



مواصفات المقرر: جيولوجيا عامة (2)

Course Specification of: General Geology (2)

المعلومات العامة عن المقرر General information about the course					
1.	اسم المقرر Course Title	General Geology (2) جيولوجيا عامة (2)			
2.	رمز المقرر ورقمه Course Code and Number	PNR 112			
3.	الساعات المعتمدة للمقرر Credit Hours	الساعات المعتمدة Credit Hours			الإجمالي Total
		محاضرات Lecture	عملي Practical	سمنار/تمارين Seminar/Tutorial	
		2	1	-	3
4.	المستوى والفصل الدراسي Study Level and Semester	1st Year / 2nd Semester			
5.	المتطلبات السابقة للمقرر (إن وجدت) Pre-requisites (if any)	PNR111			
6.	المتطلبات المصاحبة (إن وجدت) Co-requisites (if any)	-			
7.	البرنامج الذي يدرس له المقرر Program (s) in which the course is offered	BSc in Petroleum and Natural Gas Engineering متطلب كلية			
8.	لغة تدريس المقرر Language of teaching the course	Arabic/English			
9.	نظام الدراسة Study System	Academic year of two semesters			
10.	مكان تدريس المقرر Location of teaching the course	Faculty of Petroleum and Natural Resources			
11.	اسم معد (و) مواصفات المقرر Prepared by	Assoc.Prof. Adel M. Al-Matary			
12.	تاريخ اعتماد مجلس الجامعة Date of Approval	2020			

وصف المقرر Course Description

وصف المقرر بالإنجليزية	وصف المقرر بالعربية
The aim of this course introduces the basic concepts of sedimentary environments; principle of stratigraphy and historical geology; geologic time, stratigraphic units and correlations, Geology of Yemen and sedimentary basins.	

مخرجات تعلم المقرر (CILOs) Course Intended Learning Outcomes (CILOs)

After completing the course, the student will be able to:	بعد الانتهاء من دراسة المقرر سوف يكون الطالب قادرا على أن:
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Dean of the Faculty
Assoc.Prof. Bassim
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Dean of the Development
& Quality Assurance Center
Assoc.Prof. Huda Al-Emad

Rector of Sana'a University
Prof. Dr. Al Qaseem Mohammed Abas



a1.	Define the concepts sedimentary environments and stratigraphy.		- a1
a2.	Describe the different types of deposits sedimentary environments.		- a2
b1.	Analyze the geological fieldwork data related with laboratory results.		-b1
b2.	Design the stratigraphic chart-column and maps.		- b2
c1.	Use the geological maps to recognize the certain rocks local site.		- c1
c2.	Employ the Yemen's Basins Stratigraphic unit.		- c2
d1.	Use computer and internet to writing scientific research.		- d1
d2.	write a brief geological report individual and group.		- d2

مواءمة مخرجات تعلم المقرر مع مخرجات التعلم للبرنامج: Alignment of CILOs (Course Intended Learning Outcomes) to PILOs (Program Intended Learning Outcomes)			
مخرجات التعلم المقصودة من المقرر (Course Intended Learning Outcomes)		مخرجات التعلم المقصودة من البرنامج (Program Intended Learning Outcomes) (تكتب جميع مخرجات البرنامج كما هي رمزا ونصا)	
a1	Define the concepts sedimentary environments and stratigraphy.	A1	
a2	Describe the different types of deposits sedimentary environments.	A3	
b1	Analyze the geological fieldwork data related with laboratory results.	B1	
b2	Design the stratigraphic chart-column and maps.	B2	
c1	Use the geological maps to recognize the certain rocks local site.	C1	
c2	Employ the Yemen's Basins Stratigraphic unit.	C2	
d1	Use computer and internet to writing scientific research.	D2	
d2	write a brief geological report individual and group.	D3	

مواءمة مخرجات التعلم باستراتيجيات التعليم والتعلم والتقويم Alignment of CILOs to Teaching and Assessment Strategies	
أولاً: مواءمة مخرجات تعلم المقرر (المعارف والفهم) باستراتيجية التعليم والتعلم والتقويم: First: Alignment of Knowledge and Understanding CILOs	

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مخرجات المقرر/ المعرفة والفهم Knowledge and Understanding CILOs		استراتيجية التعليم والتعلم Teaching Strategies	استراتيجية التقويم Assessment Strategies
a1 -	Define the concepts sedimentary environments and stratigraphy.	Lectures Discussion Using of illustration tools and computer.	Theoretical Exam. Homework assignments,
a2 -	Describe the different types of deposits sedimentary environments.		

