كلية العلوم

قسم العلوم الطبية المخبرية

توصيف مساق (0406492) مواضيع خاصة في العلوم الطبية المخبرية

Special Topics in Medical Laboratory Science

1. معلومات مدرس المساق (Instructor)

اســــــم (مدرس / منسق) المساق :	أ.د عدنان سليم جرن Prof. Adnan S. Jaran
الساعـــــــات المكتبيـــــــــة :	حد –ثل 10.30 – 11.30 , ثن – ربع 12.45 – 1.45
رقم المكتب والرقـــم الفرعـــــي :	2119
البريـــــــــد الالكترونــــــــي :	jaran@aabu.edu.jo
مساعد البحث والتدريس/المشرف/الفني (إن وجد):	–

2. وصف المساق (Course Description)

An objective look at the field of medical laboratory science from its inception and leading up to current and future technologies, with an emphasis on current topics such as ethical and social concerns, governmental issues, professionalism and health care delivery.

Topics address recently identified current events, skills, knowledge, and/or attitudes and behavior pertinent to the technology or occupation and relevant to the professional development of the student.

This course is designed to provide experience for the student to prepare for work in health institutions and to explore the role of the medical laboratory technician in support of new technologies.

3. بيانات المساق (Course Title)

رقم المساق: 0406492	اسم المساق: مواضيع خاصة في العلوم الطبية المخبرية	المستوى: الرابع
طبيعة المساق: نظري	المتطلب السابق / المتزامن : موافقة القسم واتمام 90 ساعة معتمدة بنجاح	وقت المحاضرة: 11.45 – 1.00
العام الجامعي: 2018 / 2019	الفصل الدراسي: الصيفي	عدد الساعات الدراسية: 3

4. أهداف المساق (Course Objectives)

The student will describe basic laboratory techniques used in the clinical laboratory	أ–
Identify principles and procedures of all major areas of the clinical laboratory to include sources of error and clinical significance of results and evaluate normal and abnormal test results and related diseases	ب–
The student will demonstrate a comprehensive understanding of clinical laboratory science by describing disease states associated with abnormal laboratory results.	ج–
....	د–

5. مخرجات التعلم (Intended Student Learning Outcomes)
(المعرفة والمهارات والكفايات)

يفترض بالطالب بعد دراسته لهذا المساق أن يكون قادرا على:

1. State the procedures for specimen collection and processing.
2. Recognize and apply principles related to the use of laboratory information systems used in the clinical laboratory.
3. Review analytical tests as directed on selected laboratory specimens.
4. Recognize factors that affect methods and test results and recommend appropriate actions within established guidelines using the skills of critical thinking and problem solving.
5. Recognize the clinical significance of selected laboratory procedures used in the diagnosis and treatment of disease.
6. Discuss routine quality control procedures within established guidelines by applying the principles of critical thinking and problem solving.
7. Discuss preventive and corrective maintenance of selected equipment and instruments and refer to appropriate sources as necessary.
8. State the principles of laboratory safety, including Universal/Standard Precautions.
9. Demonstrate professional conduct and interpersonal communication skills with patients, laboratory personnel, other health care professionals, and with the public.
10. Recognize the responsibilities of other laboratory and health care personnel and interact appropriately with them for quality patient care.
11. Relate selected laboratory test results to common disease processes by recognizing common principles and methodologies used in the clinical laboratory.

6. محتوى المساق (Course Content)

الأسبوع	الموضـــوع
الأول	Introduction
الثاني	Blood Bank (Immunohematology) CLINICAL GUIDE TO TRANSFUSION
الثالث	Blood Bank (Immunohematology) CLINICAL GUIDE TO TRANSFUSION
الرابع	Clinical Chemistry (Disorders of Carbohydrate Metabolism)
الخامس	Clinical Chemistry (Inborn Errors of Metabolism)
السادس	Clinical Chemistry (Inborn Errors of Metabolism)
الامتحان الأول	
الثامن	Hematology/Hemostasis (Myoglobin & Hemoglobin)
التاسع	Immunology and Serology (Tumor Immunology)
العاشر	Laboratory Operations
الحادي عشر	Microbiology/Parasitology/Mycology/Virology
الامتحان الثاني	
الثالث عشر	Urinalysis and Body Fluids (The Kidney and Tests of renal function)
الرابع عشر	Body Fluids (CSF, Synovial and peritoneal)
الخامس عشر	Semen Analysis and Sperm Preparation and infertility
السادس عشر	**الامتحان النهائي**

7. استراتيجيات التعليم والتعلم وطرق التقويم
(Teaching and learning Strategies and Evaluation Methods)

نوع التقويم/القياس (امتحان/عروض صفية/مناقشة/واجبات)	أنشطة التعلم	استراتيجيات التدريس	مخرجات التعلم	ت
Exam/quiz	Lecture	Brain storming, discussion	The students should know the guide lines for blood transfusion	1
Exam/quiz	Lecture	Discussion problem solving	The students should be able to differentiate between	2

3

			the different type of inborn errors of metabolism	
Assignment	Lecture/	Group discussion brain storming	The students should have the knowledge to distinguish the different types of hemoglobin and their ability to carry Oxygen	3
Exam/quiz	Lecture/	Discussion	The students should know different types of tumors and the immune responses	4
Exam/assignment	Lecture/	Group discussion, problem solving	The students should know the principle for the different types of laboratory tests used in body fluids analysis	5

8. تقييم الطلبة (Assessment)

توزيع الدرجات لكل أسلوب	توقيت التقييم	الأساليب المستخدمة
10	خلال الفصل	1-أعمال الفصل: (تقرير، وظائف، حضور)
20	الأسبوع السابع	2-امتحان تحريري أول
20	الأسبوع الثاني عشر	2-امتحان تحريري ثاني
50	أسبوع الامتحانات النهائية	3-امتحان تحريري نهائي

9. الكتاب المقرر (Text Book)

المرجع الرئيس	Success! In Clinical Laboratory Science
المؤلف	Anna P. Cuilla, Donald D. Lehman
الناشر	Pearson
السنة	2019
الطبعة	4th edition
الموقع الالكتروني للمرجع	

10. المراجع الإضافية (References) (وتشمل الكتب والبحوث المنشورة في الدوريات او المواقع الالكترونية)

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