HCL group Concentrated H_2SO_4 group	6	-	12	21
2	Chemical bonding	4	-	-	14

Annual Course Report: Inorganic chemistry

3	Representative elements (from Gr.1 to gr.7) Practical • Miscellaneous group • Scheme of identification of acidic radical • Investigation for Basic Radical in sample salts group Dil. HCL • Dil. HCL + H_2S group • NH_4OH + NH_4Cl group • NH_4OH + NH_4Cl + H_2S group	12	-	12	21
4	Nobel gases, Lanthanides and Actinides Practical • NH_4OH + NH_4Cl + $(NH_4)_2$ CO_3 group • Scheme of identification of basic Radical	6	-	4	14
Total		28	-	28	70

- Topics taught as a percentage of the content specified: 86%
- Lecturers commitment of the course content: 95%

Used Teaching and Learning Methods

No	Topics	Face-to-Face Lecture	Online Lecture	Flipped Classroom	Presentation and movies	Discussion	Problem solving	Brain storming	Projects	Site visits	Self-learning and Research	Cooperative	Discovering	Modeling	lab
1	Comparative study for the following groups of materials with focusing on the compounds which are important to the industry Practical Practical • Introduction in investigation for Acidic and basic	x	x								x				x

Annual Course Report: Inorganic chemistry

	Radical in sample salts • Dilute HCl group • Concentrated H2SO4 group														
2	Chemical bonding	x	x								x				x
3	Representative elements (from Gr.1 to gr.7) Practical • Miscellaneous group • Scheme of identification of acidic radical • Investigation for Basic Radical in sample salts group Dil. HCl	x	x								x				x
	• Dil. HCl + H_2S group • $NH_4OH + NH_4Cl$ group • NH4OH + NH4Cl + H2S group														
4	Nobel gases, Lanthanides and Actinides Practical • $NH_4OH + NH_4Cl + (NH_4)_2 CO_3$ group • Scheme of identification of basic Radical	x	x								x				x

- Student Assessment:

No.	Evaluation method	Marks
1	Periodic exams	20
2	Student load	20
3	Practical Examination	10
4	Final term examination	75
	Total	125

3. Facilities Required for Teaching and Learning:

No.	Facility	No.	Facility
1	Lecture classroom	5	Data show system

Annual Course Report: Inorganic chemistry

2	Presenter	6	Sound system
3	White board		
4	Lab		

4- Administrative Constraints:

Constraints
No constraints

5- Student Evaluation Result of the Course:

No.	Evaluation Result
1	**62.83%**

6- Course enhancement suggestions

No.	Suggestions
1	**Encourage the students to make some models of atom.**
2	**Cooperate with some laboratories for water analysis.**

7- Comments from external evaluator(s) (if exists):

No.	Comments
1	**بالنسبة لدرجات الامتحان النهائى فالمكتوب فى توصيف المقرر 75درجة بينما المكتوب فى توصيف البرنامج 60درجة فقط... برجاء تصحيح الخطأ**
2	**فى توصيف البرنامج لم يتم تخصيص أى درجات للعملىPractical للمقرر بينما فى توصيف المقرر تم تخصيص 11 درجات للعملى. برجاء المراجعة**
3	**بالنسبة للوسائل المستخدمة للتعليم و التعلم تم ذكر الاحتياج إلىPresenter .. و هى كلمة غير مفهومة**

8- What has been implemented of the student's suggestions in the previous year?

No.	Suggestions
1	**None**

9- What has not been implemented of the suggestions (give reasons)?

No.	Suggestions	Reasons
1	**Support the practical part with virtual laboratories**	**Inability to have a licensed version of programms**

10- What has been implemented from the action plan in the previous year?

No.	Suggestions
1	**Make some scientific visits for petrochemical laboratories.**

11- Action plan for next academic year

No.	Areas of development	Description of development	Completion date	Person responsible
1	**Adding some scientific reference in the electronic library of the institute.**	**Increase the number of refrences that relates with inorganic industries**	**2023-2024**	**Institute management**

Course Coordinator: Assoc.prof. Ramadan Elkateb
Head of Department: Assoc.prof. Hend Elsayed Gadow

Date of Approval: 2/2023

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Annual Course Report
Mathematics 4

A. Basic Information:

Program Title	Chemical Engineering
Department offering the Program	Chemical Engineering Department
Department Responsible for the Course	Basic Science and Engineering Department
Course Code	BAS121
Year/ Level	Level 1
Specialization	Major
Authorization data of course report	7/2023
Exam Committee Selection Rule	Commissioning of the Institute of Management
External Revision of Examination	--
Lecturers Number:	1

Teaching hours	**Lectures**	**Exercise**	**laboratory**	**Student's load**
	2	2	-	5

B. Specialized information:

1. Statistics

Subject		**No.**	**Percentage**
Students attending the course		332	100
Students completing the course		267	80.4
Results	**Passed**	215	80.42
	Failed	52	19.58
Grading of successful students	**Excellent**	39	14.5
	Very Good	36	13.6
	Good	42	15.7
	Pass	98	36.7

2. Course Teaching:

No.	**Topics**	**Lecture**	**Exercise**	**laboratory**	**Student load**
1	Special functions	4	4	-	10
2	Fourier series	2	2	-	5
3	periodic functions and Euler's laws	4	4	-	10
4	Fourier's integrations – solutions of the differential	2	2	-	10

Annual Course Report
Mathematics 4

5	equations by series - solving the partial differential equations using variables separation	2	2	-	5
6	Functions with complex variables – complex quantities algebra	2	2	-	5
7	multiple values functions - the analytical functions and Koshi's theorem	2	2	-	10
8	The complex series	2	2	-	5
9	Taylor and Lorant series - the zeros, unique points and the rest - the infinite series.	8	8	-	10
Total		**28**	**28**	**-**	**70**

- Topics taught as a percentage of the content specified: 100 %
- Lecturers commitment of the course content: 100 %
- Coverage of exam topics to course content: 100 %
- Used Teaching and Learning Methods

No.	Teaching Method	Choice
1	Lectures	√
2	Discussion Sessions	×
3	Information Collection from Different Sources	√
4	Practical	×
5	Research Assignment	x
6	Field Visits	×
7	Case Studies	x
8	Smart Sessions	×

- Student Assessment:

No.	Evaluation Method	Marks
1	Periodic exams	30
2	Student load	30
3	Final term examination	90
Total		**150**

3. Facilities Required for Teaching and Learning:

No.	Facility	Choice
1	Lecture Classroom	√

No.	Facility	Choice
7	Wireless Board	×

Annual Course Report
Mathematics 4

2	Lab Facilities	√	8	Presenter	×
3	White Board	√	9	Sound System	√
4	Data Show System	√	10	Wire-Internet	x
5	Visualizer	×	11	Wireless Internet	√
6	Smart Board	×			

4- Administrative Constraints:

No.	Constraints
1	------

5- Student Evaluation Result of the Course:

No.	Evaluation Result
1	**63.56%**

6- Course enhancement suggestions

No.	Suggestions
1	Enhancement lecture presentation.

7- Comments from external evaluator(s) (if exists):

No.	Comments
1	No comment

8- What has been implemented of the student's suggestions in the previous year?

No.	Suggestions
1	Increase Problems (Development and increase sheets)

9- What has not been implemented of the suggestions (give reasons)?

No.	Suggestions	Reasons
1	-----	-----

10- What has been implemented of the action plan in the previous year?

No.	Areas of development	Description of development	Completion date	Person responsible
1	Increase Problems	Development and increase sheets	2022-2023	Dr Samar Madin

Annual Course Report
Mathematics 4

11- Action plan for next academic year

No.	Areas of development	Description of development	Completion date	Person responsible
1	Lecture Presentation	Add engineering applied problems to increase discussion and interaction between students and lecturer	2023-2024	Dr Samar Madin

Course Coordinator: Assoc. prof. Samar Madian
Head of Department: Assoc. prof. Amal Behairy
Date of Approval: 7/2023

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Annual Course Report: Technical Report Writing

A. Basic Information

Program Title	Chemical Engineering
Department offering the Program	Chemical Engineering Department
Department Responsible for the Course	Basic Science and Engineering Department
Course Code	BAS122
Year/ Level	Level 1
Specialization	Major
Authorization data of course report	8/2023
Exam Committee Selection Rule	Commissioning of the Institute of Management
External Revision of Examination	--
Lecturers Number:	1

Teaching hours	**Lectures**	**Exercise**	**laboratory**	**Student's load**
	2	-	2	4

B. Specialized information:

1. Statistics

Subject		**No.**	**Percentage**
Students attending the course		317	100%
Students completing the course		317	100%
Results	**Passed**	260	82.02%
	Failed	57	17.98%
Grading of successful students	**Excellent**	46	14.5%
	Very Good	52	16.4%
	Good	45	14.2%
	Pass	117	36.9%

2. Course Teaching:

No.	**Topics**	**Lecture**	**Exercise**	**laboratory**	**Student load**
1	Introduction to technical writing. ❖ Define a report, Types of reports, Aim ❖ Common concepts: clarity of Writing, Consistency ❖ Supporting Material Language rules (voice, tense) and Style	4	-	-	8

Annual Course Report: Technical Report Writing

2	Common components of a technical report ❖Organization of report sections Sections function and content	4	-	-	8
3	How to write a technical report ❖ Identify layout, Determine Audience ❖ Assign reference, add non text component ❖ Mechanics of report writing. Quantitative Writing	4	-	-	8
4	Equations, Tables and Figures	2	-	-	4
5	Literature citations	2	-	-	4
6	Using word processing for Writing Report	2	-	8	4
7	Creating slides with presentation graphics programs	2	-	4	4
8	MS Excel Application and power view report command	4	-	8	8
9	Database Report using MS SQL	4	-	8	8
Total		**28**	**-**	**28**	**56**

- Topics taught as a percentage of the content specified: 97%
- Lecturers commitment of the course content 97%
- Coverage of exam topics to course content: 97%

- Used Teaching and Learning Methods

No.	Teaching Methods
1	Lectures
2	Discussion sessions
3	Information collection from different sources
4	practical
5	Research assignment
6	Case study

- Student Assessment:

No.	Evaluation method	Marks
1	Periodic exams	20

Annual Course Report: Technical Report Writing

2	final examination	50
3	Practical	10
4	Student load	20
Total		**100**

3. Facilities Required for Teaching and Learning:

No.	Facility
1	Lecture classroom
2	Presentation
3	White board
4	Data show system
5	Wireless internet
6	Sound system

4- Administrative Constraints:

No.	Constraints
1	------

5- Student Evaluation Result of the Course:

No.	Evaluation Result
1	**80.57%**

6- Course enhancement suggestions

No.	Suggestions
1	Integrating work experiences with education.

7- Comments from external evaluator(s) (if exists):

No.	Comments
1	**No comment**

8- What has been implemented of the student's suggestions in the previous year?

No.	Suggestions
1	Increasing some of scientific reference in the library of the institute

9- What has not been implemented of the suggestions (give reasons)?

No.	Suggestions	Reasons
1	----------	------

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Annual Course Report: Technical Report Writing

10- What has been implemented of the action plan in the previous year?

No.	Areas of development	Description of development	Completion date	Person responsible
1	Increase some of scientific reference in the library of the institute	Add more books in the electronic library of the institute	2022-2023	Lecturer

11- Action plan for next academic year

No.	Areas of development	Description of development	Completion date	Person responsible
1	Add case studies in lectures Add applications of theoretical theory as case studies	Preparing various activities that are compatible with students' inclinations and capabilities using computer programs	2023-2024	Dr. Hany Hashesh Dr. Mohammed ElBindary

Course Coordinator: Dr. Hany Hashesh and Dr. Mohammed ElBindary
Head of Department: Assoc. Prof. Dr. Amal Bahiry
Date of Approval: 8/2023

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Annual Course Report:
Introductions to Information Technology

A. Basic Information

Program Title	Chemical Engineering
Department offering the Program	Chemical Engineering Department
Department Responsible for the Course	Basic Science and Engineering Department
Course Code	BAS123
Year/ Level	Level 1
Specialization	Major
Authorization data of course report	8/2023
Exam Committee Selection Rule	Commissioning of the Institute of Management
External Revision of Examination	--
Lecturers Number:	1

Teaching hours	**Lectures**	**Exercise**	**laboratory**	**Student's load**
	2	2	-	4

B. Specialized information:

1. Statistics

Subject		**No.**	**Percentage**
Students attending the course		320	100%
Students completing the course		320	100%
Results	**Passed**	282	88.12%
	Failed	38	11.88%
Grading of successful students	**Excellent**	43	13.4%
	Very Good	66	20.6%
	Good	50	15.6%
	Pass	123	38.4%

2. Course Teaching:

No.	**Topics**	**Lecture**	**Exercise**	**laboratory**	**Student load**
1	Introduction to information systems	4	4	-	8
2	Software and hardware used in information systems	6	6	-	12
3	Communication and Networks	4	4	-	8
4	Computer Networking	6	6	-	12

Annual Course Report:
Introductions to Information Technology

5	The internet; the foundations, Resources and uses of the internet, Emphasizing practical skills for finding, Reading and authorizing materials	4	4	-	8
6	Privacy Security and Ethics	4	4	-	4
7	Web Design using HTML Language and applications	-	-	-	4
Total		**28**	**28**	**-**	**56**

- Topics taught as a percentage of the content specified: 95 %
- Lecturers commitment of the course content: 100 %
- Coverage of exam topics to course content: 90 %
- Used Teaching and Learning Methods

No.	Teaching Methods
1	Provide regular quality feedback.
2	Use Direct Instruction.
3	Break learning tasks into small steps.
4	Moodle
5	Forming small groups of two or three students within the class grouped according to their level can help with personalizing the teaching while not sacrificing class instruction time

- Student Assessment:

No.	Evaluation Method	Marks
1	Periodic exams	20
2	final examination	50
3	Practical examination	10
4	Student load	20
Total		**100**

3. Facilities Required for Teaching and Learning:

No.	Facility
1	Lecture classroom
2	Presenter
3	Computer lab.

Annual Course Report:
Introductions to Information Technology

4	White board
5	Data show system
6	Wireless internet
7	Sound system
8	Moodle

4- Administrative Constraints:

No.	Constraints
1	----------

5- Student Evaluation Result of the Course:

No.	Evaluation Result
1	**72.33%**

6- Course enhancement suggestions

No.	Suggestions
1	Improve lecture notes
2	Integrating work experiences with education.
3	Transplant And Assess Pedagogy Utilizing Such Technologies to Enhance Students' Learning.

7- Comments from external evaluator(s) (if exists):

No.	Comments
1	----------

8- What has been implemented of the student's suggestions in the previous year?

No.	Suggestions
1	Using online course material.
2	Provide training on how to use a new teaching technology in their classes.
3	Introducing recent topics to the course on a permanent and continuous basis

9- What has not been implemented of the suggestions (give reasons)?

No.	Suggestions	Reasons
1	---------	----------

Annual Course Report:
Introductions to Information Technology

10- What has been implemented of the action plan in the previous year?

No.	Areas of development	Description of development	Completion date	Person responsible
1	Updating the course's educational resources		2022-2023	Institute management
2	-Increase Field Visits -Increase Case studies implementation according to social's needed -increase students' projects	1- Divided Students' groups 2- Identify project names According social's needed and field visits 3- Using suitable program Evaluation projects		Institute management

11- Action plan for next academic year

No.	Areas of development	Description of development	Completion date	Person responsible
1	Using MATLAB Program	Simulate and analysis by using mat lab	2023-2024	Institute management

Course Coordinator: Dr/Amira Elsonbaty
Head of Department: Assoc. prof. Amal Behairy
Date of Approval: 8/2023

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Annual Course Report: Strength of Materials

A. Basic Information

Program Title	Chemical Engineering Program
Department offering the Program	Chemical Engineering Department
Department Responsible for the Course	Basic Science and Engineering Department
Course Code	BAS124
Level / Semester	level 1
Specialization	Major
Authorization date of course report	8/2023
Exam Committee Selection Rule	Commissioning of the Institute Management
External Revision of Examination	--
Lecturers Number	1

Teaching hours	**Lectures**	**Exercise**	**laboratory**	**Student's load**
	2	**2**	**-**	**4**

B. Specialized information:

1. Statistics

Subject		**No.**	**Percentage**
Students attending the course		198	100%
Students completing the course		196	98.99%
Results	**Passed**	156	78.79%
	Failed	42	21.21%
Grading of successful students	**Excellent**	39	25%
	Very Good	16	10.26%
	Good	27	17.31%
	Pass	74	47.43%

2. Course Teaching:

No.	**Topics**	**Lecture**	**Exercise**	**laboratory**	**Student load**
1	Simple states of stress and strain	2	2	-	4
2	Tension and compression stress	4	4	-	8
3	Shear stress in bolts	4	4	-	8
4	Bending and shearing stresses in beams	4	4	-	8
5	Torsion stresses	2	2	-	4
6	Deflection of Beams	4	4	-	8
7	Analysis of thin-walled pressure vessels	4	4	-	8
8	Analysis of plane stress	4	4	-	8
Total		**28**	**28**	**-**	**56**

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Annual Course Report: Strength of Materials

- Topics taught as a percentage of the content specified: 100%
- Lecturers commitment of the course content 90%
- Coverage of exam topics to course content: 95%

- Used Teaching and Learning Methods

No.	Teaching Methods
1	Presentation of the course in digital material
2	Asking small groups to do assignments; each composed of low, medium, and high-performance students.

- Student Assessment:

No.	Evaluation Method	Marks
1	Periodic exams	20
2	Student load	20
3	Final-term examination	60
	Total	**100**

3. Facilities Required for Teaching and Learning:

No.	Facility
1	Lecture classroom
2	seminar
3	White board
4	Data Show system

4- Administrative Constraints:

No.	Constraints
1	----------

5- Student Evaluation Result of the Course:

No.	Evaluation Result
1	**84.7%**

6- Course enhancement suggestions

No.	Suggestions
1	Converting course from traditional course to particular online course
2	Increasing internet networking

Annual Course Report: Strength of Materials

7- Comments from external evaluator(s) (if exists):

No.	Comments
1	----------

8- What has been implemented of the student's suggestions in the previous year?

No.	Suggestions
1	Transplant And Assess Pedagogy Utilizing Such Technologies To Enhance Students' Learning.

9- What has not been implemented of the suggestions (give reasons)?

No.	Suggestions	Reasons
1	References need update	

10- What has been implemented of the action plan in the previous year?