ثانياً: مواءمة مخرجات تعلم المقرر (المهارات الذهنية) باستراتيجية التدريس والتقويم:

Second: Alignment of Intellectual Skills CILOs

مخرجات المقرر/ المهارات الذهنية Intellectual Skills CILOs		استراتيجية التعليم والتعلم Teaching Strategies	استراتيجية التقويم Assessment Strategies
b1 -	Analyze the geological fieldwork data related with laboratory results.	Discussion Self-study, Lectures	Quizzes, Homework assignments,
b2 -	Design the stratigraphic chart-column and maps.		

ثالثاً: مواءمة مخرجات تعلم المقرر (المهارات المهنية والعملية) باستراتيجية التدريس والتقويم:

Third: Alignment of Professional and Practical Skills CILOs

مخرجات المقرر/ المهارات المهنية والعملية Professional and Practical Skills CILOs		استراتيجية التعليم والتعلم Teaching Strategies	استراتيجية التقويم Assessment Strategies
c1-	Use the geological maps to recognize the certain rocks local site.	Laboratory sessions. Self-study,	Quizzes, Reports, Practical exam.
c2-	Employ the Yemen's Basins Stratigraphic unit.		

رابعاً: مواءمة مخرجات تعلم المقرر (المهارات العامة) باستراتيجية التدريس والتقويم:

Fourth: Alignment of Transferable (General) Skills CILOs

مخرجات المقرر Transferable (General) Skills CILOs		استراتيجية التعليم والتعلم Teaching Strategies	استراتيجية التقويم Assessment Strategies
d1-	Use computer and internet to writing scientific research.	Self-study, laboratory sessions, .	Reports, Homework assignments,
d2-	write a brief geological report individual and group.		

محتوى المقرر Course Content

موضوعات الجانب النظري Theoretical Aspect					
الرقم Order	الموضوعات الرئيسية/ الوحدات Topic List / Units	الموضوعات الفرعية Sub Topics List	عدد الأسابيع Number of Weeks	الساعات الفعلية Contact Hours	رموز مخرجات التعلم للمقرر (CILOs)

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1	Introduction	Review of general geological course	1	2	a1,a2
2	Sedimentary environments	1. Continental deposits. 2. Transitional deposits. A-Lagoons. B-Deltas 3. Marine deposits	3	6	a1,a2, b1,b2
3	principle of stratigraphy	1. Concepts and Lithostratigraphy. 2.. Stratigraphic charts	1	2	a1,a2, b1,b2
4	historical geology	- The geologic Column -Ancient Animal Life	2	4	a1, a2, b1,b2, c1,c2
5	Stratigraphic units and correlations	- Lithostratigraphic units. - Biostratigraphic unit. - Stratigraphic relationships	1	2	a1, a2, b1,b2, c1,c2
6	geology of Yemen	1-The basement 2- The sedimentary cover: 3- Cenozoic Volcanic Rocks. 4- Cenozoic Intrusive Rocks.	4	8	a1, a2, a3, b1,b2, c1,c2
7	Sedimentary basins	Yemen sedimentary basins	2	4	a1, a2, a3, b1,b2,c1,c2,d2
عدد الأسابيع والساعات الفعلية Number of Weeks /and Contact Hours Per Semester			14	28	

الموضوعات العملية (إن وجدت) Practical Aspect (if any)				
الرقم Order	التجارب العملية/ التمارين / تدريبات Practical / Exercises/ Tutorials topics	عدد الأسابيع Number of Weeks	الساعات الفعلية Contact Hours	رموز مخرجات التعلم Course ILOs
1	Introductory lecture to laboratory	1	2	a1, a2
2	Classification of Sedimentary Rocks Clastic: A- Sandstones, B-Conglomerates, C-Breccia, D-Mud Rocks	2	4	a1,a2,
3	Chemical: Limestone, Chert, Gypsum, Rock salt;	1	2	a1,a2, b1,b2,c1,c2,
4	clastic based on Size	2	4	a1,a2,b1,b2,c1,c2,d2,
5	Fossils	1	2	a1, a2, b1, b2
6	Stratigraphic Units (Case study)	1	2	a1,a2 , b1,b2,c1,c2
7	Yemen Geology	2	4	a1, a2,b1,b2,c1,c2,d2
8	Geological map	1	2	b1, b2, c1,c2,d2
9	Sedimentary Basin map	1	2	b1 ,b2,c1,c2,d2
اجمالي الأسابيع والساعات الفعلية		12	24	

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Number of Weeks /and Contact Hours Per Semester

Teaching Strategies استراتيجيات التعليم والتعلم

- Lectures
- Self-study,
- Laboratory (practical classes) sessions.
- Field Trip.

