# Jordan University of Science and Technology

## Faculty of Applied Medical Sciences

## Allied Medical Sciences Department

LM401 Clinical Microscopy - JNQF Level: 6

First Semester 2023-2024

| Course Catalog |
|---|
| 1 Credit Hours. This course provides theoretical applications of microscopic techniques in the analysis and examination of urine, stool, cerebrospinal fluid (CSF), seminal fluid, synovial fluid, pleural, and peritoneal fluid. The course will cover the principles and techniques of the clinical microscopy. |
| **Teaching Method:** On Campus |

| Text Book | |
|---|---|
| **Title** | - Fundamental of Urine and body fluid analysis |
| **Author(s)** | - Nancy A.Brunzel |
| **Edition** | 2nd Edition |
| **Short Name** | Body fluids |
| **Other Information** | |

**Course References**

| Short name | Book name | Author(s) | Edition | Other Information |
|---|---|---|---|---|
| Body fluids | - Urinalysis and body fluids | Strasinger, Susan king. | 5th Edition | |

| Instructor | |
|---|---|
| Name | **Dr. Muhamad Ali Shakhatreh** |
| Office Location | - |
| Office Hours | Sun : 10:00 - 12:00<br>Tue : 10:00 - 12:00<br>Wed : 11:00 - 12:00<br>Thu : 11:30 - 12:30 |
| Email | mkshakhatreh@just.edu.jo |

| Class Schedule & Room |
|---|
| Section 1:<br>Lecture Time: Thu : 13:30 - 14:30<br>Room: M3306 |

| Tentative List of Topics Covered | | |
|---|---|---|
| **Weeks** | **Topic** | **References** |
| Week 1 | Introduction to course | |
| Week 2 | Use and care of the microscope | |
| Week 3 | Use of hemocytometer in microscopic analysis | |
| Week 4 | Urine examination - 1 | |
| Week 5 | Urine examination - 2 | |
| Week 6 | Urine examination - 3 | |
| Week 7 | CSF examination | |
| Week 8 | Stool examination | |
| Week 9 | Sputum examination | |
| Week 10 | Seminal fluid examination. | |
| Week 11 | Synovial fluid examination | |

| Mapping of Course Outcomes to Program Outcomes and NQF Outcomes | Course Outcome Weight (Out of 100%) | Assessment method |
|---|---|---|
| To describe and focus on the selection and collection criteria of the clinical specimen. [1SLO3] [1L6K1, 1L6C1] | 5% | |
| To know the component of microscope, functions, and maintenance. [1SLO2] [1L6K1, 1L6S3] | 5% | |
| To familiarize how to use the haemocytometer and counting of cells in different body fluids. [1SLO3] [1L6S2, 1L6C2] | 5% | |
| To characterize urine macroscopically, microscopically, and chemically. [1SLO1, 1SLO2] [1L6K1, 1L6S3, 1L6C4] | 30% | |
| To characterize CSF, stool, synovial fluid, semen, and sputum chemically, macroscopically, and microscopically. [1SLO6] [1L6S2, 1L6C2, 1L6C4] | 40% | |
| To interpret the results and correlate it with clinical disease, and interfering substances. [1SLO4, 1SLO5] [1L6S2, 1L6C2, 1L6C5] | 15% | |

| Relationship to Program Student Outcomes (Out of 100%) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SLO1 | SLO2 | SLO3 | SLO4 | SLO5 | SLO6 | MSLO1 | MSLO2 | MSLO3 | MSLO4 | MSLO5 | MSLO6 |
| 15 | 20 | 10 | 7.5 | 7.5 | 40 | | | | | | |

| Relationship to NQF Outcomes (Out of 100%) | | | | | | |
|---|---|---|---|---|---|---|
| L6K1 | L6S2 | L6S3 | L6C1 | L6C2 | L6C4 | L6C5 |
| 15 | 20.83 | 12.5 | 2.5 | 20.83 | 23.33 | 5 |

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