No.	Areas of development	Description of development	Completion date	Person responsible
1	Increase some of scientific reference in the library of the institute	Add more books in the electronic library of institute	2022-2023	Course Coordinator

11- Action plan for next academic year

No.	Areas of development	Description of development	Completion date	Person responsible
1	Self-learning	Enhance searching	2023-2024	Course Coordinator

Course Coordinator: Prof. Dr. A. E. Kabel , Dr. Nesreen Elawadly
Head of Department: Assoc. prof. Amal Behairy
Date of Approval: 8/2023

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Annual Course Report: Organic Chemistry

A. Basic Information

Program Title	Chemical Engineering
Department offering the Program	Chemical Engineering Department
Department Responsible for the Course	Chemical Engineering Department
Course Code	CHE121
Year/ Level	Level 1
Specialization	Major
Authorization data of course report	8/2023
Exam Committee Selection Rule	Commissioning of the Institute of Management
External Revision of Examination	--
Lecturers Number:	1

Teaching hours	Lectures	Exercise	laboratory	Student's load
	2	**-**	**2**	**5**

B. Specialized information:

1. Statistics

Subject		**Percentage**
Students attending the course		100%
Students completing the course		98.8%
Results	**Passed**	93.98%
	Failed	6.02%
Grading of successful students	**Excellent**	20.5%
	Very Good	7.2%
	Good	15.7%
	Pass	50.6%

2. Course Teaching:

No.	Topics	Lecture	Exercise	laboratory	Student load
1	Organic Chemistry: basic concepts	2	-	2	5
2	alkanes	2	-	2	5
3	Stereochemistry	4	-	4	10
4	Alkenes	4	-	4	10
5	Alkynes	2	-	2	5
6	Aromatic Compounds	4	-	4	10
7	Alcohols	2	-	2	5
8	Ethers and alkyl halide	2	-	2	5
9	Aldehydes and Ketones	2	-	2	5

Annual Course Report: Organic Chemistry

10	Carboxylic Acids and Their Derivatives	2	-	2	5
11	Amines and polyfunctional compounds	2	-	2	5
Total		28	-	28	70

- Topics taught as a percentage of the content specified: 90%
- Lecturers commitment of the course content: 95%

Used Teaching and Learning Methods

No	Topics	Face-to-Face Lecture	Online Lecture	Flipped Classroom	Presentation and movies	Discussion	Problem solving	Brain storming	Projects	Site visits	Self-learning and Research	Cooperative	Discovering	Modeling	Lab
1	Organic Chemistry: basic concepts	x	x			x					x				
2	alkanes	x	x			x									
3	Stereochemistry	x	x			x	x				x				
4	Alkenes	x	x			x	x								
5	Alkynes	x	x			x					x				
6	Aromatic Compounds	x	x			x	x								
7	Alcohols	x	x			x	x								
8	Ethers and alkyl halide	x	x			x	x				x				
9	Aldehydes and Ketones	x	x			x	x				x				

Annual Course Report: Organic Chemistry

10	Carboxylic Acids and Their Derivatives	x	x			x	x								
11	Amines and polyfunctional compounds	x	x			x					x				

- Student evaluation:

No.	Evaluation method	Marks
1	**Periodic exams**	**30**
2	**Student load**	**30**
3	**Practical Examination**	**15**
4	**Final term examination**	**75**
Total		150

3. Facilities Required for Teaching and Learning:

No.	Facility	No.	Facility
1	Lecture classroom	5	Data show system
2	Presenter	6	Sound system
3	White board	7	Wireless internet
4	Lab		

4- Administrative Constraints:

No.	Constraints
	There are no constraints

5- Student Evaluation Result of the Course:

No.	Evaluation Result
1	**68.42%**

6- Course enhancement suggestions

No.	Suggestions
1	**Improve lecture notes**
2	**Integrating work experiences with education.**

7- Comments from external evaluator(s) (if exists):

No.	Comments
1	**برجاء مراجعة توزيع درجات المادة فى توصيف البرنامج وتوصيف المقرر حيث يوجد اختلاف.**

Annual Course Report: Organic Chemistry

2	بالنسبة للطرق المستخدمة للتعليم والتعلم تم ذكر (seminar?!) لا يوجد فى توصيف المقرر ما يستدعى الاحتياج لل seminar.

8- What has been implemented of the student's suggestions in the previous year?

No.	Suggestions
1	**Transplant And Assess Pedagogy Utilizing Such Technologies to Enhance Students' Learning.**

9- What has not been implemented of the suggestions (give reasons)?

No.	Suggestions	Reasons
1	**Increasing scientific visits for petrochemical laboratories.**	**Inability to increase cooperation protocols with companies**

10-What has been implemented of the action plan in the previous year?

No.	Suggestions
1	**Make some scientific visits for petrochemical laboratories**

11- Action plan for next academic year

No.	Areas of development	Description of development	Completion date	Person responsible
1	**Increasing scientific visits**	**Make extra cooperation protocols with companies.**	**2023-2024**	**Associate prof. Khaled Samir**

Course Coordinator: Assoc. prof. Khaled Samir

Head of Department: Assoc. prof. Hend Elsayed Gadow

Date of Approval: 8/2023

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المعهد العالى للهندسة والتكنولوجيا
بدمياط الجديدة

Annual Course Report: Physical Chemistry

A. Basic Information

Program Title	Chemical Engineering
Department offering the Program	Chemical Engineering Department
Department Responsible for the Course	Chemical Engineering Department
Course Code	CHE 122
Year/ Level	One
Specialization	Major
Authorization data of course report	7/2023
Exam Committee Selection Rule	Commissioning of the Institute of Management
External Revision of Examination	--
Lecturers Number:	1

Teaching hours	Lectures	Exercise	laboratory	Student's load
	2	-	2	3

B. Specialized information:

1. Statistics

Subject		Percentage
Students attending the course		100%
Students completing the course		100%
Results	**Passed**	73.49%
	Failed	26.51%
Grading of successful students	**Excellent**	16.9%
	Very Good	6%
	Good	13.3%
	Pass	37.3%

2. Course Teaching:

No.	Topics	Lectures	Exercise	Laboratory	Student load
1	Gases (Ideal gas, real gas)	4	-	-	6
2	Solutions (true and colloidal solutions) Practical • The nature of Copper – Ammonia Complex in aqueous Solution	4	-	4	6

Annual Course Report: Physical Chemistry

3	Chemical kinetics (Rate of reaction) Practical • Study of Homogeneous Catalytic Decomposition of H_2O_2 by Initial Rate Method • Catalytic decomposition H_2O_2 • Determination of The order of the reaction between H_2O_2 and HI	10	-	20	15
4	Chemical equilibrium	4	-	-	6
5	Surface chemistry (Adsorption) Practical • Adsorption of Oxalic Acid on Charcoal	4	-	4	6
6	Chemical thermodynamic	2	-	-	3
Total		28	-	28	42

- Topics taught as a percentage of the content specified: 90%
- Lecturers commitment of the course content: 95%

Used Teaching and Learning Methods

No	Topics	Face-to-Face Lecture	Online Lecture	Flipped Classroom	Presentation and movies	Discussion	Problem solving	Brain storming	Projects	Site visits	Self-learning and Research	Cooperative	Discovering	Modeling	Lab
1	Gases (Ideal gas, real gas)	x	X								x				

Annual Course Report: Physical Chemistry

2	Solutions (true and colloidal solutions) Practical • The nature of Copper – Ammonia Complex in aqueous Solution	x	X												X
3	Chemical kinetics (Rate of reaction) Practical • Study of Homogeneous Catalytic Decomposition of H_2O_2 by Initial Rate Method • Catalytic decomposition H_2O_2 • Determination of The order of the reaction between H_2O_2 and HI	x	X			X									X
4	Chemical equilibrium	x	x												x
5	Surface chemistry (Adsorption) Practical • Adsorption of Oxalic Acid on Charcoal	x	X												x
6	Chemical thermodynamic	x	X			X									

Annual Course Report: Physical Chemistry

- Student Assessment:

No.	Evaluation method	Marks
1	Periodic exams	30
2	Student load	30
3	Practical Examination	15
4	Final term examination	75
	Total	150

3. Facilities Required for Teaching and Learning:

No.	Facility	No.	Facility s
1	Lecture classroom	5	Data show system
2	Presenter	6	Sound system
3	White board		
4	Lab		

4- Administrative Constraints:

Constraints
No constraints

5- Student Evaluation Result of the Course:

No.	Evaluation Result
1	**33.33%**

6- Course enhancement suggestions

No.	Suggestions
1	**Cooperate with some companies to exhibit the modern technology for students.**

7- Comments from external evaluator(s) (if exists):

No.	Comments
1	**فى توصيف البرنامج تم تخصيص 60درجة للامتحانات الدورية و 75درجة للامتحان النهائى .المجموع الكلى ...135 المجموع الكلى المكتوب175 فبرجاء المراجعة و تصحيح الخطأ**
2	**فى توصيف المقرر تم تخصيص 70درجة للامتحان العملى و هى غير موجودة فى توصيف البرنامج و غالبا هذا هو سبب الخطأ فى النقطة أعلاه**
3	**تم تخصيص 2ساعة للمحاضرات و 2ساعة معمل و لم يخصص أى ساعات للتمارين!!**
4	**بالنسبة للوسائل المستخدمة للتعليم و التعلم تم ذكر الاحتياج إلى Presenter.. و هى كلمة غير مفهومة**

8- What has been implemented of the student's suggestions in the previous year?

No.	Suggestions
1	**None**

Annual Course Report: Physical Chemistry

9- What has not been implemented of the suggestions (give reasons)?

No.	Suggestions	Reasons
1	**Simulate a model for any type of reaction.**	Lack of semester time

10- What has been implemented from the action plan in the previous year?

No.	Suggestions
1	**Studying practically how to determine the reaction order and half life time for chemical reactions.**

11- Action plan for next academic year

No.	Areas of development	Description of development	Completion date	Person responsible
1	**Adding some scientific reference in the electronic library of the institute.**	**Increase the number of references that deals with reaction mechanism**	**2023-2024**	**Institute management**

Course Coordinator: Dr. Mohamed Fakeeh

Head of Department: Assoc.prof. Hend Elsayed Gadow

Date of Approval: 7/2023

وزارة التعليم العالي
المعهد العالي للهندسة والتكنولوجيا
بدمياط الجديدة

قسم الهندسة الكيميائية

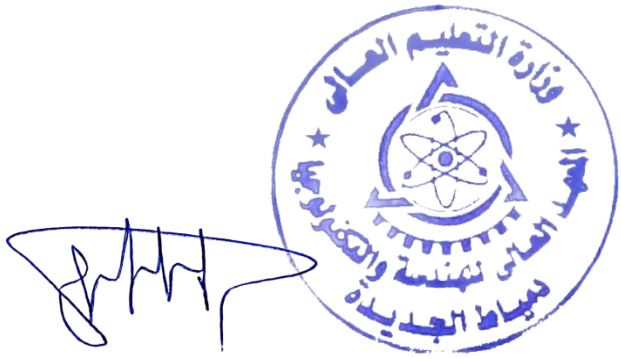
تقارير المقررات قسم الهندسة الكيميائية

إعتماد مجلس القسم لتقارير المقررات قسم الهندسة الكيميائية

بتاريخ 2023/8/28

إعتماد المجلس العلمي لتقارير المقررات قسم الهندسة الكيميائية

بتاريخ 2023/11/6



وزارة التعليم العالي
المعهد العالي للهندسة والتكنولوجيا
بدمياط الجديدة

2022- 2023

تقارير المقررات لقسم الهندسة الكيميائية

Head of the department	Quality Assurance Unit Manager	Dean of the institute
Assoc.Prof.Dr./ Hend Elsayed Gadow	Assoc.Prof.Dr./ Ramadan Abdelghany Elkateb	Prof.Dr./ Osami Elsaeed Rageh

وزارة التعليم العالي
المعهد العالي للهندسة والتكنولوجيا
بدمياط الجديدة

الفرقة الثانية

Ministry of Higher Education
The Higher Institute of
Engineering and Technology
New Damietta

وزارة التعليم العالى
المعهد العالى للهندسة والتكنولوجيا
بدمياط الجديدة

Annual Course Report
Engineering Probability and Statistics

A. Basic Information:

Program Title	Chemical Engineering
Department offering the Program	Chemical Engineering Department
Department Responsible for the Course	Basic Science and Engineering Department
Course Code	BAS211
Year/ Level	Level 2
Specialization	Major
Authorization data of course report	2/2023
Exam Committee Selection Rule	Commissioning of the Institute of Management
External Revision of Examination	--
Lecturers Number:	1

Teaching hours	**Lectures**	**Exercise**	**laboratory**	**Student's load**
	2	**2**	**-**	**4**

B. Specialized information:
1. Statistics

Subject		**No.**	**Percentage**
Students attending the course		246	100%
Students completing the course		246	100%
Results	**Passed**	234	95.12%
	Failed	12	4.88%
Grading of successful students	**Excellent**	56	22.8%
	Very Good	52	21.2%
	Good	48	19.5%
	Pass	78	31.7%

2. Course Teaching:

No.	**Topics**	**Lecture**	**Exercise**	**laboratory**	**Student load**
1	Probability theory.	4	4	-	12
2	Discrete and continuous probability distributions.	6	6	-	12
3	Statistics in engineering.	4	4	-	10
4	Descriptive Statistics Sampling distributions. Estimation and confidence intervals	2	2	-	12
5	Hypothesis testing. Simple	12	12	-	10

Annual Course Report
Engineering Probability and Statistics

	regression.				
Total		**28**	**28**	**-**	**56**

- Topics taught as a percentage of the content specified: 90 %
- Lecturers commitment of the course content: 100 %
- Coverage of exam topics to course content: 90 %
- Used Teaching and Learning Methods

No.	Teaching Method	Choice
1	Lectures	√
2	Discussion Sessions	×
3	Information Collection from Different Sources	√
4	Practical	x
5	Research Assignment	x
6	Field Visits	×
7	Case Studies	x
8	Smart Sessions	×

- Student Assessment:

No.	Evaluation Method	Marks
1	Periodic exams	20
2	Student load	20
3	Final term examination	60
	Total	**100**

3. Facilities Required for Teaching and Learning:

No.	Facility	Choice
1	Lecture Classroom	√
2	Lab Facilities	√
3	White Board	√
4	Data Show System	√
5	Visualizer	×
6	Smart Board	×

No.	Facility	Choice
7	Wireless Board	×
8	Presenter	×
9	Sound System	√
10	Wire-Internet	x
11	Wireless Internet	√

4- Administrative Constraints:

No.	Constraints
1	-------

5- Student Evaluation Result of the Course:

No.	Evaluation Result
1	**81.65%**

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Annual Course Report
Engineering Probability and Statistics

6- Course enhancement suggestions

No.	Suggestions
1	Enhancement lecture presentation.

7- Comments from external evaluator(s) (if exists):

No.	Comments
1	No comment

8- What has been implemented of the student's suggestions in the previous year?

No.	Suggestions
1	Increase Problems (Development and increase sheets)

9- What has not been implemented of the suggestions (give reasons)?

No.	Suggestions	Reasons
1	All suggestions have been implemented	-----

10- What has been implemented of the action plan in the previous year?

No.	Areas of development	Description of development	Completion date	Person responsible
1	Increase Problems	Development and increase sheets	2022-2023	Dr Samar Madin

11- Action plan for next academic year

No.	Areas of development	Description of development	Completion date	Person responsible
1	Lecture Presentation	Add engineering applied problems to increase discussion and interaction between students and lecturer	2023-2024	Dr Samar Madin

Course Coordinator: Dr: Samar Madin
Head of Department: Associate prof. Amal Behary
Date of Approval: 2/2023

Annual Course Report: Fluid Mechanics

A. Basic Information

Program Title	Chemical Engineering
Department offering the Program	Chemical Engineering Department
Department Responsible for the Course	Basic Science and Engineering Department
Course Code	BAS212
Year/ Level	Level 2
Specialization	Major
Authorization data of course report	2/2023
Exam Committee Selection Rule	Commissioning of the Institute of Management
External Revision of Examination	--
Lecturers Number:	1

Teaching hours	**Lectures**	**Exercise**	**laboratory**	**Student's load**
	2	**1**	**1**	**4**

B. Specialized information:

1. Statistics

Subject		**No.**	**Percentage**
Students attending the course		241	100.0%
Students completing the course		241	100%
Results	Passed	226	93.78%
	Failed	15	6.22%
Grading of successful students	Pass	82	34%
	Good	67	27.8%
	Very Good	55	22.8%
	Excellent	22	9.1%

2. Course Teaching:

No.	**Topics**	**Lecture**	**Exercise**	**laboratory**	**Student load**
1	Fluid properties, fluid statics, kinematics	2	2	2	6
2	Fluid dynamics including energy and Momentum equations	4	2	2	8
3	Dimensional analysis, Laminar flow, Turbulent flow and its applications	2	2	2	6
4	Forces on immersed bodies, Introduction to compressible flow	4	2	2	8
5	Applications to filtration and fluidization	4	2	2	8

Annual Course Report: Fluid Mechanics

6	Laboratory course in Fluid Mechanics includes experiments on venture-meter, friction losses in pipes	6	2	2	10
7	Center of pressure, Flow measuring apparatus, multi-pump test (Pump characteristics) and losses in piping systems	6	2	2	10
Total		**28**	**14**	**14**	**56**

- Topics taught as a percentage of the content specified: 95%
- Lecturers commitment of the course content: 98 %

- Used Teaching and Learning Methods

No.	Teaching Methods	Choice
1	Face-to-Face Lecture	√
2	Discussion sessions	√
3	Information collection from different sources	√
4	Research assignment	√
5	Online Lecture	√
6	Problem solving	√
7	Brain storming	√
9	Self-learning and Research	√
10	Lab	√

- Student Assessment:

No.	Evaluation method	Marks
1	Periodic exams	30
2	final examination	75
3	Practical examination	15
4	Student load	30
	Total	**150**

3. Facilities Required for Teaching and Learning:

No.	Facility	Choice
1	Lecture Classroom	√
2	White Board	√
3	Data Show System	√
4	Electronic learning model	√
5	Presenter	√

No.	Facility	Choice
6	Sound System	√
7	Wire-Internet	√
8	Wireless Internet	√

Annual Course Report: Fluid Mechanics

4- Administrative Constraints:

No.	Constraints
1	-------

5- Student Evaluation Result of the Course:

No.	Evaluation Result
1	90%

6- Course enhancement suggestions

No.	Suggestions
1	The course is expanded from theoretical and software engineer views to include a piratical work view the course.
2	Increase collaborative teaching to solve practical tasks and increase field visits

7- Comments from external evaluator(s) (if exists):

No.	Comments
1	----------

8- What has been implemented of the student's suggestions in the previous year?

No.	Suggestions
1	Provide training on how to use a new teaching technology in their classes.

9- What has not been implemented of the suggestions (give reasons)?

No.	Suggestions	Reasons
1	More field visits for more learning about the course	Increasing understanding of the course

10- What has been implemented of the action plan in the previous year?