Tasks and Assignments الأنشطة والتكليفات

م No	التكليف/ الواجب Assignments/ Tasks	نوع التكليف (فردى/ تعاونى)	الدرجة المستحقة Mark	أسبوع التنفيذ Week Due	مخرجات التعلم CILOs (symbols)
1	n/a				
Total Score إجمالي الدرجة					

Learning Assessment تقييم التعلم

الرقم No.	أنشطة التقييم Assessment Tasks	أسبوع التقييم Week due	الدرجة Mark	نسبة الدرجة إلى الدرجة النهائية Proportion of Final Assessment	مخرجات التعلم CILOs (symbols)
1	Tasks and Assignments	Weekly	10	6.7%	a1,a2,a3,b1,b2,c1,c2,d1,d2
2	Quiz	End of a مجلس	10	6.7 %	a1,a2,a3,b1,b2,c2,d1,d2
3	Written test	Week 8	25	16.7%	a1,a2,a3,b1,b2,c2,d1,d2
4	Practical test	Week 7	15	10%	a1,a2,b1,b2,c2,d1,d2
5	Final exam practical	Week 14	20	13.3%	All CILO
6	Final exam theory	Week 16	70	46.6%	All CILO
Total الإجمالي			150	%100	

Learning Resources مصادر التعلم

توثق المراجع حسب نظام APA (اسم المؤلف، سنة النشر، اسم الكتاب، دار النشر، بلد النشر).

Required Textbook(s) المراجع الرئيسية (لا تزيد عن مرجعين)

- Lecture Notes (No text book)

Essential References المراجع المساندة

- 1- Gary Nichols, 2009, Sedimentology and Stratigraphy, Second Edition.
- 2- Ziad R. Beydoun, et al., 1998, International Lexicon of Stratigraphy, Vol.III, Republic of Yemen, second ed.

Electronic Materials and Web Sites etc. المصادر الإلكترونية ومواقع الإنترنت

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Course Policies:

1	<p>Class Attendance:</p> <ul style="list-style-type: none"> - Students are expected to attend classes regularly and promptly. - The attendance should not be less than 80%. - If the student has been absent, he is responsible for finding out any missed material by consulting other students or going to the professor's office hours.
2	<p>Tardy:</p> <ul style="list-style-type: none"> - Attendance and arriving on time for the class are necessary. If the student is late, he will be prevented from class.
3	<p>Exam Attendance/Punctuality:</p> <ul style="list-style-type: none"> - According to the rules the student gets absent in the exam of the course.
4	<p>Assignments & Projects:</p> <ul style="list-style-type: none"> - Papers survey or projects should be submitted by the time detriment by the professor.
5	<p>Cheating:</p> <ul style="list-style-type: none"> - According to the rules, cheating is a serious offense and will always result in an imposition of a penalty. The penalties that can be started from the range of canceling the result of the course to canceling the student's admission.
6	<p>Plagiarism:</p> <ul style="list-style-type: none"> - Plagiarism is a serious offense and will always result in an imposition of a penalty. The penalties that can be started by making a zero mark for the work.
7	<p>Other policies:</p> <ul style="list-style-type: none"> - The student should by a commitment by the rules inside class and university. Therefore, he is expected to show respect for his classmate, instructors & others.



متطلب كلية

قسم/ برنامج Department:

العام الجامعي: 2019-2020م

خطة مقرر: جيولوجيا عامة (2)

Course Plan (Syllabus): General Geology (2)

معلومات عن أستاذ المقرر Information about Faculty Member Responsible for the Course					
الاسم Name	Assoc.Prof. Adel M. Al-Matary		الساعات المكتبية (أسبوعياً) Office Hours		
المكان ورقم الهاتف Location & Telephone No.	770770769		السبت SAT	الأحد SUN	الاثنين MON
البريد الإلكتروني E-mail	a.almatary@su.edu.ye				
			الثلاثاء TUE	الأربعاء WED	الخميس THU

معلومات عامة عن المقرر General information about the course						
1.	اسم المقرر Course Title	General Geology (2) جيولوجيا عامة (2)				
2.	رمز المقرر ورقمه Course Code and Number	PNR 112				
3.	الساعات المعتمدة للمقرر Credit Hours	الساعات المعتمدة Credit Hours			الإجمالي Total	
		محاضرات Lecture	عملي Practical	سمنار/تمارين Seminar/Tutorial		تدريب Training
		2	1	-	-	3
4.	المستوى والفصل الدراسي Study Level and Semester	1st Year / 2nd Semester				
5.	المتطلبات السابقة للمقرر Pre-requisites	PNR111				
6.	المتطلبات المصاحبة (إن وجدت) Co-requisite	-				
7.	البرنامج الذي يدرس له المقرر Program (s) in which the course is offered	BSc in Petroleum and Natural Gas Engineering متطلب كلية				
8.	لغة تدريس المقرر Language of teaching the course	Arabic/English				
9.	مكان تدريس المقرر Location of teaching the course	Faculty of Petroleum and Natural Resources				

وصف المقرر Course Description

The aim of this course introduces the basic concepts of sedimentary environments; principle of stratigraphy and historical geology; geologic time, stratigraphic units and correlations, Geology of Yemen and sedimentary basins.



