

King Saud University - College of Medicine - Department of Pathology

Forensic Medicine and Toxicology Unit

FORM 321

2016-2017

Forensic Medicine and Toxicology - male and female students

Khaldoon Aljerian - MBBS MHS Sc FRCPC

Ethicist: Medical errors, research, organizational, conflict resolution, patient rights

Pathologist: Autopsy, surgical, cytology, neuropathology, placental & fetal

Forensic Medicine expert: Forensic neuropathology, death certification, Sudden Unexpected death, hospital deaths, death in custody and under protection of law and/or occupier, mass disasters

## **COURSE OUTLINE**

2 credit hours covering two different courses. The first is the original course “Forensic medicine and toxicology – FORM321” offered by the unit of forensic medicine and toxicology. The second course is medical toxicology offered by emergency medicine. Although both courses are under the umbrella of FORM321 they are two separate courses, taught by different disciplines with different goals and objectives.

### **Class schedule:**

- Female: As agreed with Group manager
- Male Group A: As agreed with Group manager
- Male Group B: As agreed with Group manager

**Office hours:** Monday – Wednesday 07:30-09:00

**e-mail:** [khaldoonaljerian@gmail.com](mailto:khaldoonaljerian@gmail.com)

**e-education:** <https://groups.google.com/d/forum/form3212016> ???????

### **Course description:**

The course is an introduction to Forensic Medicine, Postmortem pathology, Forensic sciences and Toxicology. FORM 321 is conducted in English and presented to students whom have completed the following pre-requisite disciplines including subspecialties (and prior to residency): Basic medical sciences, Laboratory medicine and pathobiology, Internal medicine, Surgery, Anesthesia, Pediatrics and Obstetrics and Gynecology. The students will be introduced to legal, professional and ethical aspects of Forensic Medicine, identification, cause, mechanism and manner of death, unexpected and natural death, Forensic Sciences, mechanical and physical trauma and injury (including that of the underprivileged and minorities), asphyxia and toxicology. The students will be evaluated on their various levels of learning, knowledge, cognitive skills, interpersonal skills and responsibility, and communication and information technology.

Your textbook is Simpson's Forensic Medicine 13th ed. - J. Payne-James, et. al. (see references below).

Thorough understanding of the material in the textbook is essential for the course. You will not be able to obtain this from superficial reading of the chapters but you should master the terminology and the concepts in the textbook because this is a 300 level course (or optimally higher). The lectures, presentations, class discussions will assume that you are familiar with this information so that we can emphasize other topics, discussion and questions during class together. Your cooperation and feedback will create an optimal environment for learning that we can all enjoy.

### **Course Objectives:**

The students will be able to identify, understand and apply:

- The legal, professional and ethical aspects of Forensic Medicine including but not restricted to postmortem medicine.
- Various methods of identification, live and dead individuals.
- Cause, mechanism and manner of death when filling the death certificate.
- Unexpected and natural death.
- Forensic Sciences.
- Mechanical and physical trauma and injury (including underprivileged and minorities) and asphyxia.
- Postmortem toxicology.

The students will be able to compare and contrast various:

- Causes of death.
- Types of trauma.
- Mechanisms of death.

The student will be able to compose a scientific manuscript (optional) with critical analysis of previous references and suggest the benefits of the paper to the community. The student will demonstrate interpersonal skills, responsibility and will be able to communicate and utilize information technology.

### **Teaching Methods:**

Interactive lectures

Presentations - Case scenario/PBL

Project (This will be an elective activity at the professor's discretion)

eEducation

### **Assessment Methods:**

Exam: Midterm and Final written

Case scenario/PBL presentations, Continuous assessment (quizzes), Death certification

Project: Scientific manuscript (This will be an elective activity at the professor's discretion)

**Components of Final Mark:**

Midterm (MCQ & Case scenario)	10
Presentations - Case scenario/PBL	10
Continuous assessment (quizzes)	5
Death certification	10
Final exam	15
<hr/>	
Total	50

**Teaching Philosophy**

The methods of teaching and assessment have been chosen to target the full spectrum of the cognitive and affective domains of learning, originally described by Bloom and colleagues. Unfortunately, our course does not grant us the time to incorporate the psycho-motor domain. However, we will be offering this learning experience in a postgraduate program. One objective of this course is to discuss Forensic related topics.