No.	Areas of development	Description of development	Completion date	Person responsible
1	Increase some of scientific reference in the library of the institute	Add more books in the electronic library of institute	2022-2023	Assoc. Prof. Mohamed Gabr

Annual Course Report: Fluid Mechanics

11- Action plan for next academic year

No.	Areas of development	Description of development	Completion date	Person responsible
1	**Teaching methods**	**Make a visit to the fluid mechanics lab in the Ministry of Water Resources and Irrigation**	**2023-2024**	**Assoc. Prof. Mohamed Gabr, Prof. Mohamed Elkiki**

Course Coordinator: Assoc. Prof. Mohamed Gabr, Prof. Mohamed Elkiki.

Head of Department: Assoc. Prof. Amal Elbehairy.

Date of Approval: 2/2023

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Annual Course Report: Engineering Economy

A. Basic Information

Program Title	Chemical Engineering
Department offering the Program	Chemical Engineering Department
Department Responsible for the Course	Basic Science and Engineering Department
Course Code	BAS213
Year/ Level	Level 2
Specialization	Major
Authorization data of course report	2/2023
Exam Committee Selection Rule	Commissioning of the Institute of Management
External Revision of Examination	--
Lecturers Number:	1

Teaching hours	**Lectures**	**Exercise**	**laboratory**	**Student's load**
	2	1	-	3

B. Specialized information:

1. Statistics

Subject		**No.**	**Percentage**
Students attending the course		248	100%
Students completing the course		248	100%
Results	Passed	214	86.29%
	Failed	34	13.71%
Grading of successful students	Excellent	14	5.6%
	Very Good	23	9.3%
	Good	47	19%
	Pass	130	52.4%

2. Course Teaching:

No.	**Topics**	**Lecture**	**Exercise**	**laboratory**	**Student load**
1	Basic concepts of engineering economy	4	2	-	6
2	Break even analysis	4	**2**	-	6
3	Time value of money	6	3	-	9
4	Depreciation and replacement analysis	4	2	-	6
5	Selection between alternatives	6	3	-	9
6	Productivity	4	2	-	6
	Total	**28**	**14**	**-**	**42**

Annual Course Report: Engineering Economy

- Topics taught as a percentage of the content specified: 100 %
- Lecturers commitment of the course content: 90 %
- Coverage of exam topics to course content: 90 %

- Used Teaching and Learning Methods

No.	Teaching Methods
1	Hybrid learning (Lectures - ELearning)
2	Expeditionary Learning
3	Personalized Learning
4	Inquiry-based Learning
5	Cooperative learning

- Student Assessment:

No.	Evaluation method	Marks
1	Periodic exams	20
2	Student load	20
3	Final-term examination	60
	Total	**100**

3. Facilities Required for Teaching and Learning:

No.	Facility	No.	Facility
1	Lecture classroom	4	Data show system
2	Presenter	5	Sound system
3	White board	6	Moodle

4- Administrative Constraints:

No.	Constraints
1	------

5- Student Evaluation Result of the Course:

No.	Evaluation Result
1	77.18%

6- Course enhancement suggestions

No.	Suggestions
1	Mention to sources, references and web sites to update the general material of the course.
2	Introducing recent topics to the course on a permanent and continuous basis

7- Comments from external evaluator(s) (if exists):

No.	Comments
1	يجب توحيد كتابة المراجع وتحديثها وكتابها بشكل سليم باحتوائها على كل اسم دار النشر وسنة الاصدار ورقم الاصدار.

Annual Course Report: Engineering Economy

8- What has been implemented of the student's suggestions in the previous year?

No.	Suggestions
1	Adding new applications and practical examples
2	Increasing student interaction and participation when implementing the course
3	-Increase Case studies implementation according to social's needed

9- What has not been implemented of the suggestions (give reasons)?

No.	Suggestions	Reasons
1	----------	---------

10- What has been implemented of the action plan in the previous year?

No.	Areas of development	Description of development	Completion date	Person responsible
1	Updating the course's educational resources		2022-2023	Scientific departments
2	-Increase Case studies implementation according to social's needed	1- Divided Students' groups 2-Evaluation projects		staff

11- Action plan for next academic year

No.	Areas of development	Description of development	Completion date	Person responsible
1	Make a visit to banks to learn how to calculate household, quarterly and semi-annual interest and the value of profits.		2023-2024	staff

Course Coordinator: Dr. Rania H.Elabd
Dr.Hany Hashish
Head of Department: Assoc.prof. Amal Elbehairy
Date of Approval: 2/2023

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Annual Course Report: Heritage of Egyptian Literature

A. Basic Information

Program Title	Chemical Engineering
Department offering the Program	Chemical Engineering Department
Department Responsible for the Course	Chemical Engineering Department
Course Code	BAS214
Year/ Level	Level 2
Specialization	Major
Authorization data of course report	2/2023
Exam Committee Selection Rule	Commissioning of the Institute of Management
External Revision of Examination	--
Lecturers Number:	1

Teaching hours	Lectures	Exercise	laboratory	Student's load
	2	-	-	3

B. Specialized information:

1. Statistics

Subject			Percentage
Students attending the course		60	100%
Students completing the course		60	100%
Results	**Passed**	60	100%
	Failed	0	0%
Grading of successful students	**Excellent**	42	70%
	Very Good	8	13.3%
	Good	7	11.7%
	Pass	3	5%

2. Course Teaching:

No.	Topics	Lecture	Exercise	laboratory	Student load
1	تعريف الطالب بالتميز الإقليمي لمصر في العصور القديمة والوسطى والحديثة وأثرعبقرية المكان على الفكر والوعى المصري وتجلياته في التراث الأدبي شعرا ونثرا من خلال الدرس التاريخي والنصي للأدب المصري في مراحله المختلفة.	4	-	-	6
2	مصر وتراثها الأدبي من منظورحضاري وإبداعي - المكتبة				

Annual Course Report: Heritage of Egyptian Literature

	التراثية المصـــرية من منظور تاريخي متجدد - دراســـة مفهوم وضـعية العصـورالوسـطى في مصـر والفرق بينها وبين العصور الوســطى في أوروبا - التراث الجغرافي المصـــري وأدب الرحلة في كتابات مصرية	6	-	-	9
3	التأليف الموسوعي في مصر والصياغة الأدبية في فن الموســـوعـات – الظواهرالأدبيـــة الغـالبـــة على الأدب المصري - مناهج دراسة التراث الأدبي المصري ودلالاته – مدارس التأليف والإبداع في تاريخ الفكر المصري	8	-	-	12
4	- مجالات الإبداع في الشعر المصري)الطبيعة المصرية - أدب الحروب الموضوعات الجديدة والبيئة المصرية(- مدارس الكتابة الفنية على المستوى الرسمي وغيرها	6	-	-	9
5	- تتبع التطبيق على النص والتحليل من خلال أبرز شعراء وكتاب التراث المصـــري من أمثال ابن نباته المصـــري وابن سـناءالملك وصـولا إلى أدوار الدكتور محمد كامل حسـين والأســـتاذ أمين الخولى والدكتور جمال حمدان في تناول التراث الأدبي المصري بالتحليل والدراسة المنهجية حول عبقرية المكان.	4	-	-	6
	Total	**28**	**-**	**-**	**42**

- Topics taught as a percentage of the content specified: 96%
- Lecturers commitment of the course content: 96%

Used Teaching and Learning Methods

No	Topics	Face-to-Face Lecture	Online Lecture	Flipped Classroom	Presentation and movies	Discussion	Problem solving	Brain storming	Projects	Site visits	Self-learning and Research	Cooperative	Discovering	Modeling	lab

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Annual Course Report: Heritage of Egyptian Literature

1	تعريف الطالب بالتميز الإقليمي لمصر في العصور القديمة والوسطى والحديثة وأثرعبقرية المكان على الفكر والوعى المصري وتجلياته في التراث الأدبي شعرا ونثرا من خلال الدرس التاريخي والنصي للأدب المصري في مراحله المختلفة.	x	x			x									
2	مصر وتراثها الأدبي من منظورحضاري وإبداعي - المكتبة التراثية المصرية من منظور تاريخي متجدد - دراسة مفهوم وضعية العصورالوسطى في مصر والفرق بينها وبين العصور الوسطى في أوروبا - التراث الجغرافي المصري وأدب الرحلة في كتابات مصرية	x	x			x									
3	التأليف الموسوعي في مصر والصياغة الأدبية في فن الموسوعات – الظواهرالأدبيةالغالبة على الأدب المصري - مناهج دراسة التراث الأدبي المصري ودلالاته – مدارس التأليف والإبداع في تاريخ الفكر المصري	x	x	x		x					x				
4	- مجالات الإبداع في الشعر المصري)الطبيعة المصرية - أدب الحروب الموضوعات الجديدة والبيئة المصرية(- مدارس الكتابة الفنية على المستوى الرسمي وغيرها	x	x			x					x				

Annual Course Report: Heritage of Egyptian Literature

5	- تتبع التطبيق على النص والتحليل من خلال أبرز شعراء وكتاب التراث المصري من أمثال ابن نباته المصري وابن سناءالملك وصولا إلى أدوار الدكتور محمد كامل حسين والأستاذ أمين الخولى والدكتور جمال حمدان في تناول التراث الأدبي المصري بالتحليل والدراسة المنهجية حول عبقرية المكان.	x	x		x	x					x				

- Student Assessment:

No.	evaluation method	Marks
1	Periodic exams	10
2	Student load	10
3	Final term examination	30
	Total	**50**

3. Facilities Required for Teaching and Learning:

No.	Facility	No.	Facility
1	Lecture classroom	4	Data show system
2	Presenter	5	Sound system
3	White board		

4- Administrative Constraints:

No.	Constraints
1	**There are no constraints**

5- Student Evaluation Result of the Course:

No.	Evaluation Result
1	**89.25%**

6- Course enhancement suggestions

No.	Suggestions
1	**Make all lectures available as videos and pdf.**
2	**More interact with student through MOODEL.**

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7- Comments from external evaluator(s) (if exists):

No.	Comments
1	بالنسبة للوسائل المستخدمة للتعليم والتعلم تم ذكرالاحتياج إلىPresenter وهى كلمة غير مفهومة.

8- What has been implemented of the student's suggestions in the previous year?

No.	Suggestions
1	Self-learning: (Enhance searching).

9- What has not been implemented of the suggestions (give reasons)?

No.	Suggestions	Reasons
1	-	-

10- What has been implemented of the action plan in the previous year?

No.	Suggestions
1	Self-learning tasks to enhance searching

11- Action plan for next academic year

No.	Areas of development	Description of development	Completion date	Person responsible
1	Use the digital library for research	Allocate part of the lectures in the digital library	2023-2024	Dr. Mohammed ElBindary

Course Coordinator: Dr. Mohammed El-Bindary
Head of Department: Assoc. Prof. Dr. Hend Gadow
Date of Approval: 2/2023

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Annual Course Report: Chemical Engineering Principles I

A. Basic Information

Program Title	Chemical Engineering
Department offering the Program	Chemical Engineering Department
Department Responsible for the Course	Chemical Engineering Department
Course Code	CHE211
Year/ Level	Level 2
Specialization	Major
Authorization data of course report	2/2023
Exam Committee Selection Rule	Commissioning of the Institute of Management
External Revision of Examination	--
Lecturers Number:	1

Teaching hours	**Lectures**	**Exercise**	**laboratory**	**Student's load**
	2	2	-	5

B. Specialized information:

1. Statistics

Subject		**Percentage**
Students attending the course		100%
Students completing the course		100%
Results	**Passed**	87.1%
	Failed	12.9%
Grading of successful students	**Excellent**	3.2%
	Very Good	6.5%
	Good	27.4%
	Pass	50%

2. Course Teaching:

No.	**Topics**	**Lecture**	**Exercise**	**laboratory**	**Student load**
1	Units and dimensions	4	4	-	10
2	Basic concepts of material balances	8	8	-	20
3	Balances on non-reactive and reactive processes	12	12	-	28
4	Application of material balances on unit operations.	4	4	-	12
Total		28	28	-	70

- Topics taught as a percentage of the content specified: 89%
- Lecturers commitment of the course content: 94%

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Annual Course Report: Chemical Engineering Principles I

- Used Teaching and Learning Methods

No	Topics	Face-to-Face Lecture	Online Lecture	Flipped Classroom	Presentation and movies	Discussion	Problem solving	Brain storming	Projects	Site visits	Self-learning and Research	Cooperative	Discovering	Modeling	Lab
1	Dimensions and units	x	x			x	x								
2	Basic concepts of material balances	x	x			x	x	x							
3	Balances on non-reactive and reactive processes	x	x			x	x	x							
4	Application of material balances on unit operations.	x	x			x	x	x							

- Student evaluation:

No.	Evaluation method	Marks
1	Periodic exams	30
2	Student load	30
3	Final term examination	90
Total		150

3. Facilities Required for Teaching and Learning:

No.	Facility	No.	Facility
1	Lecture classroom	5	Data show system
2	Presenter	6	Sound system
3	White board		
4	Lab		

Annual Course Report: Chemical Engineering Principles I

4- Administrative Constraints:

No.	Constraints
1	There are no constraints

5- Student Evaluation Result of the Course:

No.	Evaluation Result
1	50%

6- Course enhancement suggestions

No.	Suggestions
1	Introducing real models of industrial applications.

7- Comments from external evaluator(s) (if exists):

No.	Comments
1	يجب ان يتم مراجعة اهداف المقرر وكذلك مخرجات التعلم حيث انه لا علاقة لهم بمحتوى المقرر
2	فى اهداف المقرر تم ذكر addressing process dynamic and control challenges والذى لايمكن ان يكون من ضمن اهداف المقرر الموجود فى هذه المرحلة من الدراسة
3	ما هو المقصود بكلمة Presenter الموجودة فى اغلب المواد تحت الطرق أو الوسائل المستخدمة فى التعليم والتعلم

8- What has been implemented from the student's suggestions in the previous year?

No.	Suggestions
1	Opening the field for brainstorming and discussion about the topics of the curriculum.
2	Integrating work experiences with education.

9- What has not been implemented from the suggestions (give reasons)?

No.	Suggestions	Reasons
1	Introducing real models of industrial applications.	Lack of academic time.

10-What has been implemented of the action plan in the previous year?

No.	Suggestions
1	Review writing references for courses in a uniform style

11- Action plan for next academic year

No.	Areas of development	Description of development	Completion date	Person responsible
1	Relate the theoretical study by the practical field	Visits to different plants.	2023-2024	Institute management

Course Coordinator: Dr. Sohier Abo Bakr
Head of Department: Asso.prof. Hend Elsayed Gadow
Date of Approval: 2/2023

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Annual Course Report: material science and metallurgy

A. Basic Information

Program Title	Chemical Engineering
Department offering the Program	Chemical Engineering Department
Department Responsible for the Course	Chemical Engineering Department
Course Code	CHE 212
Year/ Level	Level 2
Specialization	Major
Authorization data of course report	2/2023
Exam Committee Selection Rule	Commissioning of the Institute of Management
External Revision of Examination	--
Lecturers Number:	1

Teaching hours	**Lectures**	**Exercise**	**laboratory**	**Student's load**
	2	2	-	3

B. Specialized information:

1. Statistics

Subject		**Percentage**
Students attending the course		100%
Students completing the course		100%
Results	**Passed**	95.16%
	Failed	4.84%
Grading of successful students	**Excellent**	29%
	Very Good	32.3%
	Good	21%
	Pass	12.9%

2. Course Teaching:

No.	**Topics**	**Lecture**	**Exercise**	**laboratory**	**Student load**
1	Structure of metals and alloys(crystalline structure of metals-types of deformation)	10	10	-	15
2	glasses and ceramics of Structure (theories and applications)	4	4	-	6
3	Structure of polymers	4	4	-	6
4	Thermodynamics of condensed phase(equilibrium phase diagrams of binary systems, the iron carbon phase diagram, phase transformations in steel)	4	4	-	6
5	metals and alloys(Casting- Melting- Forming Operations- Solidification)	6	6	-	9

Annual Course Report: material science and metallurgy

Total	28	28	-	42

- Topics taught as a percentage of the content specified: 90%
- Lecturers commitment of the course content: 95%

Used Teaching and Learning Methods

No	Topics	Face-to-Face Lecture	Online Lecture	Flipped Classroom	Presentation and movies	Discussion	Problem solving	Brain storming	Projects	Site visits	Self-learning and Research	Cooperative	Discovering	Modeling	lab
1	Structure of metals and alloys(crystalline structure of metals-types of deformation)	x	x			x					x				
2	Structure of ceramics and glasses (theories and applications)	x	x	X		x					x				
3	Structure of polymers	x	x			x					x				
4	Thermodynamics of condensed phase(equilibrium phase diagrams of binary systems, the iron carbon phase diagram, phase transformations in steel)	x	x			x	X								
5	metals and alloys(Casting-Melting- Forming Operations-Solidification)	x	x			x	X								

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- Student Assessment:

No.	Evaluation method	Marks
1	Periodic exams	20
2	Student load	20
3	Final term examination	60
Total		**100**

3. Facilities Required for Teaching and Learning:

No.	Facility	No.	Facility
1	Lecture classroom	4	Data show system
2	Presenter	5	Sound system
3	White board		

4- Administrative Constraints:

No.	Constraints
1	-

5- Student Evaluation Result of the Course:

No.	Evaluation Result
1	**86.22%**

6- Course enhancement suggestions

No.	Suggestions
1	**Make some scientific visits plants**
2	**Increase the simulation model for material**

7- Comments from external evaluator(s) (if exists):

No.	Comments
1	**برجاء مراجعة مخرجات التعلم**
2	**ما هو المقصود بكلمة Presenterالموجودة فى أغلب المواد تحت الطرق أوالوسائل المستخدمة فى التعليم و التعلم؟**

8- What has been implemented of the student's suggestions in the previous year?

No.	Suggestions
1	**Increase the problems in the course**

9- What has not been implemented of the suggestions (give reasons)?

No.	Suggestions	Reasons
1	-	-

Annual Course Report: material science and metallurgy

10- What has been implemented from the action plan in the previous year?

No.	Suggestions
1	Studying practically how to determine the molecular weight of polymer and know the actual processing sequences for casting processes.

