



## Course Syllabus of Pathology

Faculty : Faculty of Medicine and Health Sciences.

Department: Health science.

Program : Bachelor in Medical laboratory

### I. General information about the course instructor :

|                         |                         |                              |     |     |     |     |     |
|-------------------------|-------------------------|------------------------------|-----|-----|-----|-----|-----|
| Name                    | Mogahid Yahya Nassar    | Office Hours(٢ Hours Weekly) |     |     |     |     |     |
| Location & phone number | 5202                    | Sat                          | Sun | Mon | Tue | Wed | Thu |
| Email                   | Mogahidnassar@yahoo.com |                              |     |     | √   |     |     |

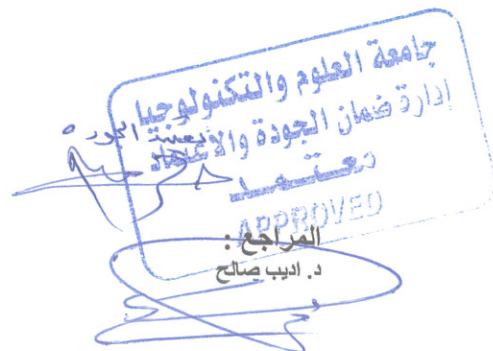
### II. General information about the course:

|                                            |                                                |                  |           |          |   |       |
|--------------------------------------------|------------------------------------------------|------------------|-----------|----------|---|-------|
| 1. Course Title :                          | Pathology                                      |                  |           |          |   |       |
| 2. Course Code and Number :                | BML351                                         |                  |           |          |   |       |
| 3. Credit Hours :                          | Credit Hours                                   |                  |           |          |   | Total |
|                                            | Theoretical                                    | Seminar/Tutorial | Practical | Training |   |       |
|                                            | 2                                              | -                | 1         | -        | 3 |       |
| 4. Study Level and Semester:               | 3 <sup>rd</sup> year /1 <sup>st</sup> semester |                  |           |          |   |       |
| 5. Pre-requisites                          | BML122                                         |                  |           |          |   |       |
| 6. Co-requisites                           | None                                           |                  |           |          |   |       |
| 7. Program in which the course is offered: | Bachelor in Medical laboratory                 |                  |           |          |   |       |
| 8. Teaching Language:                      | English                                        |                  |           |          |   |       |
| 9. Instruction location:                   | University of Science and Technology, Sana'a   |                  |           |          |   |       |

عميد الكلية:  
د. عبد الله المخلافي

رئيس القسم:  
د. عبد الحبيب ردمان

١٣/٨



المراجع:  
د. ادیب صالح

الموصف:  
د. مجاهد نصار

### III. Course Description

The course allows students to learn basic concept of the various disease processes in the body as well the basic molecular, cellular and reactions to various injurious agents. Cell injury including adaptations, necrosis & apoptosis. Pathology of Inflammation including causes and manifestations and hemodynamic are also discussed. The course also emphasizes neoplasia including classification, epidemiology, and characteristics of benign and malignant tumors. Knowledge of etiology of tumors and its consequences on health are also covered. The teaching strategies will include lectures, self-learning and assignment. The students will be evaluated through report, written exam and practical exam

### IV. Course Aims: This course is aimed to:

- 1- Provides the students with the essential basic scientific knowledge required to understand in an integrated manner the structure and functional deviations from the normal in the various body systems and organs.
- 2- Familiarize students with the basic pathology.
- 3- Understand the etiology, pathogenesis and pathologic manifestation of disease process.
- 4- Provide the students with the skills of differentiation between normal and abnormal tissues.

