Quality Assurance Unit

Tanta University
Faculty of Medicine

Department of Forensic Medicine and Clinical Toxicology

Course Specifications

Forensic Chemistry for Forensic Medicine and Clinical Toxicology Master Degree FMCT 8004

2014-2015

Forensic Chemistry for Forensic Medicine and Clinical Toxicology Master Degree Course Specifications

University: T anta Faculty: Medicine Department: Forensic Medicine and Clinical Toxicology

1) administrative Information

1- course title: Forensic Chemistry for Forensic Medicine and Clinical Toxicology Master Degree

2- Department offering the program: Forensic Medicine and Clinical Toxicology Department.

3- Department responsible for the course: Analytical Chemistry Department, faculty of pharmacy.

4- Course code: FMCT 8004

5- Level: first part

6- No. of Credit / taught hours:

Lectures: 1 credit, 11 taught Practical: 1 credit, 22 taught

Total: 2/33 credit hours/actual hours

7-Authorization date of course specification: ----2-2014

2) Professional Information

1 – Overall Course aims

To provide the trainee with knowledge, skills and attitude that qualify him to perform different method of toxicology analysis and interpret toxicology analysis results.

2 – Intended learning outcomes (ILOs):

Knowledge and understanding:

By the end of the course, *student should be able to:*

a.1- discuss basic principles, advantages and disadvantages and techniques of different methods of analytical toxicology.

a. 2- identify pitfalls in analytical toxicology.

a.3- Discuss the cross reactions between different drugs and toxins.

b- Intellectual skills:

By the end of the course, *student should be able to:*

b1- Recognize the suitable analysis for different toxins.

b2- organize correctly the suitable sample(s) for toxicology analysis

b3- interpret professionally the results of different analytical toxicology methods applied.

c- Professional &practical skills

cl- Do all methods of toxicology screening.

d-General transferable skills:

By the end of the course, *student should be able to:*

d.1-Communicate effectively with his colleagues and patients

d.2- Apply self evaluation and specify his medical educational needs.

d.3-use different learning resources to get knowledge and information.

d.4- Manage time and practice team working through collaboration with other. specialties to get proper diagnosis of a given case.

d.5- perform continuous medical education.

3) Course contents

Pharmacy and toxicology	Total lectures' credit hours	Total Practical/clinical 's credit hours	
A- Laboratory treatment of the specimens:			
1- Blood sample. 2- Urine sample. 3- Hair samples. 4- Semisolid samples including; homogenization, protein precipitation and storage requirements for biological samples.	2	3	5
B- Extraction of biological samples.			
1- Choice of extraction procedure. 2- Classification of poisons. 3- rapid detection of drugs commonly taken in overdose.	2	3	5
C- Some methods selected for analysis in forensic chemistry:			

1- Spot tests. 2- Microcrystalline tests. 3- spectroscopic methods of analysis including; - Ultraviolet and visible spectroscopy. - Infrared spectroscopy. - Atomic absorption and flame emission spectroscopy.	2	3	5
D- Some methods selected for analysis in forensic chemistry:			
1- Spot tests. 2- Microcrystalline tests. 3- spectroscopic methods of analysis including; - Ultraviolet and visible spectroscopy. - Infrared spectroscopy. - Atomic absorption and flame emission spectroscopy.	2	3	5
	8	12	30

4) Teaching and learning methods

Lectures, seminars, journal clubs, bed side teaching, case presentation, assignments, conference participation observation and hands on practice

5) Student Assessment

At the end of each semester:

1. Log book: at least 75% of attendance.
2. End of semester exam: at least C is required.

At the end of the first part:

1. written.. to assess (a1,a3, b1)
2. practical .to assess (a2,,b2,b3,c1)
3. oral .to assess (a1,a2,a3,b1,b2,b3,d3)

6) Weighing of assessments

Written examination	20 degrees
oral examination:	5 degrees
Practical	5 degrees

Semester work	Formative only
Periodical examination	Formative only
Total	30 degrees

7) List of references:

Text books

Clarke's analysis of drugs and poisons

WHO basic analytical toxicology

Periodicals and web sites

- Journal of applied toxicology.
- Journal of analytical toxicology.
- Journal of biochemical and molecular toxicology.

8) Other resources/ facilities required for teaching and learning to achieve the above ILOs

Laboratory equipments for toxin screenings.

9) We certify that all of the information required to deliver this course is contained in the above specifications and will be implemented

We verify that the above course and the analysis of students and external evaluator opinions are accurate.

Course coordinator and head of department

name……..signature……Date……

Head of quality assurance unit:

name……..signature……Date……