11- Action plan for next academic year

No.	Areas of development	Description of development	Completion date	Person responsible
1	Integrating work experiences with education.	Increased visits to metallurgy-related plants	2023-2024	Institute management

Course Coordinator: Assoc.prof. Hend Elsayed Gadow
Head of Department: Assoc.prof. Hend Elsayed Gadow
Date of Approval: 2/2023

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Annual Course Report: Principles of engineering design

A. Basic Information

Program Title	Chemical Engineering
Department offering the Program	Chemical Engineering Department
Department Responsible for the Course	Chemical Engineering Department
Course Code	CHE213
Year/ Level	Level 2
Specialization	Major
Authorization data of course report	4/2023
Exam Committee Selection Rule	Commissioning of the Institute of Management
External Revision of Examination	--
Lecturers Number:	1

Teaching hours	Lectures	Exercise	laboratory	Student's load
	2	**2**	**-**	**3**

B. Specialized information:

1. Statistics

Subject		**Percentage**
Students attending the course		100%
Students completing the course		100%
Results	**Passed**	91.67%
	Failed	8.33%
Grading of successful students	**Excellent**	5%
	Very Good	18.3%
	Good	18.3%
	Pass	50%

2. Course Teaching:

No.	Topics	Lecture	Exercise	laboratory	Student load
1	Design definition Classifications of machine design Mechanical Elements Design General considerations in Machine design Phases and Interactions of the Design Process Common Dimensioning Terminology Standards and Codes	2	2	-	3

Annual Course Report: Principles of engineering design

2	Forces and Stress Analysis Load and Stress Analysis, Stresses, strains and material properties Stresses and strains Analysis	6	6	-	9
3	Principal Stresses and Shear Stresses Hoop Stress, (Pressure vessels, and Pipelines) Bearing Stress	2	2	-	3
4	Torsional Shear Stress Impact Stress Bending Stress in Straight Beams Buckling of Columns	4	4	-	6
5	Power Screw Multiple Threaded Screws Terminology of Power Screw Torque Requirement, Lifting and Lowering Design of Screw and Nut, Design of Screw Jack	4	4	-	6
6	Flexible Drives Belt Drives	2	2	-	3
7	Flat Belt Pulleys Types of Pulleys for Flat Belts Cast Iron Pulleys Steel Pulleys Wooden Pulleys Rolling-Contact Bearings	6	6	-	9
8	Sliding Contact Bearings Journal Bearings Gear Drives	2	2	-	3
Total		**28**	**28**	**-**	**42**

- Topics taught as a percentage of the content specified: 92%
- Lecturers commitment of the course content: 97%

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- Used Teaching and Learning Methods

No	Topics	Face-to-Face Lecture	Online Lecture	Flipped Classroom	Presentation and movies	Discussion	Problem solving	Brain storming	Projects	Site visits	Self-learning and Research	Cooperative	Discovering	Modeling	lab
1	Design definition Classifications of machine design Mechanical Elements Design General considerations in Machine design Phases and Interactions of the Design Process Common Dimensioning Terminology Standards and Codes	x	x	x		x									
2	Forces and Stress Analysis Load and Stress Analysis, Stresses, strains and material properties Stresses and strains Analysis	x	x			x	x								
3	Principal Stresses and Shear Stresses Hoop Stress, (Pressure vessels, and Pipelines) Bearing Stress	x	x			x	x	x							

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4	**Torsional Shear Stress Impact Stress Bending Stress in Straight Beams Buckling of Columns**	x	x			x	x								
5	**Power Screw Multiple Threaded Screws Terminology of Power Screw Torque Requirement, Lifting and Lowering Design of Screw and Nut, Design of Screw Jack**	x	x			x	x	x							
6	**Flexible Drives Belt Drives**	x	x			x	x								
7	**Flat Belt Pulleys Types of Pulleys for Flat Belts Cast Iron Pulleys Steel Pulleys Wooden Pulleys Rolling-Contact Bearings**														
8	**Sliding Contact Bearings Journal Bearings Gear Drives**	x	x			x	x	x							

- Student evaluation:

No.	Assessment method	Weights
1	Periodic exams	20
2	Student load	20
3	Final term examination	60
Total		**100**

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3. Facilities Required for Teaching and Learning:

No.	Facility	No.	Facility
1	Lecture classroom	4	Data show system
2	Presenter	5	Sound system
3	White board		

4- Administrative Constraints:

No.	Constraints
1	**There are no constraints**

5- Student Evaluation Result of the Course:

No.	Evaluation Result
1	**65.25%**

6- Course enhancement suggestions

No.	Suggestions
1	**Integrating work experiences with education.**
2	**Student participation in research and information collection.**
3	**Allocate time within the lecture to ask questions about the previously explained topics.**

7- Comments from external evaluator(s) (if exists):

No.	Comments
1	**بالنسبة لطرق التدريس والتعلم للطلبة من ذوى الاحتياجات الخاصة فقد تم ذكر Wed communication with studentsما هو المقصود بكلمة Wed ؟ هل المقصود Web ؟**
2	**ما هو المقصود بكلمة Presenter الموجودة فى أغلب المواد تحت الطرق أو الوسائل المستخدمة فى التعليم و التعلم؟**

8- What has been implemented from the student's suggestions in the previous year?

No.	Suggestions
1	**Encouraging them to link academic learning with workplace learning**

9- What has not been implemented from the suggestions (give reasons)?

No.	Suggestions	Reasons
1	**Reduce the theoretical part**	**For its importance to understand and pave the subject**

10- What has been implemented from the action plan in the previous year?

No.	Suggestions
1	**Holding a training course on the zoom program.**

Annual Course Report: Principles of engineering design

11- Action plan for next academic year

No.	Areas of development	Description of development	Completion date	Person responsible
1	Giving enough time during the lecture for discussion	By asking questions and discussing the answers	2023-2024	Dr. Yasser Tawfic

Course Coordinator: Dr. Yasser Tawfic
Head of Department: Assoc.prof. Hend Elsayed Gadow
Date of Approval: 4/2023

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Annual Course Report: Numerical Methods in Engineering

A. Basic Information:

Program Title	Chemical Engineering
Department offering the Program	Chemical Engineering Department
Department Responsible for the Course	Basic Science and Engineering Department
Course Code	BAS221
Year/ Level	Level 2
Specialization	Major
Authorization data of course report	7/2023
Exam Committee Selection Rule	Commissioning of the Institute of Management
External Revision of Examination	--
Lecturers Number:	1

Teaching hours	**Lectures**	**Exercise**	**laboratory**	**Student's load**
	2	2	-	4

B. Specialized information:

1. Statistics

Subject		**No.**	**Percentage**
Students attending the course		240	100%
Students completing the course		240	100%
Results	**Passed**	230	95.83%
	Failed	10	4.17%
Grading of successful students	**Excellent**	65	27.1%
	Very Good	51	21.2%
	Good	64	26.7%
	Pass	50	20.8%

2. Course Teaching:

No.	**Topics**	**Lecture**	**Exercise**	**laboratory**	**Student load**
1	Numerical solution of linear and nonlinear systems -	10	10	-	8
2	Numerical differentiation and integration - Boundary and Eigen value problems.	10	10	-	12
3	- Curve fitting and interpolation	4	4	-	20
4	- Numerical solution of initial value problems -	4	4	-	16
Total		**28**	**28**	**-**	**56**

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Annual Course Report: Numerical Methods in Engineering

- Topics taught as a percentage of the content specified: 90 %
- Lecturers commitment of the course content: 100 %
- Coverage of exam topics to course content: 90 %

- Used Teaching and Learning Methods

No.	Teaching Method	Choice
1	Lectures	√
2	Discussion Sessions	×
3	Information Collection from Different Sources	√
4	Practical	x
5	Research Assignment	x
6	Field Visits	×
7	Case Studies	x
8	Smart Sessions	×

- Student Assessment:

No.	Evaluation Method	Marks
1	**Periodic exams**	**20**
2	**Student load**	**20**
3	**Final term examination**	**60**
	Total	**100**

3. Facilities Required for Teaching and Learning:

No.	Facility	Choice
1	Lecture Classroom	√
2	Lab Facilities	√
3	White Board	√
4	Data Show System	√
5	Visualizer	×
6	Smart Board	×

No.	Facility	Choice
7	Wireless Board	×
8	Presenter	×
9	Sound System	√
10	Wire-Internet	x
11	Wireless Internet	√

4- Administrative Constraints:

No.	Constraints
1	-----

5- Student Evaluation Result of the Course:

No.	Evaluation Result
1	**81.7%**

Annual Course Report: Numerical Methods in Engineering

6- Course enhancement suggestions

No.	Suggestions
1	**Enhancement lecture presentation.**

7- Comments from external evaluator(s) (if exists):

No.	Comments
1	--------

8- What has been implemented of the student's suggestions in the previous year?

No.	Suggestions
1	**Increase problems and exercises.**

9- What has not been implemented of the suggestions (give reasons)?

No.	Suggestions	Reasons
1	All suggestions have been implemented	-----

10- What has been implemented of the action plan in the previous year?

No.	Areas of development	Description of development	Completion date	Person responsible
1	**Increase Problems**	**Development and increase sheets**	**2022-2023**	**Dr Samar Madin**

11- Action plan for next academic year

No.	Areas of development	Description of development	Completion date	Person responsible
1	**Lecture Presentation**	**Add engineering applied problems to increase discussion and interaction between students and lecturer**	**2023-2024**	**Dr Samar Madin**

Course Coordinator: Dr: Samar Madin

Head of Department: Associate prof. Amal Behary

Date of Approval: 7/2023

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Annual Course Report: Chemical Engineering Principles II

A. Basic Information

Program Title	Chemical Engineering
Department offering the Program	Chemical Engineering Department
Department Responsible for the Course	Chemical Engineering Department
Course Code	CHE221
Year/ Level	Level 2
Specialization	Major
Authorization data of course report	7/2023
Exam Committee Selection Rule	Commissioning of the Institute of Management
External Revision of Examination	--
Lecturers Number:	1

Teaching hours	**Lectures**	**Exercise**	**laboratory**	**Student's load**
	3	2	-	5

B. Specialized information:

1. Statistics

Subject		**Percentage**
Students attending the course		100%
Students completing the course		100%
Results	**Passed**	95.16%
	Failed	4.84%
Grading of successful students	**Excellent**	16.1%
	Very Good	25.8%
	Good	33.9%
	Pass	19.4%

2. Course Teaching:

No.	**Topics**	**Lecture**	**Exercise**	**laboratory**	**Student load**
1	Simultaneous material and energy balances of complete process flow sheets.	6	4	-	10
2	Introduction of computer methods to solve chemical engineering problems	6	4	-	10
3	Equation-based approach and Degrees of freedom analysis	6	4	-	10
4	Conceptual design of chemical processes	6	4	-	10

Annual Course Report: Chemical Engineering Principles II

5	Introduction to basic Chemical Engineering processes (e.g. humidification, binary distillation, extraction)	12	8	-	20
6	Computer-aided process design.	6	4	-	10
Total		**42**	**28**	**-**	**70**

- Topics taught as a percentage of the content specified: 90%
- Lecturers commitment of the course content: 95%

- Used Teaching and Learning Methods

No	Topics	Face-to-Face Lecture	Online Lecture	Flipped Classroom	Presentation and movies	Discussion	Problem solving	Brain storming	Projects	Site visits	Self-learning and Research	Cooperative	Discovering	Modeling	Lab
1	**Simultaneous material and energy balances of complete process flow sheets.**	x	x			x	x								
2	**Introduction of computer methods to solve chemical engineering problems.**	x	x				x	x							
3	**Equation-based approach and Degrees of freedom analysis.**	x	x				x								
4	**Conceptual design of chemical processes**	x	x			x	x								

Annual Course Report: Chemical Engineering Principles II

5	**Introduction to basic Chemical Engineering processes (e.g. humidification, binary distillation, extraction).**	x	x			x	x								
6	**Computer-aided process design.**	x	x			x	x	x							

- Student evaluation:

No.	Evaluation method	Marks
1	Periodic exams	30
2	Student load	30
3	Final term examination	90
Total		**150**

3. Facilities Required for Teaching and Learning:

No.	Facility	No.	Facility
1	Lecture classroom	5	Data show system
2	Presenter	6	Sound system
3	White board		
4	Lab		

4- Administrative Constraints:

No.	Constraints
1	-

5- Student Evaluation Result of the Course:

No.	Evaluation Result
1	**72.7%**

6- Course enhancement suggestions

No.	Suggestions
1	**Applications of material and energy balance in actual industrial plants**

7- Comments from external evaluator(s) (if exists):

No.	Comments
1	**يجب أن يتم مراجعة أهداف المقرر و كذلك مخرجات التعلم حيث أنه لا علاقة له بمحتوى المقرر**

Annual Course Report: Chemical Engineering Principles II

2	ما هو المقصود بكلمة Presenter الموجودة فى أغلب المواد تحت الطرق أوالوسائل المستخدمة فى التعليم والتعلم ؟
3	فى أهداف المقرر تم ذكر addressing process dynamic and control challengesو الذى لا يمكن أن يكون من ضمن أهداف المقرر الموجود فى هذه المرحلة من الدراسة

8- What has been implemented of the student's suggestions in the previous year?

No.	Suggestions
1	Increase solved problems
2	Use explanatory videos in explanation

9- What has not been implemented of the suggestions (give reasons)?

No.	Suggestions
1	-

10-What has been implemented of the action plan in the previous year?

No.	Suggestions
1	references for course in a uniform style

11- Action plan for next academic year

No.	Areas of development	Description of development	Completion date	Person responsible
1	Use programs in the course	Apply hsyss for solving problems	2023-2024	Dr. Sohier Abo Bakr

Course Coordinator: Dr. Sohier Abo Bakr
Head of Department: Assoc.prof. Hend Elsayed Gadow
Date of Approval: 7/2023

Ministry of Higher Education
The Higher Institute of Engineering
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New Damietta

وزارة التعليم العالى
المعهد العالى للهندسة والتكنولوجيا
بدمياط الجديدة

Annual Course Report: chemical engineering thermodynamics

A. Basic Information

Program Title	Chemical Engineering
Department offering the Program	Chemical Engineering Department
Department Responsible for the Course	Chemical Engineering Department
Course Code	CHE222
Year/ Level	Level 2
Specialization	Major
Authorization data of course report	8/2023
Exam Committee Selection Rule	Commissioning of the Institute of Management
External Revision of Examination	--
Lecturers Number:	1

Teaching hours	Lectures	Exercise	laboratory	Student's load
	2	2	1	4

B. Specialized information:

1. Statistics

Subject		Percentage
Students attending the course		100%
Students completing the course		100%
Results	**Passed**	87.1%
	Failed	12.9%
Grading of successful students	**Excellent**	14.5%
	Very Good	16.1%
	Good	30.6%
	Pass	25.8%

2. Course Teaching:

No.	Topics	Lecture	Exercise	laboratory	Student load
1	Thermodynamic properties of homogeneous mixtures Practical • Calibration of the Calorimeter • Specific Heat Capacity of an Unknown Metal	8	4	4	6
2	Partial Molal Properties Practical Heat of Fusion of Ice	4	4	2	8

Annual Course Report: chemical engineering thermodynamics

3	Gibbs-Duhem Equations – Activity Coefficient Practical Heat of Solution	2	4	2	6
4	Fugacity. Ideal and non-ideal solutions Practical Heat of Neutralization	4	4	6	8
5	Heat effect of mixing	2	4		7
6	Excess properties	2	2		8
7	Phase equilibria – miscible systems	4	4		7
8	Chemical reaction equilibria	2	2		6
Total		28	28	14	56

- Topics taught as a percentage of the content specified: 92%
- Lecturers commitment of the course content: 97%

- Used Teaching and Learning Methods

No	Topics	Face-to-Face Lecture	Online Lecture	Flipped Classroom	Presentation and movies	Discussion	Problem solving	Brain storming	Projects	Site visits	Self-learning and Research	Cooperative	Discovering	Modeling	lab
1	Thermodynamic properties of homogeneous mixtures Practical • Calibration of the Calorimeter • Specific Heat Capacity of an Unknown Metal	x	x												x
2	Partial Molal Properties Practical	x	x			x									x

Annual Course Report: chemical engineering thermodynamics

	Heat of Fusion of Ice														
3	Gibbs-Duhem Equations – Activity Coefficient Practical Heat of Solution	x	x												x
4	Fugacity. Ideal and non-ideal solutions Practical Heat of Neutralization	x	x			x									x
5	Heat effect of mixing	x	x												
6	Excess properties	x	x			x									
7	Phase equilibria – miscible systems	x	x												
8	Chemical reaction equilibria	x	x			x									

- Student evaluation:

No.	Evaluation method	Marks
1	Periodic exams	20
2	Student load	20
3	Practical Examination	10
4	Final term examination	75
Total		125

3. Facilities Required for Teaching and Learning:

No.	Facility	No.	Facility
1	Lecture classroom	5	Data show system
2	Presenter	6	Sound system
3	White board		
4	Lab		

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Annual Course Report: chemical engineering thermodynamics

4- Administrative Constraints:

Constraints
No constraints

5- Student Evaluation Result of the Course:

No.	Evaluation Result
1	74.12%

6- Course enhancement suggestions

No.	Suggestions
1	Make a training program for the students on actual thermodynamic cycle

7- Comments from external evaluator(s) (if exists):

No.	Comments
1	ما هو المقصود بكلمةPresenter الموجودة فى أغلب المواد تحت الطرق أو الوسائل المستخدمة فى التعليم و التعلم؟ إذا كان المقصود هو عضو هيئة التدريس فهو من التأكيد لا يمكن إعتباره من ضمن الوسائل المستخدمة فى التعليم و التعلم

8- What has been implemented from the student's suggestions in the previous year?

No.	Suggestions
1	Improve lecture notes

9- What has not been implemented from the suggestions (give reasons)?

No.	Suggestions	Reasons
1	Making some visits for petrochemical factories.	Lack of academic time.

10- What has been implemented from the action plan in the previous year?

No.	Suggestions
1	Conducting a training course on the use of thermodynamic theories in industry.

