

Course Syllabus of Body fluids

Faculty: Medicine and Health sciences
Department: Health Sciences
Program: Bachelor in Medical Laboratory sciences

I. General information about the course instructor :

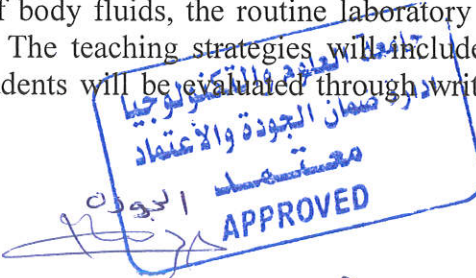
Name	Dr. Abdulhabib Alqubaty	Office Hours(3 Hours Weekly)					
Location & phone number	770145433	Sat	Sun	Mon	Tue	Wed	Thu
Email					√		

II. General information about the course :

1.	Course Title:	Body fluids				
2.	Course Code and Number :	BML472				
3.	Credit Hours :	Lecture	Seminar/Tutorial	Practical	Training	Total
		2		1		3
4.	Study Level and Semester:	4th year /1 st semester				
5.	Pre-requisites :	Non				
6.	Co-requisites :	No				
7.	Program in which the course is offered	Bachelor in Medical Laboratory sciences				
8.	Teaching Language:	English				
9.	Instruction location:	University of Science and Technology, Sana'a ,Yemen				

III. Course Description:

This course provides knowledge on mechanism of formation and normal composition of human body fluids. It also provides skills for collection of body fluids, the routine laboratory tests performed on them and evaluate laboratory test outcomes. The teaching strategies will include lectures, practical sessions, Log books and discussions. The students will be evaluated through written exam, practical exam and evaluation of log books and reports.



عميد الكلية:
د. عبد الله المخلفي

رئيس القسم:
د. عبد الحبيب ردمان

١٥ / ٩

المراجع:
د. مجاهد نصار

الموصف:
د. عبد الحبيب ردمان

IV. Course Aims: This course is aimed to:

1. Enable the students to describe body fluids that may be analyzed for diagnostic purposes in the laboratory.
2. Enable the students to discuss macroscopic, chemical and microscopic testing of body fluids and explain the principles of each test.
3. Familiarizes the students with the major body fluids clinical impact.
4. Familiarize the students with the collection procedure, composition, size, formation, function and normal and abnormal characteristics of body fluids.
5. Enable the students to evaluate laboratory test outcomes and correlate test results with patient condition(s).

V. Course Intended Learning Outcomes (CILOs) :

1. Recognize the physical properties of body fluids.
2. Describe the composition, formation and function of selected body fluids.
3. Evaluate specimen acceptability.
4. Differentiate between the various types and techniques for obtaining random urine samples
5. Evaluate and correlate laboratory results with patient condition(s)
6. Demonstrate the normal and abnormal characteristics of body fluids using physical, chemical, and microscopic examinations.
7. Practice handling and testing procedures common for various body fluids.
8. Apply quality control issues associated with reagent strips.
9. Respects the role of staff and co-staff members regardless of degree or occupation and work effectively in a group during preparation of seminars

١٥ / ١٠



المراجع:
د. مجاهد نصار

الموصف:
د. عبد الحبيب ردمان

VI. Content

First: Theoretical Aspects

No.	Course Topics/Units	Sub-topics	Weeks	Contact Hours
1	Urine	Urine formation, normal composition	1 st	2
		Physical examination of urine (color, volume, pH and specific gravity)	2 nd	2
		Glucose and other sugar in urine and ketouria	3 rd	2
		Proteinuria	4 th	2
		Bile pigments(billirubin, urobilinogen, urobilin)	5 th	2
		Blood in urine(hematuria, hemoglobinuria and myoglobinuria)	6 th	2
		Microscopic examinations of urine	7 th &8 th	4
2	Med-term exam	MCQs and essay questions	9 th	2
3	Semen Analysis	Introduction, formation of semen and normal composition Sperm normal and abnormal morphology Semen collection techniques Physical and chemical examination Microscopic examination	10 th	2
5	Cerebrospinal Fluid (CSF)	Formation, function, normal composition Physical , chemical and microscopic examinations	11 th	2
6	Pleural effusion and peritoneal fluid	Description; exudates & transudate effusions Physical , chemical and microscopic examinations	12 th	2
7	Synovial Fluid	Formation, function, normal composition Physical, chemical and microscopic examinations	13 th	2
8	Miscellaneous Fluids	Amniotic fluid, serous fluids, sputum and peritoneal fluids	14 th	2
9	Final exam		15 th	2
Total number of weeks and hours			15	30



١٥ / ١١

المراجع:
د. مجاهد نصار

الموصف:
د. عبد الحبيب ردمان

Second: Practical			
No.	Practical	No. of Weeks	Contact Hours
1	Urine collection techniques, and usage of urine preservatives	2 nd	2
2	Physical examination of urine normal and abnormal color, volume and pH Methods of determination of specific gravity	3 rd	2
4	Chemical examination of urine Determination of glucosuria Determination of Proteinuria Determination of Bence-Jones protein in urine Detection of bilirubin, urobilinogen, urobilin Determination of blood in urine Determination of Kenton bodies	4 th	2
5	Microscopic examinations of urine sedimentation, organic and inorganic sediments	5 th ,6 th	4
5	Semen Analysis Semen collection techniques Sperm normal and abnormal morphology Physical and chemical examination Microscopic examination	7 th & 8 th	4
7	Cerebrospinal Fluid (CSF) Collection techniques, physical , chemical , microscopic examinations, bacteriological & serological tests	9 th ,10 th	4
8	Pleural effusion and peritoneal fluid Collection techniques, Physical , chemical and microscopic examinations	11 th	2
9	Synovial Fluid Collection techniques, Physical, chemical and microscopic examinations	12 th	2
10	Amniotic fluid, serous fluids, sputum and peritoneal fluids	13 th	2
11	Final practical exam	14 th	2
Total number of weeks and hours		13	26



١٥ / ١٢

المراجع:
د. مجاهد نصار

الموصف:
د. عبد الحبيب رمضان