Course Intended Learning Outcomes (CILOs) مخرجات تعلم المقرر

بعد الانتهاء من دراسة المقرر سوف يكون الطالب قادرا على أن:

After completing the course, the student will be able to:

a1.	Define the concepts sedimentary environments and stratigraphy.
a2.	Describe the different types of deposits sedimentary environments.
b1.	Analyze the geological fieldwork data related with laboratory results.
b2.	Design the stratigraphic chart-column and maps.
c1.	Use the geological maps to recognize the certain rocks local site.
c2.	Employ the Yemen's Basins Stratigraphic unit.
d1.	Use computer and internet to writing scientific research.
d2.	write a brief geological report individual and group.

Course Content محتوى المقرر

Theoretical Aspect خطة تنفيذ الموضوعات النظرية

الرقم Order	الوحدات (الموضوعات الرئيسية) Units	الموضوعات التفصيلية Sub Topics	الأسبوع Week Due	الساعات الفعلية Con. H
1	Introduction	Review of general geological course	Week 1	2
2	Sedimentary environments	1. Continental deposits. 2. Transitional deposits. 3. Marine deposits	Week 2-4	6
3	principle of stratigraphy	1. Concepts and Lithostratigraphy. 2.. Stratigraphic charts	Week 5	2
4	historical geology	1-the Age of the earth 2- The geologic Column 3-Geological time units and Measuring. 4-Plants of the past 5-Ancient Animal Life	Week 6-7	4
5	Midterm exam		Week 8	2
6	Stratigraphic units and correlations	- Lithostratigraphic units. - Biostratigraphic unit. - Stratigraphic relationships	Week 9	2



7	geology of Yemen	1-The basement 2- The cover: -Paleozoic Sedimentary rocks. - Mesozoic Sedimentary Rocks. - Cenozoic Sedimentary Rocks. 3- Cenozoic Volcanic Rocks. 4- Cenozoic Intrusive Rocks.	Week 10-13	8
8	sedimentary basins	Yemen sedimentary basins	Week 14-15	4
9	Final exam		Week 16	2
عدد الأسابيع والساعات الفعلية Number of Weeks /and Contact Hours Per Semester			16	32

Practical / Training/ Tutorials/ Exercises Aspects خطة تنفيذ موضوعات الجانب العملي			
الرقم Order	موضوعات العملي/ المهام / التمارين Practical/ Tutorials/ Exercises Aspects	الأسبوع Week Due	الساعات الفعلية Cont. H
1	Introductory lecture to laboratory	Week 1	2
2	Classification of Sedimentary Rocks Clastic: A-Sandstones, B-Conglomerates, C-Breccia, D-Mud Rocks	Week 2-3	4
3	Chemical: Limestone, Chert, Gypsum, Rock salt;	Week 4	2
4	clastic based on Size	Week 5-6	4
5	Fossils	Week 7	2
6	Midterm exam	Week 8	2
7	Stratigraphic units (Case study)	Week 9	2
8	Yemen Geology	Week 10-11	4
9	Geological map	Week 12	2
10	Sedimentary Basin map	Week 13	2
11	Final exam	Week 14	2
اجمالي الأسابيع والساعات الفعلية Number of Weeks /and Contact Hours Per Semester		14	28

استراتيجيات التعليم والتعلم Teaching Strategies
<ul style="list-style-type: none"> ▪ Lectures ▪ Self-study, ▪ Laboratory (practical classes) sessions. ▪ Field Trip.

تقويم التعلم Learning Assessment

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م No	أساليب التقويم Assessment Method	موعد (أسبوع) التقويم Week Due	الدرجة Mark	الوزن النسبي % Proportion of Final Assessment
1	Tasks and Assignments	Weekly	10	6.7%
2	Quiz	End of a topic	10	6.7 %
3	Written test	Week 8	25	16.7%
4	Practical test	Week 7	15	10%
5	Final exam practical	Week 14	20	13.3%
6	Final exam theory	Week 16	70	46.6%
المجموع Total			150	100 %

Learning Resources مصادر التعلم	
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Required Textbook(s) المراجع الرئيسية (لا تزيد عن مرجعين)	
Lecture Notes (No text book)	
Essential References المراجع المساندة	
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Electronic Materials and Web Sites etc. المصادر الإلكترونية ومواقع الإنترنت	
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4	Assignments & Projects: - Papers survey or projects should be submitted by the time detriment by the professor.
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