11- Action plan for next academic year

No.	Areas of development	Description of development	Completion date	Person responsible
1	Applying the thermodynamic principles practically at large scale.	Making some visits for petrochemical factories.	2023-2024	Institute management

Course Coordinator: Dr. Mohamed Elbendary
Head of Department: Assoc.prof. Hend Elsayed Gadow
Date of Approval: 8/2023

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Annual Course Report: Analytical chemistry

A. Basic Information

Program Title	Chemical Engineering
Department offering the Program	Chemical Engineering Department
Department Responsible for the Course	Chemical Engineering Department
Course Code	CHE223
Year/ Level	Level 2
Specialization	Major
Authorization data of course report	7/2023
Exam Committee Selection Rule	Commissioning of the Institute of Management
External Revision of Examination	--
Lecturers Number:	1

Teaching hours	**Lectures**	**Exercise**	**laboratory**	**Student's load**
	2	-	2	4

B. Specialized information:

1. Statistics

Subject		**Percentage**
Students attending the course		100%
Students completing the course		100%
Results	**Passed**	98.36%
	Failed	1.64%
Grading of successful students	**Excellent**	19.7%
	Very Good	31.1%
	Good	24.6%
	Pass	23%

2. Course Teaching:

No.	**Topics**	**Lecture**	**Exercise**	**laboratory**	**Student load**
1	Basic tools in analytical chemistry Practical • Preparation of Standard Solution of solid salt • Preparation of a Standard Solution of concentrated Acid	4	-	4	8

Annual Course Report: Analytical chemistry

2	Titrimetric Methods of Analysis Practical • Mohr's method for determining chloride • EDTA standardization against metallic magnesium • Determination of magnesium using eriochrome black T indicator • Determination of aluminium using EBT as indicator (back – titration)	8	-	10	16
3	Gravimetric Methods of Analysis Practical Gravimetric Analysis	4	-	6	8
4	Evaluating Analytical Data	8	-	-	16
5	Instrumental chemical analysis Practical • Conductimetry • PH meters • Spectrophotometer	4	-	8	8
Total		28	28	-	56

- Topics taught as a percentage of the content specified: 93%
- Lecturers commitment of the course content: 94%

Used Teaching and Learning Methods

No	Topics	Face-to-Face Lecture	Online Lecture	Flipped Classroom	Presentation and movies	Discussion	Problem solving	Brain storming	Projects	Site visits	Self-learning and Research	Cooperative	Discovering	Modeling	Lab
1	Basic tools in analytical chemistry Practical • Preparation of Standard Solution of solid salt • Preparation of a Standard Solution of concentrated Acid	x	x			x									X
2	Titrimetric Methods of Analysis Practical • Mohr's method for determining chloride • EDTA standardization against metallic magnesium • Determination of magnesium using eriochrome black T indicator • Determination of aluminium using EBT as indicator (back –titration)	x	x												X

Annual Course Report: Analytical chemistry

3	Gravimetric Methods of Analysis Practical Gravimetric Analysis	x	x												X
4	Evaluating Analytical Data	x	x			X									
5	Instrumental chemical analysis Practical • Conductimetry • PH meters • Spectrophotometer	x	x								X				X

- Student Assessment:

No.	Evaluation method	Marks
1	Periodic exams	15
2	Student load	15
3	Practical Examination	10
4	Final term examination	60
Total		100

3. Facilities Required for Teaching and Learning:

No.	Facility	No.	Facility
1	Lecture classroom	5	Data show system
2	Presenter	6	Sound system
3	White board		
4	Lab		

4- Administrative Constraints:

No.	Constraints
1	**There are no constraints**

5- Student Evaluation Result of the Course:

No.	Evaluation Result
1	**84.68%**

6- Course enhancement suggestions

No.	Suggestions
1	**Using modern techniques, technology and multimedia**

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Annual Course Report: Analytical chemistry

7- Comments from external evaluator(s) (if exists):

No.	Comments
1	مراجعة الدرجات المخصصة للمادة فى توصيف البرنامج حيث أن مجموع الدرجات (40+10+60) هو 110 بينما المكتوب أن المجموع (100)
2	نفس الخطأ المذكور أعلاه موجود فى توصيف المقرر
3	ما هو المقصود بكلمة Presenter الموجودة فى أغلب المواد تحت الطرق أو الوسائل المستخدمة فى التعليم و التعلم؟ إذا كان المقصود هوعضو هيئة التدريس فهو من التأكيد لا يمكن إعتباره من ضمن الوسائل المستخدمة فى التعليم و التعلم.

8- What has been implemented of the student's suggestions in the previous year?

No.	Suggestions
1	Dividing them into groups to search about some scientific topics related to the subject

9- What has not been implemented of the suggestions (give reasons)?

No.	Suggestions	Reasons
1	Increasing the number of lab experiments	The number of experiments is comprehensive and sufficient for the time specified for the academic year

10- What has been implemented of the action plan in the previous year?

No.	Suggestions
1	Adding some scientific reference in the electronic library of the institute.

11- Action plan for next academic year

No.	Areas of development	Description of development	Completion date	Person responsible
1	Emphasis on linking the practical part with the theoretical part	By discussing during the lecture what has been concluded practically in lab hours	2023-2024	Assoc. prof. Hend Gadow

Course Coordinator: Assoc. prof. Hend Gadow
Head of Department: Assoc. prof. Hend Gadow
Date of Approval:7/2023

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وزارة التعليم العالى
المعهد العالى للهندسة والتكنولوجيا
بدمياط الجديدة

Annual Course Report: Process Dynamics and Control

A. Basic Information

Program Title	Chemical Engineering
Department offering the Program	Chemical Engineering Department
Department Responsible for the Course	Chemical Engineering Department
Course Code	CHE 224
Year/ Level	Level 2
Specialization	Major
Authorization data of course report	7/2023
Exam Committee Selection Rule	Commissioning of the Institute of Management
External Revision of Examination	--
Lecturers Number:	1

Teaching hours	**Lectures**	**Exercise**	**laboratory**	**Student's load**
	2	**2**	**-**	**4**

B. Specialized information:

1. Statistics

Subject		**Percentage**
Students attending the course		100%
Students completing the course		100%
Results	**Passed**	82.26%
	Failed	17.74%
Grading of successful students	**Excellent**	4.8%
	Very Good	8.1%
	Good	22.6%
	Pass	46.8%

2. Course Teaching:

No.	**Topics**	**Lecture**	**Exercise**	**laboratory**	**Student load**
1	Automatic control merits and basic features	2	2	-	4
2	Classification of control action (openloop and closed-loop, feed-back and feed-forward, process and position control)	4	4	-	8
3	Mathematical tools (Linearization, Laplace transforms and block diagram algebra)	4	4	-	8
4	Process dynamics (first, second and higher orders)	2	2	-	4

Annual Course Report: Process Dynamics and Control

5	Measuring and actuating elements	4	4	-	8
6	Two-position controller and Three-term controller	4	4	-	8
7	Controller mechanism and optimum setting	4	4	-	8
8	System stability (algebraic and graphical methods).	4	4	-	8
Total		**28**	**28**	**-**	**56**

- Topics taught as a percentage of the content specified: 89%
- Lecturers commitment of the course content: 98%
Used Teaching and Learning Methods

No	Topics	Face-to-Face Lecture	Online Lecture	Flipped Classroom	Presentation and movies	Discussion	Problem solving	Brain storming	Projects	Site visits	Self-learning and Research	Cooperative	Discovering	Modeling	lab
1	Automatic control merits and basic features	x	x		x		x								
2	Classification of control action (openloop and closed-loop, feed-back and feedforward, process and position control)	x	x		x	x	x								
3	Mathematical tools (Linearization, Laplace transforms and block diagram algebra)	x	x		x	x	x								
4	Process dynamics (first, second and higher orders)	x	x		x		x								

Annual Course Report: Process Dynamics and Control

5	Measuring and actuating elements	x	x		x		x								
6	Two-position controller and Three-term controller	x	x		x	x	x								
7	Controller mechanism and optimum setting	x	x		x	x	x								
8	System stability (algebraic and graphical methods).	x	x		x	x	x								

- Student Assessment:

No.	Evaluation method	Marks
1	Periodic exams	20
2	Student load	20
3	Final term examination	60
Total		**100**

3. Facilities Required for Teaching and Learning:

No.	Facility	No.	Facility
1	**Lecture classroom**	5	**Data show system**
2	**Presenter**	6	**Sound system**
3	**White board**		
4	**Lab**		

4- Administrative Constraints:

Constraints
No constraints

5- Student Evaluation Result of the Course:

No.	Evaluation Result
1	**76.17%**

6- Course enhancement suggestions

No.	Suggestions
1	**Improve lecture notes**
2	**Integrating work experiences with education.**
3	**Transplant and assess pedagogy utilizing such technologies to enhance students' learning.**

Annual Course Report: Process Dynamics and Control

7- Comments from external evaluator(s) (if exists):

No.	Comments
1	المادة موجودة مبكرا جدا فى الجدول الدراسى للطالب .. من المفضل أن يدرس الطالب هذه المادة فى الفصل الدراسى الثانى من العام الثالث و من الأفضل تدريسها فى السنة النهائية. كيف يدرس الطالب CHE224فى نفس الفصل الدراسى الذى يدرس فيه CHE221 .و كذلك كيف يمكن تدريس المادة قبل أن يدرس مادة CHE324.يجب تعديل ذلك فى أول فرصة لتعديل اللائحة الدراسية
2	يجب مراجعة مخرجات التعلم المقرر
3	فى محتوى المقرر تم ذكر القيام ببعض التجارب و لا يوجد فى المقرر ساعات مخصصة للتجارب المعملية
4	ما هو المقصود بكلمة Presenterالموجودة فى أغلب المواد تحت الطرق أو الوسائل المستخدمة فى التعليم و التعلم؟ إذا كان المقصود هو عضو هيئة التدريس فهو من التأكيد لا يمكن إعتباره من ضمن الوسائل المستخدمة فى التعليم و التعلم. ما هو المقصود بكلمة Presenterالموجودة فى غلب المواد تحت الطرق أو الوسائل المستخدمة فى التعليم و التعلم؟ إذا كان المقصود هو عضو هيئة التدريس فهو من التأكيد لا يمكن إعتباره من ضمن الوسائل المستخدمة فى التعليم و التعلم

8- What has been implemented from the student's suggestions in the previous year?

No.	Suggestions
1	Improve lecture notes

9- What has not been implemented from the suggestions (give reasons)?

No.	Suggestions
1	None

10- What has been implemented from the action plan in the previous year?

No.	Suggestions
1	Increasing the application and discussion aspect with students.

11- Action plan for next academic year

No.	Areas of development	Description of development	Completion date	Person responsible
1	Making some scientific visits to petrochemical factories.	Understanding how the process control is at large scale.	2023-2024	Institute management

Course Coordinator: Prof. Dr. / Taha E. Farrag
Head of Department: Assoc.prof. Hend Elsayed Gadow
Date of Approval: 7/2023

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وزارة التعليم العالى
المعهد العالى للهندسة والتكنولوجيا
بدمياط الجديدة

Annual Course Report: Heat Transfer

A. Basic Information

Program Title	Chemical Engineering
Department offering the Program	Chemical Engineering Department
Department Responsible for the Course	Chemical Engineering Department
Course Code	CHE225
Year/ Level	Level 2
Specialization	Major
Authorization data of course report	8/2023
Exam Committee Selection Rule	Commissioning of the Institute of Management
External Revision of Examination	--
Lecturers Number:	1

Teaching hours	Lectures	Exercise	laboratory	Student's load
	2	**2**	**1**	**3**

B. Specialized information:

1. Statistics

Subject		**Percentage**
Students attending the course		100%
Students completing the course		100%
Results	**Passed**	83.61 %
	Failed	16.39 %
Grading of successful students	**Excellent**	13.1 %
	Very Good	11.5 %
	Good	26.2 %
	Pass	32.2 %

2. Course Teaching:

No.	Topics	Lecture	Exercise	laboratory	Student load
1	Introduction to heat transfer : conduction ,convection ,thermal radiation Practical Heat exchanger training equipment	6	6	2	8
2	The heat diffusion equation : Cartesian ,cylindrical ,spherical coordiates Practical Shell & tube heat exchanger	6	6	2	8
3	One dimensional St.St conduction Practical Radial heat conduction	4	4	2	6

Annual Course Report: Heat Transfer

4	External ,internal flow convection Practical Linear heat conduction	4	4	2	8
5	heat exchangers Practical Extended surface heat transfer	8	8	6	6
Total		28	28	14	42

- Topics taught as a percentage of the content specified: 89%
- Lecturers commitment of the course content: 97%

- Used Teaching and Learning Methods

No	Topics	Face-to-Face Lecture	Online Lecture	Flipped Classroom	Presentation and movies	Discussion	Problem solving	Brain storming	Projects	Site visits	Self-learning and Research	Cooperative	Discovering	Modeling	lab
1	**Introduction to heat transfer : conduction ,convection ,thermal radiation Practical Heat exchanger training equipment**	**x**	**x**			**x**					**x**				
2	**The heat diffusion equation : Cartesian ,cylindrical ,spherical coordiates Practical Shell & tube heat exchanger**	**x**	**x**												
3	**One dimensional St.St conduction Practical**	**x**	**x**			**x**	**x**								**x**

Annual Course Report: Heat Transfer

	Radial heat conduction														
4	**External ,internal flow convection Practical Linear heat conduction**	**x**	**x**			**x**	**x**				**x**				**x**
5	**heat exchangers Practical Extended surface heat transfer**	**x**	**x**			**x**	**x**	**x**							**x**

- Student evaluation:

No.	Evaluation method	Marks
1	Periodic exams	20
2	Student load	20
3	Practical Examination	10
4	Final term examination	75
Total		125

3. Facilities Required for Teaching and Learning:

No.	Facility	No.	Facility
1	Lecture classroom	5	Data show system
2	Presenter	6	Sound system
3	White board		
4	Lab		

4- Administrative Constraints:

No.	Constraints
1	-

5- Student Evaluation Result of the Course:

No.	Evaluation Result
1	**63.38%**

6- Course enhancement suggestions

No.	Suggestions
1	**Integrating work experiences with education.**
2	**Transplant and assess pedagogy utilizing such technologies to enhance students' learning.**

Annual Course Report: Heat Transfer

7- Comments from external evaluator(s) (if exists):

No.	Comments
1	يجب أن يتم مراجعة أهداف المقرر و كذلك مخرجات التعلم حيث أنه لا علاقة له بمحتوى المقرر.
2	فى محتوى المقرر تم ذكر أنه يوجد ساعات للمعمل فى الخمس مواضيع المكونة للمقرر .إلا أنه عند تحديد وسائل التعليم و التعلم تم ذكر المعمل فى موضوع واحد فقط من الخمس مواضيع المقررة . برجاء لمراجعة والتصحيح.
3	ما هو المقصود بكلمة Presenterالموجودة فى أغلب المواد تحت الطرق أو الوسائل المستخدمة فى التعليم و التعلم؟ إذا كان المقصود هو عضو هيئة التدريس فهو من التأكيد لا يمكن إعتباره من ضمن الوسائل المستخدمة فى التعليم و التعلم.

8- What has been implemented from the student's suggestions in the previous year?

No.	Suggestions
1	Ensuring that the students carry out the tasks of self-study and discuss with them what they have reached

9- What has not been implemented from the suggestions (give reasons)?

No.	Suggestions	Reasons
1	Making some visits for petrochemical plants.	Lack of academic time.

10- What has been implemented from the action plan in the previous year?

No.	Suggestions
1	Conducting a training course on the use of heat transfer theories in industry.

11- Action plan for next academic year

No.	Areas of development	Description of development	Completion date	Person responsible
1	Applying heat transfer principles practically at large scale.	Making some visits for petrochemical plants.	2023-2024	Institute management

Course Coordinator: Dr. Riham Atef

Head of Department: Assoc. prof. Hend Elsayed Gadow

Date of Approval: 8/2023

وزارة التعليم العالي
المعهد العالي للهندسة والتكنولوجيا
بدمياط الجديدة

قسم الهندسة الكيميائية

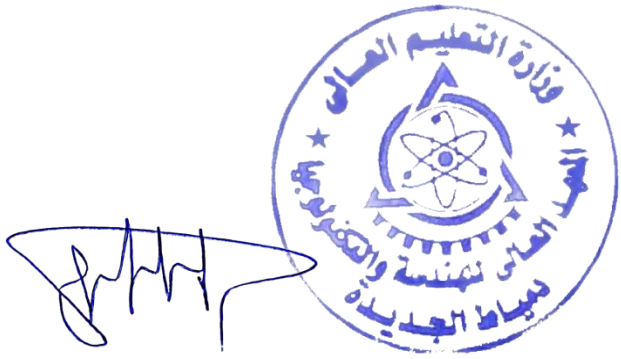
تقارير المقررات قسم الهندسة الكيميائية

إعتماد مجلس القسم لتقارير المقررات قسم الهندسة الكيميائية

بتاريخ 2023/8/28

إعتماد المجلس العلمي لتقارير المقررات قسم الهندسة الكيميائية

بتاريخ 2023/11/6



وزارة التعليم العالي
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بدمياط الجديدة

2022- 2023

تقارير المقررات لقسم الهندسة الكيميائية

Head of the department	Quality Assurance Unit Manager	Dean of the institute
Assoc.Prof.Dr./ Hend Elsayed Gadow	Assoc.Prof.Dr./ Ramadan Abdelghany Elkateb	Prof.Dr./ Osami Elsaeed Rageh

وزارة التعليم العالي
المعهد العالي للهندسة والتكنولوجيا
بدمياط الجديدة

الفرقة الثالثة

Annual Course Report: Environmental Management

A. Basic Information

Program Title	Chemical Engineering program
Department offering the Program	Chemical Engineering Department
Department Responsible for the Course	Basic Science and Engineering Department
Course Code	BAS 311
Year/ Level	Level 3
Specialization	Major
Authorization date of course report	2/2023
Exam Committee Selection Rule	Commissioning of the Institute of Management
External Revision of Examination	--
Lecturers Number:	1

Teaching hours	**Lectures**	**Exercise**	**laboratory**	**Student's load**
	2	**1**	**-**	**3**

B. Specialized information:

1. Statistics

Subject		**No.**	**Percentage**
Students attending the course		129	100%
Students completing the course		129	100%
Results	**Passed**	126	97.67%
	Failed	3	2.33%
Grading of successful students	**Excellent**	26	20.2%
	Very Good	35	27.1%
	Good	36	27.9%
	Pass	29	22.5%

2. Course Teaching:

No.	**Topics**	**Lecture**	**Exercise**	**laboratory**	**Student load**
1	The importance of studying environmental science – modern technology and its effect on the environment	8	2	-	12
2	quality of the environment and development elements	4	3	-	6

Annual Course Report: Environmental Management

3	sources of environmental pollution and method of control (air pollution – water pollution)	8	6	-	12
4	Solid wastes pollution – noise) – economics of environmental pollution control – legislations for the environment protection.	8	3	-	12
Total		**28**	**14**	**-**	**42**

- Topics taught as a percentage of the content specified: 100 %
- Lecturers commitment of the course content: 100 %
- Coverage of exam topics to course content: 90 %

- Used Teaching and Learning Methods

No.	Teaching Methods
1	Lectures
2	Discussion sessions
3	Information collection from different sources
4	Field visits

- Student Assessment:

No.	Evaluation Method	Marks
1	Periodic exam	20
2	final term examination	60
3	Student load	20
	Total	**100**

3. Facilities Required for Teaching and Learning:

No.	Facility
1	Seminar
2	Lecture Classroom
3	White Board
4	Data Show system

4- Administrative Constraints:

No.	Constraints
1	-----

Annual Course Report: Environmental Management

5- Student Evaluation Result of the Course:

No.	Evaluation Result
1	**72.76%**

6- Course enhancement suggestions

No.	Suggestions
1	Provide training on how to use a new teaching technology in their classes.

7- Comments from external evaluator(s) (if exists):

No.	Comments
1	No comments

8- What has been implemented of the student's suggestions in the previous year?

No.	Suggestions
1	Increasing student interaction and participation when implementing the course
2	Increase collaborative teaching to solve practical tasks and increase field visits

9- What has not been implemented of the suggestions (give reasons)?