Interaction in class and in your eEducation (<https://groups.google.com/d/forum/form3212016>????), with your colleagues and course supervisors is imperative to learning. The eEducation will give you 24/7 access to the FORM 321 eEducation discussions and important documents for your course.

It is essential to understand that you are learning and how this is done. It is about what you do with the posts and comments. How do you react? How is this related to forensics? What am I going to do with this information? Does this post/comment/link/article raise any questions? How would I answer them? How would I evaluate that state, correct it or make it better? These are the some of the objectives of the course.

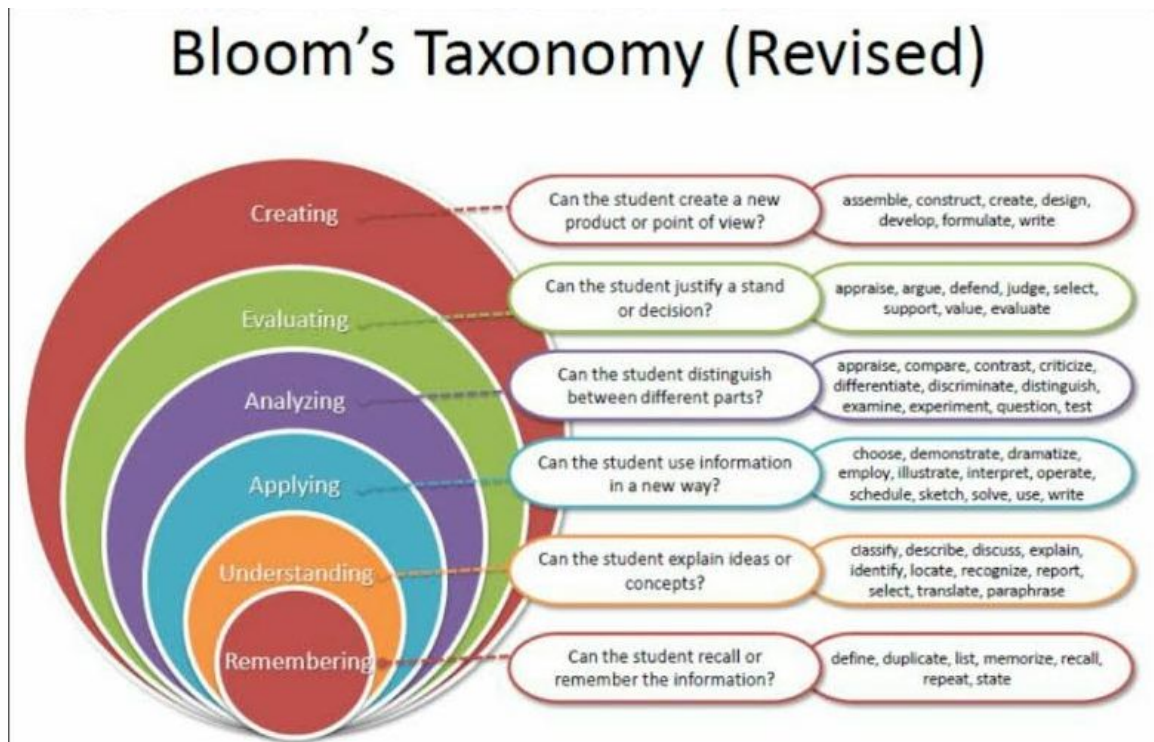
**The “Cognitive Domain”**

The project will show your ability to create a forensic related scientific project/manuscript and evaluate, analyze and review others publications. Filling the death certificate means you have learned to apply your newly adapted knowledge and analyse cases of death. Presenting a forensic topic reveals your ability to understand value and organise your knowledge.

My future colleagues, the reason we are all putting up posts is not to test if you can read, if you have high speed internet, etc...It is to stimulate you to think about Forensics...to target the awareness and growth in attitudes, emotion, and feelings towards Forensics...to see if you can look at things and see them through a Forensic “lens” and to stimulate a project.

### The "Forensic Lens" and the "Affective Domain"

Targeting learning in the "affective domain" (similar to the way we target the cognitive domain) has several levels. The lowest is "receiving" (passive attention) but it is also the most essential (similar to remembering in the cognitive domain of Bloom's Taxonomy, it is also the lowest level of the cognitive domain but the most essential). Then comes responding or "reacting". Next is "valuing" and understanding if this information has worth. Then comes "Organizing" (the valued info/ideas, etc). The highest is "Characterizing", meaning you will have a value/opinion/belief towards the valued and organized information which will affect your behavior or your character.



