Form: Course Syllabus		
	Form Number	EXC-01-02-02A
	Issue Number and Date	2/3/24/2022/2963 05/12/2022
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	Number of Pages	06

1.	**Course Title**	Stratigraphy
2.	**Course Number**	0305711
3.	**Credit Hours (Theory, Practical)**	3 theoretical
	Contact Hours (Theory, Practical)	--------
4.	**Prerequisites/ Corequisites**	-----
5.	**Program Title**	M.Sc. In Geology Thesis track
6.	**Program Code**	0305
7.	**School/ Center**	Science
8.	**Department**	Geology
9.	**Course Level**	Graduate
10.	**Year of Study and Semester (s)**	----
11.	**Other Department(s) Involved in Teaching the Course**	-----
12.	**Main Learning Language**	English
13.	**Learning Types**	X ☐Face to face learning ☐Blended ☐Fully online
14.	**Online Platforms(s)**	☐Moodle ☐Microsoft Teams
15.	**Issuing Date**	24/11/2024
16.	**Revision Date**	

17. Course Coordinator:

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18. Other Instructors:

None

19. Course Description:

As stated in the approved study plan.

The course will focus on the following topics, First, the detailed study of the international stratigraphic codes and their direct applications to Jordanian stratigraphy. Stratigraphical subdivisions and their applications fields e.g. lithostratigraphy, biostratigraphy, chrono-stratigraphy, magnetostratigraphic, seismic stratigraphy and sequence stratigraphy. Introduction to stratigraphic analysis and lithologic correlation: rock unit classification and conversion of the chronostratigraphic time to geochronologic time. Visiting exposed stratigraphic sites trying to apply the above topics practically. Under the student's activity section, each student should chose published scientific paper related to one of the topics above (from Jordan if possible) for analyzing and criticization.

20. Program Student Outcomes (SO's): (To be used in designing the matrix linking the intended learning outcomes of the course with the intended learning outcomes of the program)

1.Students will show advanced expertise of geological standards, theories, and analytical techniques, equipping them to clear up complicated geological problems.

2. Students will develop the capability to design, conduct, and critically examine geological research, using quantitative and qualitative information evaluation to draw significant conclusions applicable to enterprise and academia.

4. Students will be able to really and efficaciously communicate complex geological data in written, oral, and visual formats to various audiences, which includes technical and non-technical stakeholders.

6. Students will understand the importance of ongoing professional development and demonstrate a proactive method to stay updated on new studies, technological advancements, and industry traits in geology.

21. Course Intended Learning Outcomes (CLO's): (Upon completion of the course, the student will be able to achieve the following intended learning outcomes)

1. The students should understand and apply the international stratigraphic codes (ISC) for any stratified rocks.
2. The students should be able to differentiate between stratigraphical subdivisions and when each subdivision should be applied for a specific rock sequence.
3. The students should be able to apply stratigraphic analysis and lithologic correlation task for any rock sequence or core samples.
4. Able to apply what they learn from the course at field.
5. Able to write, analyze, propose and share some stratigraphical data with others.

Course CLOs	The learning levels to be achieved					
	Remembering	Understanding	Applying	Analysing	evaluating	Creating
1		X	X			
2		X	X	X		
3		X	X	X		
4		X	X	X	X	
5			X	X	X	

22. The matrix linking the intended learning outcomes of the course with the intended learning outcomes of the program:

Program SO's / Course CLO's	SO (1)	SO (2)	SO (3)	SO (4)	SO (5)	SO (6)	SO (7)	SO (8)
CLO (1)	X	X		X		X		
CLO (2)	X	X		X		X		
CLO (3)	X	X		X		X		
CLO (4)	X	X		X		X		
CLO (5)	X	X		X		X		

23. Topic Outline and Schedule:

Week	Lecture	Topic	CLO/s Linked to the Topic	Learning Types (Face to Face/ Blended/ Fully Online)	Platform Used	Synchronous / Asynchronous Lecturing	Evaluation Methods	Learning Resources
1	1.1	the international stratigraphic codes and their direct applications to Jordanian stratigraphy	1	Face to Face			Problem Set	Stratigraphy, Andrew D. Miall, 2023
	1.2							
	1.3							
2	2.1	Lithostratigraphy	2				Problem set	Stratigraphy, Andrew D. Miall, 2023
	2.2							
	2.3							
3	3.1	biostratigraphy						
	3.2							

	3.3							
4	4.1	chrono-stratigraphy		Face to Face				
	4.2							
	4.3							
5	5.1	Magneto-stratigraphy						
	5.2							
	5.3							
6	6.1	seismic stratigraphy						
	6.2							
	6.3							
7	7.1	sequence stratigraphy.						
	7.2							
	7.3							
8	8.1	Introduction to stratigraphic analysis and lithologic correlation.	2-3	Face to Face				
	8.2							
	8.3							
9	9.1	rock unit classification and conversion of the chronostratigraphic time to geochronologic time	2-3					
	9.2							
	9.3							
10	10.1							
	10.2							
	10.3							
11	11.1							
	11.2							
	11.3							
12	12.1	Visiting exposed stratigraphic sites trying to apply the above topics practically	4-5	Face to Face At field			Problem set	Stratigraphy, Andrew D. Miall, 2023 and any helpful reference available
	12.2							
	12.3							
13	13.1	analyzing and criticization of publish paper related to our topics and presentations.	4-5	Face to Face				
	13.2							
	13.3							
14	14.1							
	14.2							
	14.3							
15	15.1							
	15.2							
	15.3							

24. Evaluation Methods:

Opportunities to demonstrate achievement of the CLOs are provided through the following assessment methods and requirements:

Evaluation Activity	Mark	Topic(s)	CLO/s Linked to the Evaluation activity	Period (Week)	Platform
Midterm Exam	25	1-7	1-2	5	
Students Activities: Project, problem solve, field application, seminar	50		4-5	4	
Final exam	25	8-14	1-3	5	

25. Course Requirements:

(e.g.: students should have a computer, internet connection, webcam, account on a specific software/platform…etc.). Geological equipment for fields trips.

26. Course Policies:

A- Attendance policies: **University regulation**

B- Absences from exams and submitting assignments on time: **University regulation**

C- Health and safety procedures:

D- Honesty policy regarding cheating, plagiarism, misbehavior: **University regulation**

E- Grading policy: May subjected to changes (depends on the overall results)

60- 64 C

65- 69 C+

70- 74 B-

75- 79 B

80- 84 B+

85- 89 A-

90-100 A

F- Available university services that support achievement in the course:

27. References:

A- Required book(s), assigned reading and audio-visuals:

Stratigraphy: A Modern Synthesis (Springer Textbooks in Earth Sciences, Geography and Environment by Andrew D. Miall, 2023

B- Recommended books, materials, and media:

Unlocking the Stratigraphical Record: Advances in Modern Stratigraphy},

{Doyle, P. and Bennett, M.R.1998

28. Additional information:

Name of the Instructor or the Course Coordinator: **Prof. Abdalla Abu Hamad**	Signature: ……..……	Date: ……..……
Name of the Head of Quality Assurance Committee/ Department ……	Signature: ……..……	Date: ……..……
Name of the Head of Department **Dr. Bety Saqarat**	Signature: ……..……	Date: ……..……
Name of the Head of Quality Assurance Committee/ School of Science **Prof. Emad A. Abuosba**	Signature: ……..……	Date: ……..……
Name of the Dean or the Director **Prof. Mahmoud I. Jaghoub**	Signature: ……..……	Date: ……..……