No.	Suggestions	Reasons
1	Field visiting	Annual maintenance work in factories available around us.

10- What has been implemented of the action plan in the previous year?

No.	Areas of development	Description of development	Completion date	Person responsible
1	Adding environmental impact assessment to the course	Presentation, discussion and approval by the Scientific Department Council	2022-2023	Institute management

11- Action plan for next academic year

No.	Areas of development	Description of development	Completion date	Person responsible
2	Visit some water treatment plant and renewable energy.	Provide field visits	2023-2024	Institute management

Course Coordinator: Assoc. Prof. Dr. Ramadan Elkateb
Head of Department: Assoc. Prof. Dr. Amal Bahiry
Date of Approval: 2/2023

Ministry of Higher Education
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المعهد العالى للهندسة والتكنولوجيا
بدمياط الجديدة

Annual Course Report:Reactor Design

A. Basic Information

Program Title	Chemical Engineering
Department offering the Program	Chemical Engineering Department
Department Responsible for the Course	Chemical Engineering Department
Course Code	CHE311
Year/ Level	Level 3
Specialization	Major
Authorization data of course report	3/2023
Exam Committee Selection Rule	Commissioning of the Institute of Management
External Revision of Examination	--
Lecturers Number:	1

Teaching hours	**Lectures**	**Exercise**	**laboratory**	**Student's load**
	2	2	-	4

B. Specialized information:

1. Statistics

Subject		**Percentage**
Students attending the course		100%
Students completing the course		100%
Results	**Passed**	97.83%
	Failed	2.17%
Grading of successful students	**Excellent**	0%
	Very Good	2.2%
	Good	23.9%
	Pass	71.7%

2. Course Teaching:

No.	**Topics**	**Lecture**	**Exercise**	**laboratory**	**Student load**
1	Fundamentals of thermodynamics and kinetics of chemical reactions	2	2	-	4
2	Analysis of batch, plug-flow and continuous stirred tank reactors for different types of reactions	4	4	-	8
3	Non ideal reactor analysis, including residence time distribution, back mixing and dispersion models	2	2	-	4

Annual Course Report:Reactor Design

4	Kinetics of isothermal and nonisothermal ideal reactors.	2	2	-	4
5	Kinetics of heterogeneous or catalytic reactions	4	4	-	8
6	Design of different types of catalytic and non-catalytic reactors	2	2	-	4
7	Mass and energy transfer limitations in heterogeneous reaction systems	2	2	-	4
8	Catalyst effectiveness	4	4	-	8
9	Reactor stability and sensitivity to operating parameters	2	2	-	4
10	Optimization of reactor design and Factors affecting choice of reactors	4	4	-	8
Total		**28**	**28**	**-**	**56**

- Topics taught as a percentage of the content specified: 94%
- Lecturers commitment of the course content: 95 %
- Used Teaching and Learning Methods

No	Topics	Face-to-Face Lecture	Online Lecture	Flipped Classroom	Presentation and movies	Discussion	Problem solving	Brain storming	Projects	Site visits	Self-learning and Research	Cooperative	Discovering	Modeling	lab
1	Fundamentals of thermodynamics and kinetics of chemical reactions	x	x			x					x				
2	Analysis of batch, plug-flow and continuous stirred tank reactors for different	x	x	x		x					x				

Annual Course Report:Reactor Design

	types of reactions														
3	Non ideal reactor analysis, including residence time distribution, back mixing and dispersion models	x	x			x		x			x				
4	Kinetics of isothermal and non-isothermal ideal reactors.	x	x	x		x		x			x				
5	Kinetics of heterogeneous or catalytic reactions	x	x	x		x		x			x				
6	Design of different types of catalytic and non-catalytic reactors	x	x	x		x		x			x				
7	Mass and energy transfer limitations in heterogeneous reaction systems	x	x	x		x		x			x				
8	Catalyst effectiveness	x	x	x		x		x			x				
9	Reactor stability and sensitivity to operating parameters	x	x	x		x		x			x				
10	Optimization of reactor design and Factors affecting choice of reactors	x	x	x		x		x			x				

- Student Assessment:

No.	Evaluation Method	Marks
1	Periodic exams	30
2	Student load	20
3	Final term examination	75
		Total

3. Facilities Required for Teaching and Learning:

No.	Facility	No.	Facility
1	Lecture classroom	4	Data show system

Annual Course Report:Reactor Design

2	Presenter	5	Sound system
3	White board		

4- Administrative Constraints:

No.	Constraints
1	-

5- Student Evaluation Result of the Course:

No.	Evaluation Result
1	**78.05%**

6- Course enhancement suggestions

No.	Suggestions
1	**Make visits to industrial plants.**

7- Comments from external evaluator(s) (if exists):

No.	Comments
1	**ما هو المقصود بكلمة Presenter الموجودة فى أغلب المواد تحت الطرق أوالوسائل المستخدمة فى التعليم و التعلم؟ إذا كان المقصود هوعضو هيئة التدريس فهو من التأكيد لا يمكن إعتباره من ضمن الوسائل المستخدمة فى التعليم و التعلم.**

8- What has been implemented of the student's suggestions in the previous year?

No.	Suggestions
1	**Opening the field for brainstorming and discussion about the topics of the curriculum.**

9- What has not been implemented of the suggestions (give reasons)?

No.	Suggestions	Reasons
1	-	-

10- What has been implemented from the action plan in the previous year?

No.	Action
1	**Possessing the skill of storytelling, which is considered one of the skills that most increases student participation**

Annual Course Report:Reactor Design

11- Action plan for next academic year

No.	Areas of development	Description of development	Completion date	Person responsible
1	**Application of modern teaching methods**	**Divide the students into groups to present an applied part about the contents of the course**	**2023-2024**	**Prof. Dr. / Taha E. Farrag**

Course Coordinator: Prof. Dr. / Taha E. Farrag
Head of Department: Assoc. Dr. Hend Elsayed Gadow
Date of Approval: 3/2023

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Annual Course Report: Operation research

A. Basic Information

Program Title	Chemical Engineering
Department offering the Program	Chemical Engineering Department
Department Responsible for the Course	Chemical Engineering Department
Course Code	CHE 312
Year/ Level	Level 3
Specialization	Major
Authorization data of course report	2/2023
Exam Committee Selection Rule	Commissioning of the Institute of Management
External Revision of Examination	--
Lecturers Number:	1

Teaching hours	Lectures	Exercise	laboratory	Student's load
	2	2	-	4

B. Specialized information:

1. Statistics

Subject		**Percentage**
Students attending the course		100%
Students completing the course		100%
Results	**Passed**	97.83%
	Failed	2.17%
Grading of successful students	**Excellent**	6.5%
	Very Good	41.3%
	Good	30.4%
	Pass	19.6%

2. Course Teaching:

No.	Topics	Lecture	Exercise	laboratory	Student load
1	Models and methods of operations research in solving engineering and management problems.	4	4	-	8
2	Linear programming, simplex method, duality, sensitivity analysis	4	4	-	8
3	Transportation, assignment and transshipment models	4	4	-	8

Annual Course Report: Operation research

4	Network flows models and integer programming	4	4	-	8
5	Probabilistic models in operations research problems	4	4	-	8
6	Queuing theory, Markov chain and decision analysis	4	4	-	8
7	Marko vain decision process and utility functions	4	4	-	8
Total		28	28	-	56

- Topics taught as a percentage of the content specified: 88%
- Lecturers commitment of the course content: 97%

Used Teaching and Learning Methods

No	Topics	Face-to-Face Lecture	Online Lecture	Flipped Classroom	Presentation and movies	Discussion	Problem solving	Brain storming	Projects	Site visits	Self-learning and Research	Cooperative	Discovering	Modeling	lab
1	Models and methods of operations research in solving engineering and management problems.	x	x			x	x								
2	Linear programming, simplex method, duality, sensitivity analysis	x	x			x	x								
3	Transportation, assignment and transshipment models	x	x			x	x	x							
4	Network flows models and integer programming	x	x			x									

Annual Course Report: Operation research

5	Probabilistic models in operations research problems	**x**	**x**			**x**	**x**								
6	Queuing theory, Markov chain and decision analysis	**x**	**x**			**x**	**x**								
7	Marko vain decision process and utility functions	**x**	**x**			**x**	**x**								

- Student Assessment:

No.	Evaluation method	Marks
1	Periodic exams	20
2	Student load	20
3	Final term examination	60
	Total	**100**

3. Facilities Required for Teaching and Learning:

No.	Facility	No.	Facility
1	**Lecture classroom**	**4**	**Data show system**
2	**Presenter**	**5**	**Sound system**
3	**White board**		

4- Administrative Constraints:

Constraints
No constraints

5- Student Evaluation Result of the Course:

No.	Evaluation Result
1	**67.33%**

6- Course enhancement suggestions

No.	Suggestions
1	**Improve lecture notes**
2	**Integrating work experiences with education.**
3	**Increasing the scientific references which relates to operation researches.**

7- Comments from external evaluator(s) (if exists):

No.	Comments
1	بالنسبة لطرق التدريس و التعلم للطلبة من ذوى الاحتياجات الخاصة فقد تم ذكر Wed **communication with students**ما هو المقصود بكلمة **Wed**؟ هل المقصود **Web**؟
2	ما هو المقصود بكلمةPresenter الموجودة فى أغلب المواد تحت الطرق أو الوسائل المستخدمة فى التعليم و التعلم؟ إذا

Annual Course Report: Operation research

	كان المقصود هو عضو هيئة التدريس فهو من التأكيد لا يمكن إعتباره من ضمن الوسائل المستخدمة فى التعليم و التعلم

8- What has been implemented of the student's suggestions in the previous year?

No.	Suggestions
1	This course was not studied in the previous year.

9- What has not been implemented of the suggestions (give reasons)?

No.	Suggestions
1	This course was not studied in the previous year.

10- What has been implemented from the action plan in the previous year?

No.	Action
1	Adding some scientific reference in the electronic library of the institute.

11- Action plan for next academic year

No.	Areas of development	Description of development	Completion date	Person responsible
1	Make some visits to petrochemical factories	Understanding practically the application of operation research in petrochemical industry	2023-2024	Institute management

Course Coordinator: Dr.Soheir Abubakr

Head of Department: Associate prof. Hend Gadow

Date of Approval: 2/2023

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Annual Course Report: Mass Transfer Operations I

A. Basic Information

Program Title	Chemical Engineering
Department offering the Program	Chemical Engineering Department
Department Responsible for the Course	Chemical Engineering Department
Course Code	CHE 313
Year/ Level	Level 3
Specialization	Major
Authorization data of course report	2/2023
Exam Committee Selection Rule	Commissioning of the Institute of Management
External Revision of Examination	--
Lecturers Number:	1

Teaching hours	**Lectures**	**Exercise**	**laboratory**	**Student's load**
	2	2	-	4

B. Specialized information:

1. Statistics

Subject		**Percentage**
Students attending the course		100%
Students completing the course		100%
Results	**Passed**	100%
	Failed	0%
Grading of successful students	**Excellent**	26.1%
	Very Good	26.1%
	Good	28%
	Pass	19.6%

2. Course Teaching:

No.	**Topics**	**Lecture**	**Exercise**	**laboratory**	**Student load**
1	Introduction to mass transfer and diffusion- basic definitions (velocity concentration - flux) - molecular diffusion in gases.	4	4	-	8
2	molecular diffusion in liquids - molecular diffusion in gels and biological solutions	4	4		8
3	molecular diffusion in solids	4	4		8

Annual Course Report: Mass Transfer Operations I

4	convective mass transfer- types of mass transfer coefficients - dimensionless groups in mass transfer	2	2	-	4
5	theories of mass transfer- momentum, heat, and mass transfer analogies	4	4	-	8
6	equilibrium between two phases- interphase mass transfer- overall mass transfer coefficients.	4	4	-	8
7	Vapor-liquid equilibria (VLE), binary system distillation (plate and packed columns)	4	4	-	8
8	liquid-liquid extraction.	2	2		4
Total		28	28	-	56

- Topics taught as a percentage of the content specified: 88%
- Lecturers commitment of the course content: 96%

Used Teaching and Learning Methods

No	Topics	Face-to-Face Lecture	Online Lecture	Flipped Classroom	Presentation and movies	Discussion	Problem solving	Brain storming	Projects	Site visits	Self-learning and Research	Cooperative	Discovering	Modeling	lab
1	**Introduction to mass transfer and diffusion- basic definitions (velocity concentration - flux) - molecular diffusion in gases.**	x	x			x									
2	**molecular diffusion in liquids - molecular diffusion in gels and biological solutions**	x	x			x	x								

Annual Course Report: Mass Transfer Operations I

3	**molecular diffusion in solids**	**x**	**x**			**x**		**x**							
4	**convective mass transfer- types of mass transfer coefficients - dimensionless groups in mass transfer**	**x**	**x**			**x**	**x**								
5	**theories of mass transfer- momentum, heat, and mass transfer analogies**	**x**	**x**			**x**	**x**								
6	**equilibrium between two phases- interphase mass transfer- overall mass transfer coefficients.**	**x**	**x**			**x**	**x**	**x**							
7	**Vapor-liquid equilibria (VLE), binary system distillation (plate and packed columns)**	**x**	**x**			**x**	**x**	**x**			**x**	**x**			
8	**liquid-liquid extraction.**	**x**	**x**			**x**	**x**	**x**			**x**	**x**			

- Student Assessment:

No.	Evaluation method	Marks
1	Periodic exams	30
2	Student load	20
3	Final term examination	75
Total		125

3. Facilities Required for Teaching and Learning:

No.	Facility	No.	Facility
1	Lecture classroom	4	Data show system
2	Presenter	5	Sound system
3	White board		

4- Administrative Constraints:

No.	Constraints
1	----

Annual Course Report: Mass Transfer Operations I

5- Student Evaluation Result of the Course:

No.	Evaluation Result
1	78.48%

6- Course enhancement suggestions

No.	Suggestions
1	Support content information by increasing field visits
2	Include information and examples from practical life to facilitate and clarify the idea

7- Comments from external evaluator(s) (if exists):

No.	Comments
1	يجب أن يتم مراجعة أهداف المقرر حيث أنه لا علاقة له بمحتوى المقرر.
2	ما هو المقصود بكلمة Presenterالموجودة فى أغلب المواد تحت الطرق أو الوسائل المستخدمة فى التعليم و التعلم؟ إذا كان المقصود هو عضو هيئة التدريس فهو من التأكيد لا يمكن اعتباره من ضمن الوسائل المستخدمة فى التعليم و التعلم.

8- What has been implemented of the student's suggestions in the previous year?

No.	Suggestions
1	Provide field visits
2	Using online course material.

9- What has not been implemented of the suggestions (give reasons)?

No.	Suggestions	Reasons
1	-------	----

10- What has been implemented of the action plan in the previous year?

No.	Suggestions
1	Relate the theoretical study by the practical field by Visits to petrochemical plants.

11- Action plan for next academic year

No.	Areas of development	Description of development	Completion date	Person responsible
1	Ensuring that the students carry out the tasks of self-study	discuss with them that they have reached	2023-2024	Dr. Riham Atef

Course Coordinator: Dr. Riham Atef
Head of Department: Associate prof. Hend Elsayed Gadow

Date of Approval:2/2023

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المعهد العالى للهندسة والتكنولوجيا
بدمياط الجديدة

Annual Course Report: Bio-chemistry

A. Basic Information

Program Title	Chemical Engineering
Department offering the Program	Chemical Engineering Department
Department Responsible for the Course	Chemical Engineering Department
Course Code	CHE 314
Year/ Level	Level 3
Specialization	Major
Authorization data of course report	2/2023
Exam Committee Selection Rule	Commissioning of the Institute of Management
External Revision of Examination	--
Lecturers Number:	1

Teaching hours	**Lectures**	**Exercise**	**laboratory**	**Student's load**
	2	2	-	4

B. Specialized information:

1. Statistics

Subject		**Percentage**
Students attending the course		100%
Students completing the course		100%
Results	**Passed**	97.83%
	Failed	2.17%
Grading of successful students	**Excellent**	56.5%
	Very Good	17.4%
	Good	15.2%
	Pass	8.7%

2. Course Teaching:

No.	**Topics**	**Lecture**	**Exercise**	**laboratory**	**Student load**
1	Principles	4	4	-	8
2	Carbohydrates	4	4	-	8
3	amino acids	4	4	-	8
4	proteins	4	4	-	8
5	Enzymes	2	2		4
6	fatty acids	2	2	-	4
7	oils and fats	4	4	-	8
8	Pharmaceutical compounds.	4	4	-	8
Total		**28**	**28**	**-**	**56**

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Annual Course Report: Bio-chemistry

- Topics taught as a percentage of the content specified: 90 %
- Lecturers commitment of the course content: 95 %

Used Teaching and Learning Methods

No	Topics	Face-to-Face Lecture	Online Lecture	Flipped Classroom	Presentation and movies	Discussion	Problem solving	Brain storming	Projects	Site visits	Self-learning and Research	Cooperative	Discovering	Modeling	Lab
1	Principles of bio chemistry	x	x			x					x				
2	Carbohydrates	x	x			x									
3	Amino acids	x	x			x	x				x				
4	Proteins	x	x			x	x								
5	Enzymes	x	x			x					x				
6	Fatty acids	x	x			x	x								
7	Oils and fats	x	x			x	x								
8	Pharmaceutical compounds	x	x			x	x				x				

- Student Assessment:

No.	Evaluation method	Marks
1	Periodic exams	20
2	Student load	20
3	Final term examination	60
Total		**100**

3. Facilities Required for Teaching and Learning:

No.	Facility	No.	Facility
1	Lecture classroom	4	Data show system
2	Presenter	5	Sound system
3	White board		

Annual Course Report: Bio-chemistry

4- Administrative Constraints:

No.	Constraints
1	-----

5- Student Evaluation Result of the Course:

No.	Evaluation Result
1	80.41%

6- Course enhancement suggestions

No.	Suggestions
1	Using a video presentation system that is related to the topic to increase the clarity of the idea.
2	Introducing real models of industrial applications.

7- Comments from external evaluator(s) (if exists):

No.	Comments
1	المادة كان من الممكن وضعها فى السنة الثانية بدلا من مادةCHE224
2	برجاء مراجعة الدرجات المخصصة للمادة حيث أنه فى توصيف البرنامج تم تخصيص 60درجة من مجموع الدرجات للامتحان النهائى بينما فى توصيف المقرر تم تخصيص 50 درجة فقط.
3	ما هو المقصود بكلمة Presenter الموجودة فى أغلب المواد تحت الطرق أوالوسائل المستخدمة فى التعليم و التعلم؟ إذا كان المقصود هوعضو هيئة التدريس فهو من التأكيد لا يمكن إعتباره من ضمن الوسائل المستخدمة فى التعليم و التعلم.

