



**The University of Jordan**

**Accreditation & Quality Assurance Center**

**Toxic and Hallucinogenic Plants**  
**COURSE Syllabus**  
**2021-2022**

1	Course title	Toxic and Hallucinogenic Plants
2	Course number	1201531
3	Credit hours (theory, practical)	2 (theory)
	Contact hours (theory, practical)	26 (theory)
4	Prerequisites/corequisites	1203364
5	Program title	BSc & PharmD
6	Program code	
7	Awarding institution	The University of Jordan
8	Faculty	Pharmacy
9	Department	Pharmaceutical Sciences
10	Level of course	Undergraduate
11	Year of study and semester (s)	4 <sup>th</sup> , 5 <sup>th</sup> and 6 <sup>th</sup> years (elective course)
12	Final Qualification	BSc & PharmD
13	Other department (s) involved in teaching the course	NA
14	Language of Instruction	English
15	Date of production/revision	6 Oct 2021

### 16. Course Coordinator:

Dr. Yahia Tabaza, *BSc, MSc, PhD.*

Office: 209

Phone: 5355000, ext. 23257

E-mail: [y.tabaza@ju.edu.jo](mailto:y.tabaza@ju.edu.jo)

Office hours: To be announced. Students are welcome to contact the instructor via email or to arrange a meeting via MS teams.

### 17. Other instructors:

Prof. Khaled tawaha

E-mail: [tawaha2003@yahoo.com](mailto:tawaha2003@yahoo.com), [k.tawaha@ju.edu.jo](mailto:k.tawaha@ju.edu.jo)

Office No.: ???

Office hours: To be announced. Students are welcome to contact the instructor via email or to arrange a meeting via MS teams.

### 18. Course Description:

This course exposes the students to basic knowledge about toxic, hallucinogenic and narcotic plants. The course deals with narcotic and hallucinogenic plant material and compounds, their effect on the brain and biological effects on health in general. In addition, the course discusses toxic plants mainly those endemic to Jordan. Focuses mainly on the toxic part(s), toxic constituents, symptoms of poisoning, treatment and precautions.

**19. Course aims and outcomes:****A- Aims:**

This course aims at acquainting students with basic knowledge of toxic, hallucinogenic and narcotic plants.

The course involves two parts; the first part discusses toxic plants mainly those which are endemic to Jordan. Focus mainly on the toxic part(s), toxic constituents, symptoms of poisoning, treatment and precautions.

The second part deals with hallucinogenic plant materials and compounds, their history, chemistry, mechanism of action, effects and their treatment options.

**B- Intended Learning Outcomes (ILOs):**

Upon successful completion of this course students will be able to:

A) Knowledge and Understanding: Student is expected to:

- Understand the science of toxic and hallucinogenic plants
- Acquaint the knowledge of the constituents of plants and their effect on health and brain.

B) Intellectual Analytical and Cognitive Skills: Student is expected to:

- Generally define and investigate in the field the and disciplines related to study toxic and hallucinogenic plants
- Define, identify and evaluate of toxic and hallucinogenic plants

C) Subject-Specific Skills: Student is expected to:

- Acquaint practical knowledge of methods of identification, chemical and physical evaluation of toxic and hallucinogenic plants
- Evaluate the hazardous effects of toxic and hallucinogenic plants on human health and CNS.

D) Transferable Key Skills: Students is expected to:

- Work in a team as work group and discuss results with other colleagues.
- Know how to conduct a literature survey, access specific information about toxic and hallucinogenic plants as well as how to collect data of others research to prepare group common reports.

**Teaching Methods**

E-Lectures, E-Discussions via zoom, Assignments and Exams.

**20. Topic Outline and Schedule:**

<i>Content</i>	<i>Week</i>	<i>Instructor</i>	<i>Achieved ILOs</i>	<i>Evaluation Methods</i>	<i>Reference (part)</i>
<b>Toxic Plants</b>	<b>1-7</b>	<b>K. Tawaha</b>	<b>A B C D</b>	<b>Exams and assignments</b>	<b>1, 2</b>
Toxic Hallucinogenic and Allergic Plants	1	K. Tawaha	A B C D	Exams and assignments	1, 2
Removal of the poisonous material	2	K. Tawaha	A B C D	Exams and assignments	1, 2
Internal poisoning caused by eating plant parts	2	K. Tawaha	A B C D	Exams and assignments	1, 2
Plants containing Cardiac glycosides	3	K. Tawaha	A B C D	Exams and assignments	1, 2

