King Saud University – College of Science – Biochemistry Department

COURSE SYLLABUS

Course Title:	Biochemistry of Biological fluids	**Course Code:**	BCH 472
Semester/ Year:	First / 1441-1442		

I. BASIC COURSE INFORMATION

Campus:	Science College, Building no. 5 – Male campus
Course Section:	1
Department:	Biochemistry

Days:	**Tuesday (Theory)** **Tuesday (Practical)**	Time:	**5-7 PM** **3-5 PM**	Place of class meetings:	**B 002** **(online)**
Credit hours:	3 hours (Theory: 2 hours, and Practical: 1 hour)				
Course Instructor:	Dr. Mansour K. M. Gatasheh				
Prerequisite courses:	BCH 320			**Co-requisites:**	NON

II. INSTRUCTOR CONTACT INFORMATION

Name:	Dr. Mansour K. M. Gatasheh		
Office Location:	Science College (no. 5), Room 64 A 2		
Office hours:			
Phone no(s):	0544836708 (whatsup) 0545571229 (mobile)	**Appropriate times to call:**	Office hours
Email address:	mgatasheh@ksu.edu.sa		

III. COURSE COMPONENTS (Total contact hours per semester)

Lecture	Tutocrial	Laboratory	Field
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IV. COURSE LEARNING OUTCOMES

At the end of course, the students will be able to:

- To introduce students about types of body fluids and their distribution in human body.
- Procedures of body fluid sample collection and management.
- Their analysis and application in diagnostics in relation to different diseases.

V. COURSE CONTENTS

Topics to be Covered	No of weeks	Contact hours
Introduction to body fluids – intracellular fluid, extracellular and interstitial fluid	1	**2**
Body fluid compartments – changes during different physiological conditions like dehydration, over hydration, loss of electrolytes etc….	1.5	**3**
Sample collection and management	1	**2**
Urine analysis – formation, anatomy, normal and abnormal constituents, renal function, calculi formation and screening	1.5	**3**
Cerebrospicnal fluid (CSF) analysis – formation, composition, functions and changes in relevance to diseases	1.5	**3**
Synovial fluid analysis – functions and role in arthritis	1	**2**
Sweat analysis and its role in cystic fibrosis diagnosis	1.5	**3**
Amniotic fluid analysis – composition, screening for genetic diseases, fetal maturity tests	1	**2**
Sputum analysis – composition, biochemical tests	1	**2**
Saliva & feces analysis	1.5	**3**
Semen analysis – composition, formation, tests relevant to fertility	0.5	**1**

VI. ASSESSMENT TOOLS

Total Marks = 100 Marks; distributed as follows:

Assessment	Percent of Final Grade
First Midterm exam	15
Second Midterm exam	15
Literature search report & oral presentation	10
Practical	30
Final written exam	30
	100

VII. REQUIRED TEXT(S)

- Urine analysis and body fluids by susan king strasinger.

VIII. ESSENTIAL REFERENCES

- Fundamentals of urine and body fluid analysis by Nancy A Brunzel
- Text book of urine analysis and body fluids : A clinical approach by Lady James Mcbride.
- Graff's text book of routine urine and body fluid analysis by Lilian A Mundt.

IX. COURSE POLICIES

Attendance Policy

The Students are expected to attend all classes. The student who has more than **one-fourth** unexcused absence of the course meetings will receive an **"F"** grade for the course.

Professionalism Policy

- Mobile phone must be kept silent during the classroom and lab lectures.
- Please arrive on time for the class and lab lectures.

The students who do not follow these roles will be asked to leave the classroom and lab lectures immediately.