8- What has been implemented from the student's suggestions in the previous year?

No.	Suggestions
1	Integration of more industrial applications to emphasize the topic
2	Improve lecture notes
3	Opening the field for brainstorming and discussion about the topics of the curriculum

9- What has not been implemented from the suggestions (give reasons)?

No.	Suggestions	Reasons
1	---	----

10- What has been implemented from the action plan in the previous year?

No.	Suggestions
1	Asking questions for discussion and asking them to search for more applications

Annual Course Report: Bio-chemistry

11- Action plan for next academic year

No.	Areas of development	Description of development	Completion date	Person responsible
1	Integrating work experiences with education.	Visit industrial plant related to biochemistry	2023-2024	Associate prof. Khaled samir

Course Coordinator: Associate prof. Khaled Samir
Head of Department: Associate prof. Hend Elsayed Gadow
Date of Approval: 2/2023

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Annual Course Report: Electrochemistry

A. Basic Information

Program Title	Chemical Engineering
Department offering the Program	Chemical Engineering Department
Department Responsible for the Course	Chemical Engineering Department
Course Code	CHE 315
Year/ Level	Level 3
Specialization	Major
Authorization date of course report	2/2023
Exam Committee Selection Rule	Commissioning of the Institute of Management
External Revision of Examination	--
Lecturers Number:	1

Teaching hours	**Lectures**	**Exercise**	**laboratory**	**Student's load**
	2	1	1	3

B. Specialized information:

1. Statistics

Subject		**Percentage**
Students attending the course		100%
Students completing the course		95.65%
Results	**Passed**	97.83%
	Failed	2.17%
Grading of successful students	**Excellent**	43.5%
	Very Good	45.7%
	Good	8.7%
	Pass	0%

2. Course Teaching:

No.	**Topics**	**Lecture**	**Exercise**	**laboratory**	**Student load**
1	Chemistry and electricity [Electro neutrality - Potential differences at interfaces]	4	2	2	6
2	Electrochemical cells [Transport of charge within the cell-Cell description conventions -Electrodes and electrode reactions]	4	3	3	9

Annual Course Report: Electrochemistry

3	Standard half-cell potentials [Reference electrodes- Prediction of cell potentials Cell potentials and the electromotive series - Cell potentials and free energy - The fall of the electron]	4	3	3	9
4	The Nernst equation -Concentration cells- Analytical applications of the Nernst equation	4	1	1	3
5	Determination of solubility products- Potentiometric titrations -Measurement of pH -Membrane potentials	4	2	2	6
6	Batteries and fuel cells [The fuel cell]	4	2	2	6
7	Electrochemical Corrosion [Control of corrosion]- Electrolytic cells [Electrolysis involving water - Faraday's laws of electrolysis-]	4	1	1	3
Total		28	14	14	42

- Topics taught as a percentage of the content specified: 97 %
- Lecturers commitment of the course content: 99 %
- Used Teaching and Learning Methods

No	Topics	Face-to-Face Lecture	Online Lecture	Flipped Classroom	Presentation and movies	Discussion	Problem solving	Brain storming	Projects	Site visits	Self-learning and Research	Cooperative	Discovering	Modeling	lab
1	**Chemistry and electricity [Electro neutrality - Potential differences at interfaces]**	**x**	**x**	**x**		**x**	**x**								**x**

Annual Course Report: Electrochemistry

2	**Electrochemical cells [Transport of charge within the cell-Cell description conventions Electrodes and electrode reactions]**	**x**	**x**			**x**	**x**	**x**						**x**
3	**Standard half-cell potentials [Reference electrodes- Prediction of cell potentials-Cell potentials and the electromotive series - Cell potentials and free energy - The fall of the electron]**	**x**	**x**			**x**	**x**				**x**			**x**
4	**The Nernst equation Concentration cells- Analytical applications of the Nernst equation**	**x**	**x**	**x**		**x**								**x**
5	**Determination of solubility products- Potentiometric**	**x**	**x**			**x**	**x**							**x**
	titrations - Measurement of pH Membrane potentials													
6	**Batteries and fuel cells [The fuel cell]**	**x**	**x**	**x**							**x**			**x**
7	**Electrochemical Corrosion [Control of corrosion]- Electrolytic cells [Electrolysis involving water - Faraday's laws of electrolysis-]**	**x**	**x**			**x**	**x**							**x**

- Student Assessment:

No.	Evaluation Method	Marks
1	Periodic exams	20
2	Student load	30

Annual Course Report: Electrochemistry

3	Final term examination	50
Total		**100**

3. Facilities Required for Teaching and Learning:

No.	Facility	No.	Facility
1	Lecture classroom	5	Data show system
2	Presenter	6	Sound system
3	White board		
4	Computer lab		

4- Administrative Constraints:

No.	Constraints
1	-------

5- Student Evaluation Result of the Course:

No.	Evaluation Result
1	**81.62%**

6- Course enhancement suggestions

No.	Suggestions
1	Integrating work experiences with education by field visits.

7- Comments from external evaluator(s) (if exists):

No.	Comments
1	**الوسائل المستخدمة فى التعليم و التعلم؟ إذا الموجودة فى أغلب المواد تحت الطرق أو Presenterما هو المقصود بكلمة الوسائل المستخدمة فى التعليم و التعلم من التأكيد لا يمكن إعتباره من ضمن كان المقصود هو عضو هيئة التدريس فهو و الوسائل. الطرق تلك باستخدام يقوم من هو حيث أنه**

8- What has been implemented of the student's suggestions in the previous year?

No.	Suggestions
1	**The course not taught the previous year**

9- What has not been implemented of the suggestions (give reasons)?

No.	Suggestions	Reasons
1	-----	-----

10-What has been implemented of the action plan in the previous year?

No.	Suggestions
1	**The course not taught the previous year**

Annual Course Report: Electrochemistry

11- Action plan for next academic year

No.	Areas of development	Description of development	Completion date	Person responsible
1	Increase some of scientific reference In the library of the institute	Add more electrochemistry references In the electronic library of the institute	2023-2024	Institute management

Course Coordinator: Assoc.prof. Hend Elsayed Gadow
Head of Department: Assoc.prof. Hend Elsayed Gadow
Date of Approval: 2/2023

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وزارة التعليم العالى
المعهد العالى للهندسة والتكنولوجيا
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Annual Course Report: air pollution

A. Basic Information

Program Title	Chemical Engineering
Department offering the Program	Chemical Engineering Department
Department Responsible for the Course	Chemical Engineering Department
Course Code	CHE 316E
Year/ Level	Level 4
Specialization	Major
Authorization data of course report	2/2023
Exam Committee Selection Rule	Commissioning of the Institute of Management
External Revision of Examination	--
Lecturers Number:	1

Teaching hours	Lectures	Exercise	laboratory	Student's load
	2	2	-	3

B. Specialized information:

1. Statistics

Subject		Percentage
Students attending the course		100%
Students completing the course		100%
Results	**Passed**	95.65%
	Failed	4.35%
Grading of successful students	**Excellent**	30.4%
	Very Good	30.4%
	Good	15.2%
	Pass	19.6%

2. Course Teaching:

No.	Topics	Lecture	Exercise	laboratory	Student load
1	Source of pollutants	4	4	-	6
2	measurements and equipment design for removal of air pollutants	4	4	-	6
3	Effects of air pollutants	4	4	-	6
4	Dispersion of pollutants in the atmosphere	4	4	-	6
5	Particulate matter and its control equipment	4	4	-	6
6	Atmospheric photochemical reactions	4	4	-	6
7	Instrumentation and emission testing equipment	4	4		6
Total		**28**	**28**	**-**	**42**

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Annual Course Report: air pollution

- Topics taught as a percentage of the content specified: 90 %
- Lecturers commitment of the course content: 95 %

Used Teaching and Learning Methods

No	Topics	Face-to-Face Lecture	Online Lecture	Flipped Classroom	Presentation and movies	Discussion	Problem solving	Brain storming	Projects	Site visits	Self-learning and Research	Cooperative	Discovering	Modeling	Lab
1	Source of pollutants	x	x	x		X									
2	measurements and equipment design for removal of air pollutants	x	x			X	x				X				
3	Effects of air pollutants	x	x			X					X				
4	Dispersion of pollutants in the atmosphere	x	x	x		X									
5	Particulate matter and its control equipment	x	x			X					X				
6	Atmospheric photochemical reactions	x	x			X									
7	Instrumentation and emission testing equipment	x	x			X					X				

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Annual Course Report: air pollution

- Student Assessment:

No.	evaluation method	Marks
1	Periodic exams	30
2	Student load	20
3	Final term examination	50
	Total	100

3. Facilities Required for Teaching and Learning:

No.	Facility	No.	Facility
1	Lecture classroom	4	Data show system
2	Presenter	5	Sound system
3	White board		

4- Administrative Constraints:

Constraints
No constraints

5- Student Evaluation Result of the Course:

No.	Evaluation Result
1	**78.98%**

6- Course enhancement suggestions

No.	Suggestions
1	**Integration of more industrial applications to emphasize the topic**

7- Comments from external evaluator(s) (if exists):

No.	Comments
1	**يجب أن يتم مراجعة أهداف المقرر و كذلك مخرجات التعلم حيث أنه لا علاقة له بمحتوى المقرر**
2	**ما هو المقصود بكلمة Presenterالموجودة فى أغلب المواد تحت الطرق أو الوسائل المستخدمة فى التعليم و التعلم؟ إذا كان المقصود هو عضو هيئة التدريس فهو من التأكيد لا يمكن إعتباره من ضمن الوسائل المستخدمة فى التعليم و التعلم**

8- What has been implemented from the student's suggestions in the previous year?

No.	Suggestions
1	**Make scientific sessions with some environmental experts to make the students more aware about the latest technologies that cause air pollution**

9- What has not been implemented from the suggestions (give reasons)?

No.	Suggestions	Reasons
1	**Simulate real models for any industry that causes air pollution**	**Lack of academic time**

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Annual Course Report: air pollution

10- What has been implemented from the action plan in the previous year?

No.	Suggestions
1	**Increasing the application and discussion aspect with students.**

11- Action plan for next academic year

No.	Areas of development	Description of development	Completion date	Person responsible
1	**Adding some scientific reference in the electronic library of the institute.**	**Increase the number of text books that deals with pollution resulted from modern industries**	**2023-2024**	**Institute management**

Course Coordinator: Dr. Mohamed Elbendary
Head of Department: Associate prof. Hend Elsayed Gadow
Date of Approval: 2/2023

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Annual Course Report:
Project Management and Control

A. Basic Information

Program Title	Chemical Engineering program
Department offering the Program	Chemical Engineering Department
Department Responsible for the Course	Basic Science and Engineering Department
Course Code	BAS 321
Year/ Level	Level 3
Specialization	Major
Authorization date of course report	9/2023
Exam Committee Selection Rule	Commissioning of the Institute of Management
External Revision of Examination	--
Lecturers Number:	1

Teaching hours	**Lectures**	**Exercise**	**laboratory**	**Student's load**
	2	2	-	4

B. Specialized information:

1. Statistics

Subject		**No.**	**Percentage**
Students attending the course		183	100%
Students completing the course		183	100%
Results	**Passed**	182	99.45 %
	Failed	1	0.55 %
Grading of successful students	**Excellent**	95	51.9 %
	Very Good	59	32.2 %
	Good	18	9.8 %
	Pass	10	5.5 %

2. Course Teaching:

No.	**Topics**	**Lecture**	**Exercise**	**laboratory**	**Student load**
1	Introduction to project management.	2	2	-	4
2	Project planning and scheduling.	2	2	-	4
3	Network based scheduling.	2	2	-	4
4	Critical path method.	6	6	-	12
5	Program evaluation& review technique (PERT)	4	4	-	8

Annual Course Report:
Project Management and Control

6	Probability aspects of project completion time.	2	2	-	4
7	Project cost control.	6	6	-	12
8	Resource allocation	2	2	-	4
9	Forecasting funds requirement	2	2	-	4
Total		**28**	**28**	**-**	**56**

- Topics taught as a percentage of the content specified: 94%
- Lecturers commitment of the course content: 96 %
- Used Teaching and Learning Methods

No.	Teaching Method	Choice
1	Lectures	√
2	Discussion Sessions	×
3	Information Collection from Different Sources	√
4	Practical	x
5	Research Assignment	x
6	Field Visits	×
7	Case Studies	x
8	Smart Sessions	×

- Student Assessment:

No.	Evaluation method	Marks
1	Periodic exams	20
2	Student load	20
3	Final-term examination	60
Total		**100**

3. Facilities Required for Teaching and Learning:

No.	Facility	Choice	No.	Facility	Choice
1	Lecture Classroom	√	7	Wireless Board	×
2	Lab Facilities	√	8	Presenter	×
3	White Board	√	9	Sound System	√

Annual Course Report:
Project Management and Control

4	Data Show System	√		10	Wire-Internet	x
5	Visualizer	×		11	Wireless Internet	√
6	Smart Board	×		12	…	×

4- Administrative Constraints:

No.	Constraints
1	-----

5- Student Evaluation Result of the Course:

No.	Evaluation Result
1	95 %

6- Course enhancement suggestions

No.	Suggestions
1	Improve lecture notes
2	Integrating work experiences with education.
3	Transplant And Assess Pedagogy Utilizing Such Technologies To Enhance Students' Learning.

7- Comments from external evaluator(s) (if exists):

No.	Comments
1	No comment

8- What has been implemented of the student's suggestions in the previous year?

No.	Suggestions
1	Increase the practical session in the course

9- What has not been implemented of the suggestions (give reasons)?

No.	Suggestions	Reasons
1	Using online course material.	Needing of extra internet system and smart boards

Annual Course Report:
Project Management and Control

10- What has been implemented of the action plan in the previous year?

No.	Areas of development	Description of development	Completion date	Person responsible
1	Increase some of scientific reference In the library of the institute	Purchase some references	2022-2023	Dr. Hamdy Abd Elaty

11- Action plan for next academic year

No.	Areas of development	Description of development	Completion date	Person responsible
1	Increasing applied problems	Assignment and sheets	2023-2024	Dr. Hamdy Abd Elaty

Course Coordinator: Dr. Hamdy Abd Elaty
Head of Department: Assoc. Prof. Dr. Amal Behiry
Date of Approval: 9/2023

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المعهد العالى للهندسة والتكنولوجيا
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Annual Course Report: Mass Transfer Operations II

A. Basic Information

Program Title	Chemical Engineering
Department offering the Program	Chemical Engineering Department
Department Responsible for the Course	Chemical Engineering Department
Course Code	CHE321
Year/ Level	Level 3
Specialization	Major
Authorization data of course report	8/2023
Exam Committee Selection Rule	Commissioning of the Institute of Management
External Revision of Examination	--
Lecturers Number:	1

Teaching hours	**Lectures**	**Exercise**	**laboratory**	**Student's load**
	3	2	-	4

B. Specialized information:

1. Statistics

Subject		**Percentage**
Students attending the course		100%
Students completing the course		100%
Results	**Passed**	91.3%
	Failed	8.7%
Grading of successful students	**Excellent**	6.5%
	Very Good	23.9%
	Good	26.1%
	Pass	34.8%

2. Course Teaching:

No.	**Topics**	**Lecture**	**Exercise**	**laboratory**	**Student load**
1	Inter-phase mass transport	3	2	-	4
2	Continuous two phase mass transport processes	6	4	-	8
3	Gas absorption and stripping	6	4	-	8
4	adsorption	6	4	-	8
5	crystallization	3	2	-	4
6	double-effect evaporation	3	2	-	4

Annual Course Report: Mass Transfer Operations II

7	Humidification, water cooling, drying.	9	6	-	12
8	Membrane separation technology	6	4	-	8
Total		**42**	**28**		**56**

- Topics taught as a percentage of the content specified: 88%
- Lecturers commitment of the course content: 96%

Used Teaching and Learning Methods

No	Topics	Face-to-Face Lecture	Online Lecture	Flipped Classroom	Presentation and movies	Discussion	Problem solving	Brain storming	Projects	Site visits	Self-learning and Research	Cooperative	Discovering	Modeling	lab
1	Inter-phase mass transport	x	x			x	x	x							
2	Continuous two phase mass transport processes	x	x		x	x	x	x							
3	Gas absorption and stripping	x	x		x	x	x	x							
4	adsorption	x	x			x	x	x			x	x			
5	crystallization	x	x			x	x	x			x	x			
6	double-effect evaporation	x	x		x	x	x	x							
7	Humidification, water cooling, drying.	x	x			x	x	x							
8	Membrane separation technology	x	x			x	x	x			x	x			

Annual Course Report: Mass Transfer Operations II

- Student Assessment:

No.	Evaluation method	Marks
1	Periodic exams	30
2	Student load	30
3	Final term examination	90
	Total	150

3. Facilities Required for Teaching and Learning:

No.	Facility	No.	Facility
1	Lecture classroom	4	Data show system
2	Presenter	5	Sound system
3	White board		

4- Administrative Constraints:

No.	Constraints
1	-----

5- Student Evaluation Result of the Course:

No.	Evaluation Result
1	**73.68%**

6- Course enhancement suggestions

No.	Suggestions
1	**Increasing the scientific references which relates to mass transfer operations.**

7- Comments from external evaluator(s) (if exists):

No.	Comments
1	**يجب أن يتم مراجعة أهداف المقرر.**
2	**ما هو المقصود بكلمة Presenterالموجودة فى أغلب المواد تحت الطرق أو الوسائل المستخدمة فى التعليم و التعلم؟ إذا كان المقصود هو عضو هيئة التدريس فهو من التأكيد لا يمكن إعتباره من ضمن الوسائل المستخدمة فى التعليم و التعلم.**

8- What has been implemented of the student's suggestions in the previous year?

No.	Suggestions
1	**Ensuring that the students carry out the tasks of self-study and discuss with them what they have reached**

9- What has not been implemented of the suggestions (give reasons)?

No.	Suggestions	Reasons
1	**Making field visits**	**Lack of time**

Annual Course Report: Mass Transfer Operations II

10- What has been implemented of the action plan in the previous year?