Ricinus Communis	3	K. Tawaha	A B C D	Exams and assignments	1, 2
Anticholinergics	4	K. Tawaha	A B C D	Exams and assignments	1, 2
Poison Hemlock, Harmal	4	K. Tawaha	A B C D	Exams and assignments	1, 2
Ecbalium elatrium, Colocynth, Colchicum	5	K. Tawaha	A B C D	Exams and assignments	1, 2
Calotropis, Nicotiana, Potato	5	K. Tawaha	A B C D	Exams and assignments	1, 2
Toxic Hallucinogenic and Allergic Plants	5	K. Tawaha	A B C D	Exams and assignments	1, 2
Removal of the poisonous material	6	K. Tawaha	A B C D	Exams and assignments	1, 2
Internal poisoning caused by eating plant parts	6	K. Tawaha	A B C D	Exams and assignments	1, 2
Plants containing Cardiac glycosides	6	K. Tawaha	A B C D	Exams and assignments	1, 2
Ricinus Communis	7	K. Tawaha	A B C D	Exams and assignments	1, 2
Anticholinergics	7	K. Tawaha	A B C D	Exams and assignments	1, 2
Poison Hemlock, Harmal	7	K. Tawaha	A B C D	Exams and assignments	1, 2
<b>Hallucinogenic plants</b>	<b>8-14</b>	<b>Y. Tabaza</b>	<b>A B C D</b>	<b>Exams</b>	<b>3-6</b>
Introduction	8	Y. Tabaza	A B C D	Exams	3-6
Cocaine	8	Y. Tabaza	A B C D	Exams	3-6
Methamphetamine	9	Y. Tabaza	A B C D	Exams	3-6
Khat and synthetic cathinones	9	Y. Tabaza	A B C D	Exams	3-6
Levodopa, bromocriptine, prescription stimulants and harmaline	10	Y. Tabaza	A B C D	Exams	3-6
DMT	10	Y. Tabaza	A B C D	Exams	3-6
LSD	11	Y. Tabaza	A B C D	Exams	3-6
Ecstasy	11	Y. Tabaza	A B C D	Exams	3-6
Psilocin & Psilocybin	12	Y. Tabaza	A B C D	Exams	3-6
GABA enhancers	13	Y. Tabaza	A B C D	Exams	3-6
Opium	13	Y. Tabaza	A B C D	Exams	3-6
Cannabis	14	Y. Tabaza	A B C D	Exams	3-6
Synthetic cannabinoids	14	Y. Tabaza	A B C D	Exams	3-6

**21. Teaching Methods and Assignments:**

<b>Development of ILOs is promoted through the following teaching and learning methods:</b>		
<b>ILO/s</b>	<b>Learning Methods</b>	<b>Evaluation Methods</b>
<b>A B C D</b>	E-Lectures E-Meetings Assignments Discussions AND Video simulations	Exams, Quizzes, Assignments Quiz in self-study materials
<b>Learning skills:</b>		
<ol style="list-style-type: none"> <li>1. <b>Critical thinking</b></li> <li>2. <b>Digital literacy</b></li> <li>3. <b>Problem-solving skills</b></li> <li>4. <b>self-study</b></li> </ol>		

**22. Evaluation Methods and Course Requirements:**

<p><b>Opportunities to demonstrate achievement of the ILOs are provided through the following assessment methods and requirements:</b></p> <ol style="list-style-type: none"> <li>1. <b>Exams (quiz, midterm and Final)</b></li> <li>2. <b>Assignment</b></li> </ol>
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**23. Course Policies:**

<p>A- Attendance policies: <b>Attendance: Mandatory.</b> <b>University regulations will be applied</b></p> <p>B- Absences from exams and handing in assignments on time: <b>University regulations will be applied</b></p> <p>C- Health and safety procedures: NA</p> <p>D- Honesty policy regarding cheating, plagiarism, misbehavior: The participation in and/or the commitment of cheating will lead to applying all of the following penalties together</p> <ol style="list-style-type: none"> <li>1) Failing the subject he/she cheated at</li> <li>2) Failing the other subjects taken in the same course</li> <li>3) Not allowed to register for the next semester. The summer semester is not considered as a semester</li> </ol> <p>E- Grading policy: Exams and Quizzes.</p> <table style="width: 100%;"> <tr> <td>Oral discussion (4<sup>th</sup> week):</td> <td style="text-align: right;"><b>10 points</b></td> </tr> <tr> <td>Quiz (9<sup>th</sup> week):</td> <td style="text-align: right;"><b>10 points</b></td> </tr> <tr> <td>Midterm exam:</td> <td style="text-align: right;"><b>30 points</b></td> </tr> <tr> <td>Final Exam:</td> <td style="text-align: right;"><b>50 points</b></td> </tr> <tr> <td><b>Total</b></td> <td style="text-align: right;"><b>100 points</b></td> </tr> </table>	Oral discussion (4 <sup>th</sup> week):	<b>10 points</b>	Quiz (9 <sup>th</sup> week):	<b>10 points</b>	Midterm exam:	<b>30 points</b>	Final Exam:	<b>50 points</b>	<b>Total</b>	<b>100 points</b>
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Quiz (9 <sup>th</sup> week):	<b>10 points</b>									
Midterm exam:	<b>30 points</b>									
Final Exam:	<b>50 points</b>									
<b>Total</b>	<b>100 points</b>									

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

Classrooms, internet classes

#### 24. Required equipment:

Data show and internet connection

#### 25. References:

SN	ISBN	Title	Author	Year
1	1-898298-63-7	Pharmacognosy, Phytochemistry, Medicinal plants	Jean Bruneton	1999 (2 <sup>nd</sup> Ed)
3	0-7020-2617-4	Trease and Evans Pharmacognosy (2000, 2002, 2004, 2005).	by W.C. Evans	2000 (15 <sup>th</sup> Ed)
3	978-0-470-74168-9	Medicinal Natural Products	Paul Dewick	2009 (3 <sup>rd</sup> Ed)
4		NIDA website: <a href="http://www.drugabuse.gov/">http://www.drugabuse.gov/</a>		
5		Addiction blog: <a href="https://addictionblog.org/">https://addictionblog.org/</a>		
6		Drugbank: <a href="https://www.drugbank.ca/">https://www.drugbank.ca/</a>		

#### 26. Additional information:

Name of Course Coordinator: **Dr. Yahia Tabaza**

Signature: .....

Head of curriculum committee/Department: .....

Signature: .....

Head of Department: **Prof. Sana Bardaweel**

Signature: .....

Head of curriculum committee/Faculty: **Prof. Mutasim Ghzawi**

Signature: .....

Dean: **Prof. Rana Abu Dahab**

Signature: .....

Date: **Oct 6, 2021**

Copy to:

Head of Department

Assistant Dean for Quality Assurance

Course File