

## Jordan University of Science and Technology Faculty of Applied Medical Sciences Allied Medical Sciences Department

LM354 Diagnostic Hematopathology (2) - JNQF Level: 7

Second Semester 2023-2024

## **Course Catalog**

2 Credit Hours. This course is the second course in the MLS curriculum concerned with hematological disorders. The course will provide students with a vista of the common hematological abnormalities and disorders of leukocytes with a major emphasis on the etiology, pathogenicity, clinical features, and diagnostic approach of these disorders. Most of the course will focus on malignant disorders including Leukemia, Myeloproliferative disorders, and myelodysplastic syndrome. The course will also cover hemostatic disorders including quantitative and qualitative disorders of platelets as well as coagulopathies.

Teaching Method: On Campus

| Text Book            |                                                         |  |  |  |  |  |  |
|----------------------|---------------------------------------------------------|--|--|--|--|--|--|
| Title                | Title Hematology: Clinical principles and applications  |  |  |  |  |  |  |
| Author(s)            | Bernadette F. Rodak, George A. Fritsma and Kathryn Doig |  |  |  |  |  |  |
| Edition              | 5th Edition                                             |  |  |  |  |  |  |
| Short Name           | Ref #1                                                  |  |  |  |  |  |  |
| Other<br>Information |                                                         |  |  |  |  |  |  |

| Instructor             |                       |  |  |  |  |
|------------------------|-----------------------|--|--|--|--|
| Name Dr. Jehad Alhmoud |                       |  |  |  |  |
| Office Location        | -                     |  |  |  |  |
| Office Hours           |                       |  |  |  |  |
| Email                  | jfalhmoud@just.edu.jo |  |  |  |  |

Class Schedule & Room

Section 1: Lecture Time: Sun, Tue : 08:30 - 09:30 Room: NB49

| Tentative List of Topics Covered |                                                            |                       |  |  |  |  |
|----------------------------------|------------------------------------------------------------|-----------------------|--|--|--|--|
| Weeks                            | Торіс                                                      | References            |  |  |  |  |
| Week 1                           | Review leukocytes and disorders classification             | Handout From Ref #1   |  |  |  |  |
| Week 2                           | Benign quantitative leukocyte disorders                    | 29 From <b>Ref #1</b> |  |  |  |  |
| Week 3                           | Leukemia (I): Etiology, pathogenesis and clinical features | Handout From Ref #1   |  |  |  |  |
| Week 4                           | Leukemia (II): Acute leukemia                              | 35 From <b>Ref #1</b> |  |  |  |  |
| Week 5                           | Leukemia (III): Acute leukemia                             | 35 From <b>Ref #1</b> |  |  |  |  |
| Week 6                           | Leukemia (IV): Chronic Lymphoid Leukemia                   | 36 From <b>Ref #1</b> |  |  |  |  |
| Weeks 7, 8                       | Myeloproliferative Disorders                               | 33 From <b>Ref #1</b> |  |  |  |  |
| Weeks 9, 10                      | Weeks 9, 10 Myelodysplastic syndromes MDS                  |                       |  |  |  |  |
| Week 11                          | Lymphomas                                                  | Handout From Ref #1   |  |  |  |  |
| Weeks 12, 13                     | Plasma cell disorders: Multiple Myeloma                    | Handout From Ref #1   |  |  |  |  |

| Mapping of Course Outcomes to Program Outcomes and NQF Outcomes                                                                                                                                                                      | Course<br>Outcome<br>Weight (Out<br>of 100%) | Assessment<br>method |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|----------------------|
| To classify benign and malignant leukocyte disorders [1SLO1] [1L7K1]                                                                                                                                                                 | 20%                                          |                      |
| To understand the etiology, pathogenesis, clinical presentation, and prognosis of leukocyte malignancies [1SLO2] [1L7K1]                                                                                                             | 20%                                          |                      |
| To become familiar with the differential diagnostic approach for the diagnosis of malignant disorders including routine examination and specialized technical approach [1SLO3] [1L7S1]                                               | 30%                                          |                      |
| Explain hemostatic disorders including platelet disease and coagulopathies regarding etiology, pathogenesis, and clinical features as well as the routine and specialized diagnostic approaches [1SLO2, 1SLO3] [1L7K1, 1L7S1, 1L7S2] | 20%                                          |                      |
| To correlate the clinical aspects of the disease with diagnostic and prognostic issues [1SLO6] [1L7S3, 1L7C4]                                                                                                                        | 10%                                          |                      |

| Relationship to Program Student Outcomes (Out of 100%) |      |      |      |      |      |       |       |       |       |       |       |
|--------------------------------------------------------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|
| SLO1                                                   | SLO2 | SLO3 | SLO4 | SLO5 | SLO6 | MSLO1 | MSLO2 | MSLO3 | MSLO4 | MSLO5 | MSLO6 |
| 20                                                     | 30   | 40   |      |      | 10   |       |       |       |       |       |       |

| Relationship to NQF Outcomes (Out of 100%) |       |      |      |      |  |  |
|--------------------------------------------|-------|------|------|------|--|--|
| L7K1                                       | L7S1  | L7S2 | L7S3 | L7C4 |  |  |
| 46.67                                      | 36.67 | 6.67 | 5    | 5    |  |  |

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