No.	Suggestions
1	**Improve lecture notes.**

11- Action plan for next academic year

No.	Areas of development	Description of development	Completion date	Person responsible
1	**Relating the course with industrial field**	**Provide field visits**	**2023-2024**	**Institute management**

Course Coordinator: Dr. Riham Atef
Head of Department: Associate prof. Hend Elsayed Gadow

Date of Approval: 8/2023

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وزارة التعليم العالى
المعهد العالى للهندسة والتكنولوجيا
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Annual Course Report: Corrosion Engineering

A. Basic Information

Program Title	Chemical Engineering
Department offering the Program	Chemical Engineering Department
Department Responsible for the Course	Chemical Engineering Department
Course Code	CHE 322
Year/ Level	Level 3
Specialization	Major
Authorization date of course report	7/2023
Exam Committee Selection Rule	Commissioning of the Institute of Management
External Revision of Examination	--
Lecturers Number:	1

Teaching hours	**Lectures**	**Exercise**	**laboratory**	**Student's load**
	2	**2**	**-**	**3**

B. Specialized information:

1. Statistics

Subject		**Percentage**
Students attending the course		100%
Students completing the course		100%
Results	**Passed**	100%
	Failed	0%
Grading of successful students	**Excellent**	10.9%
	Very Good	52.2%
	Good	23.9%
	Pass	13%

2. Course Teaching:

No.	**Topics**	**Lecture**	**Exercise**	**laboratory**	**Student load**
1	Theories and principles of corrosion	2	2	-	3
2	Types of corrosion (Localized corrosion, pitting, crevice corrosion , cavitations, stress corrosion cracking and corrosion fatigue)	4	4	-	6
3	metallurgical factors	2	2	-	3
4	welding problems	2	2	-	3
5	material selection	2	2	-	3

Annual Course Report: Corrosion Engineering

6	Inspection and nondestructive testing	4	4	-	6
7	chemical cleaning flue gas attack	2	2	-	3
8	corrosion testing evaluation and simulation	4	4	-	6
9	corrosion prevention ,monitoring, cathode protection and anodic protection	2	2	-	3
10	water treatment for boilers and condensers	4	4	-	6
	Total	**28**	**28**	**-**	**42**

- Topics taught as a percentage of the content specified: 96 %
- Lecturers commitment of the course content: 96 %
- Used Teaching and Learning Methods

No	Topics	Face-to-Face Lecture	Online Lecture	Flipped Classroom	Presentation and movies	Discussion	Problem solving	Brain storming	Projects	Site visits	Self-learning and Research	Cooperative	Discovering	Modeling	Lab
1	Theories and principles of corrosion	X	X			x					x				
2	Types of corrosion (Localized corrosion, pitting, crevice corrosion , cavitations, stress corrosion cracking and corrosion fatigue)	x	X	X		X	X								

Annual Course Report: Corrosion Engineering

3	metallurgical factors	x	X	x		X									
4	welding problems	x	X	x		X		X							
5	material selection	x	X	x		X		X							
6	Inspection and nondestructive testing	x	X	x		X									
7	chemical cleaning flue gas attack	x	X	x		X									
8	corrosion testing evaluation and simulation	x	X	x		X	x								
9	corrosion prevention ,monitoring, cathode protection and anodic protection	x	X	x		X	X								
10	water treatment for boilers and condensers	x	X	x		X	x								

- Student Assessment:

No.	Evaluation Method	Marks
1	periodic exams	20
2	Student load	20
3	Final term examination	60
Total		100

3. Facilities Required for Teaching and Learning:

No.	Facility	No.	Facility
1	Lecture classroom	4	Data show system
2	Presenter	5	Sound system

Annual Course Report: Corrosion Engineering

3	White board

4- Administrative Constraints:

No.	Constraints
1	There are no constraints

5- Student Evaluation Result of the Course:

No.	Evaluation Result
1	78.47%

6- Course enhancement suggestions

No.	Suggestions
1	Improve lecture notes
2	Increasing visual aids that help understanding the content.

7- Comments from external evaluator(s) (if exists):

No.	Comments
1	يجب أن يتم مراجعة أهداف المقرر
2	ما هو المقصـــود بكلمة Presenter الموجودة فى أغلب المواد تحت الطرق أو الوســائل المســتخدمة فى التعليم و التعلم؟ إذا كان المقصود هو عضو هيئة التدريس فهو من التأكيد لا يمكن إعتباره من ضمن الوسائل المستخدمة فى التعليم و التعلم.

8- What has been implemented of the student's suggestions in the previous year?

No.	Suggestions
1	Obliging the students to search for real examples of corrosion and mention the type of corrosion and discussing their results
2	Integrating work experiences with education.
3	Preparing pieces that have corroded to see the types of corrosion in reality

9- What has not been implemented of the suggestions (give reasons)?

No.	Suggestions	Reasons
1	**----**	**-----**

10-What has been implemented of the action plan in the previous year?

No.	Suggestions
1	Adding some scientific reference in the electronic library of the institute.

Annual Course Report: Corrosion Engineering

11- Action plan for next academic year

No.	Areas of development	Description of development	Completion date	Person responsible
1	Application of modern teaching methods	Divide the students into groups to present an applied part about the contents of the course	2023-2024	Assoc.prof. Hend Elsayed Gadow and Dr. Mohamed Fakeeh

Course Coordinator: Assoc.prof. Hend Elsayed Gadow and Dr. Mohamed Fakeeh
Head of Department: Assoc.prof. Hend Elsayed Gadow
Date of Approval:7/2023

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Annual Course Report: Mechanical unit operation

A. Basic Information

Program Title	Chemical Engineering
Department offering the Program	Chemical Engineering Department
Department Responsible for the Course	Chemical Engineering Department
Course Code	CHE 323
Year/ Level	Level 3
Specialization	Major
Authorization date of course report	7/2023
Exam Committee Selection Rule	Commissioning of the Institute of Management
External Revision of Examination	--
Lecturers Number:	1

Teaching hours	**Lectures**	**Exercise**	**laboratory**	**Student's load**
	3	2	-	4

B. Specialized information:

1. Statistics

Subject		**Percentage**
Students attending the course		100%
Students completing the course		100%
Results	**Passed**	95.65%
	Failed	4.35%
Grading of successful students	**Excellent**	6.5%
	Very Good	17.4%
	Good	23.9%
	Pass	47.8%

2. Course Teaching:

No.	**Topics**	**Lecture**	**Exercise**	**laboratory**	**Student load**
1	Filtration	3	2	-	4
2	Size reduction	3	2	-	4
3	Screening and Size Classification	3	2	-	4
4	Solid drying	6	4	-	8
5	Crystallization	3	2	-	4
6	Centrifugation	3	2	-	4
7	Sedimentation	6	4	-	8

Annual Course Report: Mechanical unit operation

8	Power consumption in gas /liquid contacting. Design principles for stirrer and model experiments for scale up.	3	2	-	4
9	Computation methods in multistage and multicomponent systems and operations including particulate solids	12	8		16
Total		**42**	**28**	**-**	**56**

- Topics taught as a percentage of the content specified: 93%
- Lecturers commitment of the course content: 97%

Used Teaching and Learning Methods

No	Topics	Face-to-Face Lecture	Online Lecture	Flipped Classroom	Presentation and movies	Discussion	Problem solving	Brain storming	Projects	Site visits	Self-learning and Research	Cooperative	Discovering	Modeling	Lab
1	Filtration	x	x			x	x								
2	Size reduction	x	x			x					X				
3	Screening and Size Classification	x	x			x	x								
4	Solid drying	x	x			x	x				X				
5	Crystallization	x	x			x	x				X				
6	Centrifugation	x	x			x	x				X				
7	Sedimentation	x	x			x									
8	Power consumption in gas /liquid contacting. Design principles for stirrer and model experiments for scale up.	x	x			X									
9	Computation methods in multistage and multicomponent systems and	x	x			x					X				

Annual Course Report: Mechanical unit operation

	operations including particulate solids														

- Student Assessment:

No.	Evaluation method	Marks
1	Periodic exams	30
2	Student load	30
3	Final term examination	90
	Total	**150**

3. Facilities Required for Teaching and Learning:

No.	Facility	No.	Facility
1	Lecture classroom	4	Data show system
2	Presenter	5	Sound system
3	White board		

4- Administrative Constraints:

No.	Constraints
1	-------

5- Student Evaluation Result of the Course:

No.	Evaluation Result
1	**74.83%**

6- Course enhancement suggestions

No.	Suggestions
1	**Using a video presentation system that is related to the topic to increase the clarity of the idea.**
2	**Increasing the references related to the topic**

7- Comments from external evaluator(s) (if exists):

No.	Comments
1	**يجب ان يتم مراجعة اهداف المقرر**
2	**برجاء مراجعة تقسيم ساعات المادة حيث أنه فى توصيف البرنامج تم تخصيص 2 ساعة معمل بينما فى توصيف المقرر تم تخصيص 2 ساعة تدريب**
3	**ما هو المقصود بكلمة Presenter الموجودة فى أغلب المواد تحت الطرق أوالوسائل المستخدمة فى التعليم والتعلم؟ إذا كان المقصود هوعضو هيئة التدريس فهو من التأكيد لا يمكن إعتباره من ضمن الوسائل المستخدمة فى التعليم و التعلم.**

Annual Course Report: Mechanical unit operation

4	برجاء مراجعة مجموع الدرجات للمادة حيث أنه فى توصيف البرنامج تم تخصيص 10درجات عملى مما يجعل مجموع الدرجات160 بينما المجموع المكتوب150

8- What has been implemented of the student's suggestions in the previous year?

No.	Suggestions
1	Integration of more industrial applications to emphasize the topic.

9- What has not been implemented of the suggestions (give reasons)?

No.	Suggestions	Reasons
1	------	----

10- What has been implemented from the action plan in the previous year?

No.	Suggestions
1	Asking questions for discussion and asking them to search for more applications

11- Action plan for next academic year

No.	Areas of development	Description of development	Completion date	Person responsible
1	Application of modern teaching methods	Divide the students into groups to present an applied part about the contents of the course	2023-2024	Prof. Dr. Taha Farag

Course Coordinator: Prof. Dr. Taha Farag
Head of Department: Assoc.prof. Hend Elsayed Gadow
Date of Approval: 7/2023

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وزارة التعليم العالى
المعهد العالى للهندسة والتكنولوجيا
بدمياط الجديدة

Annual Course Report: Process Modeling and Simulation

A. Basic Information

Program Title	Chemical Engineering
Department offering the Program	Chemical Engineering Department
Department Responsible for the Course	Chemical Engineering Department
Course Code	CHE 324
Year/ Level	Level 3
Specialization	Major
Authorization data of course report	8/2023
Exam Committee Selection Rule	Commissioning of the Institute of Management
External Revision of Examination	--
Lecturers Number:	1

Teaching hours	**Lectures**	**Exercise**	**laboratory**	**Student's load**
	3	-	2	4

B. Specialized information:

1. Statistics

Subject		**Percentage**
Students attending the course		100%
Students completing the course		100%
Results	**Passed**	100%
	Failed	0%
Grading of successful students	**Excellent**	28.3%
	Very Good	48.8%
	Good	19.6%
	Pass	4.3%

2. Course Teaching:

No.	**Topics**	**Lecture**	**Exercise**	**laboratory**	**Student load**
1	Review of the basic principles of transport of momentum, heat, and mass with applied problems. Practical • Natural gas processing • Heat Exchanger	24	-	16	32
2	Numerical methods for solving more complex problems of transport phenomena and kinetics. Practical • Chemical reaction	18	-	12	24

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Annual Course Report: Process Modeling and Simulation

Total	**42**	**-**	**28**	**56**

- Topics taught as a percentage of the content specified: 92%
- Lecturers commitment of the course content: 97%

- Used Teaching and Learning Methods

No	Topics	Face-to-Face Lecture	Online Lecture	Flipped Classroom	Presentation and movies	Discussion	Problem solving	Brain storming	Projects	Site visits	Self-learning and Research	Cooperative	Discovering	Modeling	Lab
1	Review of the basic principles of transport of momentum, heat, and mass with applied problems. Practical • Natural gas processing • Heat Exchanger	x	x			x	x	x						x	x
2	Numerical methods for solving more complex problems of transport phenomena and kinetics. Practical • Chemical reaction	x	x			x	x	x						x	x

- Student evaluation:

No.	Evaluation method	Marks
1	Periodic exams	20
2	Student load	20
3	Practical Examination	10

Annual Course Report: Process Modeling and Simulation

4	Final term examination	50
Total		100

3. Facilities Required for Teaching and Learning:

No.	Facility	No.	Facility
1	Lecture classroom	5	Data show system
2	Presenter	6	Sound system
3	White board		
4	Lab		

4- Administrative Constraints:

No.	Constraints
1	-----

5- Student Evaluation Result of the Course:

No.	Evaluation Result
1	73.29%

6- Course enhancement suggestions

No.	Suggestions
1	**Transplant and assess pedagogy utilizing such technologies to enhance students' learning.**

7- Comments from external evaluator(s) (if exists):

No.	Comments
1	اسم المادة Process Modeling and Simulation مما يعنى أنه يجب أن تشمل نمذجة و محاكاة مما يعنى استخدام برامج كمبيوتر فى المحاكاة !!!لم يتم ذكر تلك البرامج.
2	محتوى المادة المذكور فى توصيف المقرر مختصر جدا جدا و لا يشمل ساعات تدريب و كل الساعات مقسمة على المحاضرات و العملى.
3	ما هو المقصود بكلمة Presenterالموجودة فى أغلب المواد تحت الطرق أو الوسائل المستخدمة فى التعليم و التعلم؟ إذا كان المقصود هو عضو هيئة التدريس فهو من التأكيد لا يمكن إعتباره من ضمن الوسائل المستخدمة فى التعليم و التعلم

8- What has been implemented of the student's suggestions in the previous year?

No.	Suggestions
1	**Introducing real models of industrial applications.**

9- What has not been implemented of the suggestions (give reasons)?

No.	Suggestions	Reasons
1	**Increase some of scientific reference about process modelling and simulation for chemical engineering in electronic library.**	**Lack of time for the academic term.**

10-What has been implemented of the action plan in the previous year?

No.	Suggestions
1	**Using the internet in the research and ensuring that the students carry out the tasks of self-study and discuss with them what they have reached**

Annual Course Report: Process Modeling and Simulation

11- Action plan for next academic year

No.	Areas of development	Description of development	Completion date	Person responsible
1	Use more advanced programs	Apply advanced chemical engineering programs	2023-2024	Dr. Sohier Abo Bakr

Course Coordinator: Dr. Sohier Abo Bakr
Head of Department: Assoc.prof. Hend Elsayed Gadow
Date of Approval: 8/2023

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Annual Course Report: Polymer Engineering

A. Basic Information

Program Title	Chemical Engineering
Department offering the Program	Chemical Engineering Department
Department Responsible for the Course	Chemical Engineering Department
Course Code	CHE 325C
Year/ Level	Level 3
Specialization	Major
Authorization data of course report	8/2023
Exam Committee Selection Rule	Commissioning of the Institute of Management
External Revision of Examination	--
Lecturers Number:	1

Teaching hours	**Lectures**	**Exercise**	**laboratory**	**Student's load**
	2	2	-	4

B. Specialized information:

1. Statistics

Subject		**Percentage**
Students attending the course		100%
Students completing the course		100%
Results	**Passed**	100%
	Failed	0%
Grading of successful students	**Excellent**	43.5%
	Very Good	23.9%
	Good	10.9%
	Pass	21.7%

2. Course Teaching:

No.	**Topics**	**Lecture**	**Exercise**	**laboratory**	**Student load**
1	Polymer chemistry and types of polymerization reactions.	4	4	-	8
2	Polymerization techniques	2	2	-	4
3	measurement of molecular weight	2	2	-	4
4	Classification of polymers	2	2	-	4
5	plastics, elastomers	4	4	-	8
6	thermoplastics and thermosetting resins	2	2	-	4
7	Structure, mechanical and physical properties of polymers	2	2	-	4

Annual Course Report: Polymer Engineering

8	manufacture of polymers	2	2	-	4
9	Polymer processing	2	2	-	4
10	Extrusion	2	2	-	4
11	Injection and blow molding	2	2	-	4
12	Manufacture and properties of some commercial polymers	2	2	-	4
	Total	**28**	**28**	**-**	**56**

- Topics taught as a percentage of the content specified: 90%
- Lecturers commitment of the course content: 95%

Used Teaching and Learning Methods

No	Topics	Face-to-Face Lecture	Online Lecture	Flipped Classroom	Presentation and movies	Discussion	Problem solving	Brain storming	Projects	Site visits	Self-learning and Research	Cooperative	Discovering	Modeling	Lab
1	Polymer chemistry and types of polymerization reactions.	x	x			x					x				
2	Polymerization techniques	x	x	x		x									
3	measurement of molecular weight	x	x			x	x								
4	Classification of polymers	x	x			x					x				
5	plastics, elastomers	x	x			x									

Annual Course Report: Polymer Engineering

6	thermoplastics and thermosetting resins	x	x			x					x				
7	Structure, mechanical and physical properties of polymers	x	x			x					x				
8	manufacture of polymers	x	x			x					x				
9	Polymer processing	x	x	x		x									
10	Extrusion	x	x								x				
11	Injection and blow molding	x	x			x									
12	Manufacture and properties of some commercial polymers	x	x	x		x									

- Student Assessment:

No.	Evaluation method	Marks
1	periodic exams	20
2	Student load	30
3	Final term examination	50
total		100

3. Facilities Required for Teaching and Learning:

No.	Facility	No.	Facility
1	Lecture classroom	4	Data show system
2	Presenter	5	Sound system
3	White board		

4- Administrative Constraints:

Constraints
No constraints

5- Student Evaluation Result of the Course:

No.	Evaluation Result
1	**75.24%**

Annual Course Report: Polymer Engineering

6- Course enhancement suggestions

No.	Suggestions
1	Student participation in research and information collection
2	Making site visits to raise awareness of the spread of polymers and their importance in various field

7- Comments from external evaluator(s) (if exists):

No.	Comments
1	يجب أن يتم مراجعة أهداف المقرر و التى تم ذكر فيها أنه يتم استخدام computational system in polymer industry و هو غير واضح من المحتوى المذكور للمقرر.
2	برجاء مراجعة الدرجات المخصصة للامتحان النهائى حيث أنها 50 درجة فى توصيف البرنامج و60درجة فى توصيف المقرر
3	ما هو المقصود بكلمة Presenter الموجودة فى أغلب المواد تحت الطرق أو الوسائل المستخدمة فى التعليم و التعلم؟ إذا كان المقصود هو عضو هيئة التدريس فهو من التأكيد لا يمكن إعتباره من ضمن الوسائل المستخدمة فى التعليم و التعلم.

8- What has been implemented of the student's suggestions in the previous year?

No.	Suggestions
2	Using online course material.

9- What has not been implemented of the suggestions (give reasons)?

No.	Suggestions	Reasons
1	Practically preparing a polymer and trying to separate it using one of the methods that have been taught	Lack of time and possibilities

10- What has been implemented from the action plan in the previous year?

No.	Suggestions
1	Making some scientific visits for petrochemical laboratories..

11- Action plan for next academic year

No.	Areas of development	Description of development	Completion date	Person responsible
1	Increasing visual aids that help understanding the content	Increasing the explanatory videos in the teaching content	2023-2024	Dr. Mohamed Fakeeh

Course Coordinator: Dr. Mohamed Fakeeh
Head of Department: Assoc.prof. Hend Elsayed Gadow
Date of Approval: 8/2023