

Course Specification

College: **College of Pharmacy**

Institution: **King Saud University**

Department: **Pharmacology**

Degree: **MSc. In Toxicology**

A Course Identification and General Information

Course code	Course title	Credit Hours			
		Lecture	Lab.	Other	Credit
PHL 533	Toxicology of drug of abuse	3	0	-	3
Pre-requisites for this course: -					
Co-requisites for this course: -					
Level/year at which this course is offered: 2 nd level					
Name of faculty member responsible for the course:					
1. Kamal E. D. EL Tahir, PhD (Professor)					
2. Abdulrhman Aqeel PhD (Professor)					
3. Saleh A. Bakheet, PhD (Assistant Professor)					

B Objectives

1. Summary of the main learning outcomes for students enrolled in the course.

- To define and acquire knowledge regarding the meanings of the various medical terms in the field of drugs such as habituation, tolerance, addiction and abstinence syndrome.
- To allow the students to differentiate between the different types of tolerance and dependence.
- To gain knowledge regarding the various types of the psychedelic drugs and their different abused slang names in the different countries.
- To recognise the factors that predispose to the use of psychedelic drugs.
- To outline the different scientific strategies that can be followed to prophylactic youth from indulging in the habit of drug intake.
- To enlighten the student with the various pharmacological actions of the psychedelic drugs, their mechanisms of action and their adverse reactions.
- To differentiate between the various withdrawal symptoms those accompany the abrupt withdrawal of the drugs that show physical dependence.
- To gain knowledge regarding the available means for treatment of addicts.

C. Course Description

This course is intended to provide the student with knowledge regarding the different classes of psychedelic drugs whether they are legal or illegal drugs. All these drugs share the general properties of being able to induce habituation, tolerance, dependence and addiction. The various factors that tend to predispose youth to their use will be discussed together with the scientific strategies to prevent indulging in the habit of their intake. The major part of the course will be directed for discussion of the pharmacological action, mechanisms and adverse reactions of the drugs. Furthermore, the discussion will include the various methods available for treatment of addiction and prevention of precipitation of the withdrawal symptoms.

1. Topics to be Covered

Topic	No. of Weeks	Contact hours
Introduction to tolerance, dependence and addiction	1	2
Alcohols and tobacco	1	2
Khat, cocaine, amphetamines	4	8
Opioids.	2	4
Cannabis.	3	6
Hallucinogens: LSD, Psilocybin, mescaline, phencyclidine	2	4
Inhalants: Benzene, toluene, gasoline	1	2

Course components (total contact hours per semester):

Lecture:	Tutorial	Practical	Other
14	-	-	-
Additional private study/learning hours expected for students per week. (This should be an average for the semester not a specific requirement in each week)			
4 hours			

Development of Learning Outcomes in Domains of Learning

For each of the domains of learning shown below indicate:

- A brief summary of the knowledge or skill the course is intended to develop;
- A description of the teaching strategies to be used in the course to develop that knowledge or skill;
- The methods of student assessment to be used in the course to evaluate learning outcomes in the domain concerned.

a. Knowledge

(i) Description of the knowledge to be acquired

- Knowledge about the various types of drugs of dependence and addiction.
- Scientific strategies to prevent youth from intake of drugs of dependence.

(ii) Teaching strategies to be used to develop that knowledge

- Lectures

<p>(iii) Methods of assessment of knowledge acquired</p> <ul style="list-style-type: none"> Exams.
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b. Cognitive Skills

<p>(i) Cognitive skills to be developed</p> <ul style="list-style-type: none"> Ability to collect information to help for problem solving

<p>(ii) Teaching strategies to be used to develop these cognitive skills</p> <ul style="list-style-type: none"> Give students a problem that requires collecting information from internet.

<p>(iii) Methods of assessment of students cognitive skills</p> <ul style="list-style-type: none"> Exams
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c. Interpersonal Skills and Responsibility

<p>(i) Description of the interpersonal skills and capacity to carry responsibility to be developed</p> <ul style="list-style-type: none"> Not applicable.
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<p>(ii) Teaching strategies to be used to develop these skills and abilities</p> <ul style="list-style-type: none"> Not applicable
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<p>(iii) Methods of assessment of students interpersonal skills and capacity to carry responsibility</p> <ul style="list-style-type: none"> Not applicable.

d. Communication, Information Technology and Numerical Skills
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<p>(i) Description of the skills to be developed in this domain.</p> <ul style="list-style-type: none"> Not applicable.