### Psychomotor Domain

This will be an elective activity at the professor's discretion.

**Presentation rubric:**

Points	1	2	3	4	Total
<b>Subject Knowledge</b>	Student does not have grasp of information. Many statements are incorrect and unsupported.	Student is uncomfortable with information, leaves out important details and/or presents inaccurate information.	Student is at ease with topic and presents accurate information.	Student demonstrates full grasp of the topic, presenting complete and accurate information.	
<b>Explanations from Evidence</b>	The student either has no conclusions or the conclusions are not related to the evidence provided in the presentation.	Conclusions are very poorly related to the evidence provided in the presentation.	The student uses some data, prior knowledge, research, and experience to draw conclusions but ignores other evidence introduced during the presentation.	The student uses all available data and his/her prior knowledge/research and experience to draw conclusions. If appropriate, student includes discussion of conflicting evidence.	
<b>Tables Graphs Graphics</b>	Presentation includes no graphics or graphics are unrelated to the subject and/or distract from the message.	Student doesn't explain tables/graphs, uses inappropriate graph type(s) or graphics conflict with conclusions.	Graphics illustrate evidence which supports the conclusion, appropriate graph type(s) used. Larger, smaller or simplified graphics would be more clear.	Appropriate graphics clearly present information which supports the conclusion and the student accurately explains the graphics during the presentation.	
<b>Conclusions</b>	Conclusions are not presented.	The conclusions are mostly inconsistent with the evidence.	The conclusion is only partially supported by the evidence.	Based on the data and evidence presented, the conclusions are reasonable.	
<b>Questions</b>	Student cannot answer questions about subject.	Student is able to answer only rudimentary questions, answers questions without explanation.	Student is at ease with answers to most questions, but fails to elaborate.	Student answers all class questions with explanations and elaboration.	
				<b>Total Points:</b>	<b>/20</b>

**Medical Expert**

Throughout the year it will be required that you become a medical expert: Manager, Collaborator, Communicator, Health advocate, Professionalism, and Scholar.

**Policy on language quality and late submissions:**

Class attendance is necessary to successfully complete this course. English is the official college of medicine language. You will also be judged on your writing abilities. It is recommended to take the appropriate measures to avoid mistakes. You will be penalized between 5-15% at the professor's discretion. Plagiarism will not be tolerated.

Late submissions are not tolerated. Exceptions are made only for illness and other serious situations deemed as such by the professor. There will be a penalty for late submissions. Each day of late submission will result in a penalty of 5%. This also applies to assignments sent by email and in this case the time of receipt of the email will be considered a guarantor of the time of delivery.

**Instructions for reading the book**

The reference for this class includes:

Simpson's Forensic Medicine 13th ed. - J. Payne-James, et. al. (Hodder-Arnold, 2011)

Other references are listed in the course outline and complimented by eEducation and class interactions, sessions and lectures. Thorough understanding of the material in the textbook is essential for the course. You will not be able to obtain this from superficial reading of the chapters but you should master the terminology and the concepts in the textbook because this is a 300 level course (or optimally higher). The lectures, presentations, class discussions will assume that you are familiar with this information so that we can emphasize other topics, discussion and questions during class together.

You are required to read approximately 10 pages a day, daily. This should take you approximately 15-30 minutes each day. The book contains 29 chapters and appendix 1 and 3 that you are required to cover. Therefore, you should be finished reading the book within approximately 16 days. One way you may wish to read the book is by reading the titles of each chapter and going over the pictures, graphs and tables before reading the entire chapter. Focus on the titles we have focused on in our course outline.

# Simpson's Forensic Medicine

13th Edition



Jason Payne-James  
Richard Jones  
Steven B Karch  
John Manlove

**Resource text book:**

Simpson's Forensic Medicine 13th ed. - J. Payne-James, et. al. (Hodder-Arnold, 2011)

**Acceptable resources for this course are:**

<https://groups.google.com/d/forum/form3212016>

<http://www.medscape.com>

<http://scholar.google.com/>

<http://www.ncbi.nlm.nih.gov/pubmed/>

Optional:

Project format

Types of Projects

Preparing a Manuscript for Submission to a Biomedical Journal

Biomedical Publication Ethics