

# Forensic chemistry lecture 50:160:580 (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 in room 204 of the Fine Arts Building of the Camden Campus of Rutgers University. The classes will take place from 6.00 – 8.50 pm (18.00-20.50), 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 19<sup>th</sup> September. 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 19<sup>th</sup> September.

• 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 31<sup>st</sup> 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 31<sup>st</sup> October.

• Exam – 50%

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	
А	70 - 100	
В	60 – 69	
С	50 – 59	
D	40 – 49	
F	<39	

# Schedule of classes

Week	Date	Description	Submit/Assessment
1	09/05	Intro & Drugs (1)	
2	09/12	Drugs (2)	
3	09/19	No class	Online test – 1
4	09/26	Toxicology	
5	10/03	Chromatography and mass spectrometry	
6	10/10	Fire investigation (1)	
7	10/17	Fire investigation (2)	
8	10/24	Explosives and FDR	
9	10/31	No class	Online test – 2
10	11/07	Paint (1)	
11	11/14	Paint (2)	
	11/21	Thursday schedule (No class - Thanksgiving)	
12	11/28	Paint (3)	
13	12/05	Fibres (1)	
14	12/12	Fibres (2)	