

Forensic chemistry lecture 50:160:480 (3)

Staff information

Dr Michelle Carlin

Email: michelle.g.carlin@rutgers.edu

Tel: +1(856)-225-6158

What and How you will learn

This course is entitled Forensic Chemistry; the course will cover a number of different evidence types that fall under the description of forensic chemistry, for example, paint, fibres, glass, fire, drugs, toxicology. You will attend in-person classes that will take place from 6.00 – 8.50 pm (18.00-20.50) on a Wedesday evening, unless otherwise detailed. Classes will be lecture based, with discussion encouraged.

What you will be expected to achieve

Knowledge & understanding

You will be expected to demonstrate a broad knowledge of forensic chemistry principles and analytical techniques used to analyse a variety of forensic chemistry evidence types, e.g. illicit/pharmaceutical drugs, firearms discharge residue, paint, etc

• Intellectual/professional skills & abilities

Show the ability to explain and critically appraise scientific papers, analytical data and other academic information pertaining to forensic chemistry evidence types

Personal values & attributes

Demonstrate an awareness of the professional, ethical and legal implications pertaining to the analysis and interpretation of forensic chemistry evidence types

Required Course Materials:

There is no required textbook for this course. All necessary information will be disseminated via Canvas. It is critical that students frequently check their Rutgers e-mail address for course announcements with regards to assignments and reading materials.

Assessment

Online test 1 – 25%

Multiple choice and short answer questions based on drugs and drug analysis from a forensic chemistry perspective. This assessment will be available on Canvas on the day of 16th October. Once you have started the test, you will have 2 hours to complete the task. You must complete the online assessment before 9 pm on 16th October.

Online test 2 – 25%

Multiple choice and short answer questions based on fire investigation, explosives and firearms discharge residue from a forensic chemistry perspective. This will be available on Canvas on the day of 27th November. Once you have started the test, you will have 2 hours to complete the task. You must complete the online assessment before 9 pm on 27th November.

Report – 20%

A short report of a maximum of 1000 words (references not included in the count) on paint analysis and forensic chemistry/authentication process should be completed and submitted to the online portal by 9 pm on Thursday the 5th December. The information pertaining to this assessment will be made available on Canvas.

• Exam – 30%

The exam will contain short answer questions relating to all topics covered in this course. Questions will be a combination of factual responses but also questions based on case scenarios where forensic chemistry evidence may be found. This will take place during the exam period at the end of semester.

Grading

Please note, I use a slightly different grading system however the grade will be the same but the number range is different to what you are used to:

Grade	% Range
Α	70 – 100
В	60 – 69
С	50 – 59
D	40 – 49
F	<39

Schedule of classes

Week	Date	Description	Submit/Assessment
1	09/04		
2	09/11	Intro & Drugs (1)	
3	09/18	Drugs (2)	
4	09/25	Explosives and FDR	
5	10/02	Toxicology	
6	10/09	Chromatography and mass spectrometry	
7	10/16	No class	Online test – 1
8	10/23	Fire investigation (1)	
9	10/30	Fire investigation (2)	
10	11/06	Paint (1)	
11	11/13	Paint (2)	
12	11/20	Paint (3)	
13	11/27	No class - Thanksgiving	Online test – 2
14	12/04	Fibres (1)	Paint report due

15	12/11	Fibres (2)	
13	1/	1	