### V. Course Intended Learning Outcomes (CILOs) :

at the end of this course the students must be able to:

- 1- Explain terms and divisions in general pathology.
- 2- Demonstrate an understanding of the etiology and pathogenesis of disease & it's effects on the body
- 3- Explain the salient principles of inflammation and repair
- 4- Describe circulatory dysfunction
- 5- Describe and contrast neoplasm and cysts.
- 6- Identify pathological changes by the light microscope
- 7- Describe the pathologic picture of a disorder based on gross or microscopic morphology
- 8- Demonstrate the ability to identify the macroscopic and microscopic criteria of the altered 9- structure and hence function of the tissue in disease process
- 9- Correlate the signs and symptoms of a disease with the underlying gross & microscopic tissue.
- 10- Use the sources of biomedical information to remain current with the advances in knowledge & practice

| VI. Course Contents             |                              |                                                                                                  |                                                                           |               |
|---------------------------------|------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|---------------|
| Theoretical Aspect:             |                              |                                                                                                  |                                                                           |               |
| No.                             | Course Topics/Units          | Sub-topics                                                                                       | Week                                                                      | Contact Hours |
| 1                               | Introduction and cell injury | Definition<br>Causes of cell injury<br>Types of cell injury                                      | 1 <sup>st</sup>                                                           | 2             |
| 2                               | Adaptation                   | Atrophy<br>Hypertrophy<br>Hyperplasia<br>Metaplasia<br>Dysplasia<br>Carcinoma in-situ            | 2 <sup>nd</sup>                                                           | 2             |
| 3                               | Necrosis                     | Definition<br>Causes<br>Types<br>apoptosis                                                       | 3 <sup>rd</sup>                                                           | 2             |
| 4                               | Inflammation                 | Acute inflammation<br>Suppurative inflammation.<br>Chronic inflammation                          | 4 <sup>th</sup> ,5 <sup>th</sup> ,6 <sup>th</sup> .                       | 6             |
| 5                               | Repeair                      | Types<br>Fibrosis<br>Wound healing                                                               | 7 <sup>th</sup>                                                           | 2             |
| 6                               | Mid Exam                     |                                                                                                  | 8 <sup>th</sup>                                                           | 2             |
| 7                               | Circulatory disturbance      | Thrombosis<br>Clot<br>Embolism<br>Ischaemia<br>Infarction<br>Congestion<br>Oedema<br>Haemorrhage | 9 <sup>th</sup> ,10 <sup>th</sup> ,11 <sup>th</sup><br>12 <sup>th</sup> , | 8             |
| 8                               | Neoplasia                    | Definition<br>Classification<br>Characters<br>Benign<br>Malignant<br>Examples                    | 13 <sup>th</sup> ,14 <sup>th</sup> ,15 <sup>th</sup>                      | 6             |
| 9                               | Final exam                   |                                                                                                  | 16 <sup>th</sup>                                                          | 2             |
| Total number of weeks and hours |                              |                                                                                                  | 16                                                                        | 32            |

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جامعة العلوم والتكنولوجيا  
إدارة ضمان الجودة والاعتماد  
مُعتمد  
APPROVED  
المراجع :  
الموصف :  


Second: Practical/Tutorial/Clinical Aspects

| No.                             | Practical/Tutorial/Clinical topics                                   | Week                              | Contact Hours |
|---------------------------------|----------------------------------------------------------------------|-----------------------------------|---------------|
| 1                               | Tissue processing                                                    | 2 <sup>nd</sup>                   | 2             |
| 2                               | How to use the microscope                                            | 3 <sup>rd</sup>                   | 2             |
| 3                               | Gross & microscopic features of Necrosis                             | 4 <sup>th</sup>                   | 2             |
| 4                               | Gross & microscopic features of Acute inflammation                   | 5 <sup>th</sup>                   | 2             |
| 5                               | Gross & microscopic features of Chronic inflammation                 | 6 <sup>th</sup>                   | 2             |
| 6                               | Gross & microscopic features of Thrombosis, ischaemia and infarction | 7 <sup>th</sup>                   | 2             |
| 7                               | Gross & microscopic features of Neoplasia                            | 8 <sup>th</sup> , 9 <sup>th</sup> | 4             |
| 8                               | Exam                                                                 | 13 <sup>th</sup>                  | 2             |
| Total number of weeks and hours |                                                                      | 9                                 | 18            |