<p>(ii) Teaching strategies to be used to develop these skills</p> <ul style="list-style-type: none"> Not applicable
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<p>(iii) Methods of assessment of students numerical and communication skills</p> <ul style="list-style-type: none"> Not applicable

e. Psychomotor Skills (if applicable)
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<p>(i) Description of the psychomotor skills to be developed and the level of performance required</p> <ul style="list-style-type: none"> Not applicable
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<p>(ii) Teaching strategies to be used to develop these skills</p> <ul style="list-style-type: none"> Not applicable
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<p>(iii) Methods of assessment of students psychomotor skills</p> <ul style="list-style-type: none"> Not applicable

5. Schedule of Assessment Tasks for Students During the Semester			
Assessment	Assessment task (eg. essay, test, group project, examination etc.)	Week due	Proportion of Final Assessment
1	First midterm exam	7	30
2	Second midterm Exam	13	30
3	Final Exam	16	40

D. Student Support
<p>Arrangements for availability of faculty for individual student consultations and academic advice. (include amount of time faculty are available each week)</p> <ul style="list-style-type: none"> • Faculty web-page with communication tolls. • office hours: 2

E. Learning Resources
<p>Required Text(s)</p> <ul style="list-style-type: none"> • ElTahir, Kamal E.H. (2008). Narcotic and mind manifesting drugs. Dar Al-Iloom, Riyadh, Saudi Arabia. • Hogan, J.A., Gabrielsen, K. And Luna, N. (2007). Substance abuse prevention: the intersection of science and practice. Barnes and Nobles (www.bn.com). • Keltner, Nolo and Folkds, DoG. (2007). Barnes and Nobles (www.bn.com).
<p>Essential Reference</p> <ul style="list-style-type: none"> • Sussaman, S.Y. and Anes, Sol. (2007). The social psychology of drugs abuse. Barnes and Noble. • Lyman, M.D. and Potter, GoW. (2008). Drugs in society: causes, concepts and control. Barnes and Nobles (www.bn.com). • Friedman, H., Klein, T. W. and Specter, S. C. (eds). (2006). Drugs of abuse, immunity and infections. <p style="text-align: right;">• لا للمخدرات والمؤثرات العقلية. بروفييسور كمال الدين الطاهر- دار العلوم- الرياض</p>
<p>Recommended Books and Reference Material (Journals, Reports, etc) (Attach List)</p> <ul style="list-style-type: none"> • J. addiction • J. psychopharmacology
<p>Electronic Materials, Web Sites etc</p> <ul style="list-style-type: none"> • www.drugabuse.gov/NIDA • www.pubmed.com • Science direct

F. Facilities Required
<p>Indicate requirements for the course including size of classrooms and laboratories (ie number of seats in classrooms and laboratories, extent of computer access etc.)</p>
<p>1. Accommodation (Lecture rooms, computer laboratories, etc.)</p> <ul style="list-style-type: none"> • Lecture room (30)

2. Computing resources

- Internet access

3. Other resources (specify --eg. If specific laboratory equipment is required, list requirements or attach list)

- Not Applicable

G Course Evaluation and Improvement Processes

1. Strategies for Obtaining Student Feedback on Effectiveness of Teaching

- Students evaluation in each semester
- Meeting with students
- E-suggestions
- Open door policy

2. Other Strategies for Evaluation of Teaching by the Instructor or by the Department

- Self evaluation

3. Processes for Improvement of Teaching

- Studying reports

4. Processes for Verifying Standards of Student Achievement (eg. check marking by an independent faculty member of a sample of student work, periodic exchange and remarking of a sample of assignments with a faculty member in another institution)

- Taking a sample of assignments and exams to determine validity and reliability.

5. Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- Collecting all reports and evaluations at the end of the semester for a reviewing purpose.