Course Specification

General Surgical Pathology

Faculty of Medicine–Mansoura University

(A) Administrative information

(1) Program offering the course:	Orthopediac and traumatology MD degree
(2) Department offering the course:	Orthopediac and traumatology
(3) Department responsible for teaching the course:	Pathology Department
(4) Part of the programme:	First part
(5) Date of approval by the Department`s council:	11.5.2016
(6) Date of last approval of programme specification by Faculty council:	9/8/2016
(7) Course title:	Orthopaedic Pathology
(8) Course code:	OSURG 625SP
(9) Total teaching hours:	30 HOURS
(10) Credit hours	2 hour

(B) Professional information

(1) Programme Aims:

The broad aims of the course are as follows:

1- Teaching the candidate the general basic pathological processes, pathogenesis, and molecular basis of diseases.

(2) Intended Learning Outcomes (ILOs):

A- Knowledge and Understanding

A1: Identify the general pathological features of inflammation, tissue repair, cell injury and cell death

A2: Recognize different forms of circulatory disturbances and their underlying pathogenesis

A3: Recognize types of immune cells, types, pathogenesis and examples of different types of hypersensitivity reactions and autoimmunity

A4: Identify types, pathogenesis and clinical features of different genetic disorders and enlist methods of diagnosis of genetic disorders

A5: Identify different aspects of infections as toxaemia, bacteraemia, septicaemia and pyaemia.

A6 Describe different patterns of cellular adaptation as atrophy, hypertrophy, metaplasia and dysplasia and recognize the growth disturbances as hamartomas and differentiate detween benign and malignant tumors.

A7: Identify steps of carcinogenesis with explanation of the underlying disturbances in proto-oncogenes, tumor suppressor genes and DNA repair genes.

A8 Identify altered structure and function of the body and its major systems that are seen in various diseases; definition, etiology, pathogenesis, prognosis, fate & complications of such diseases.

B- Intellectual skills

B1. Interpret data of surgical specimens.

B2: Analyze various gross and microscopic pathologic data resulting from the disease process.

B3: Interpret findings of pathological specimens effectively

B4: Enlist the differential diagnosis of various gross and microscopic pathologic features to reach proper evidence based diagnosis.

B5: Relate the clinical data, investigational data and patient history to reach proper pathologic diagnosis with proper time managing.

B6: Analyze different problems of misdiagnosis.

B7: Discuss case problematic cases with senior staffs and supervisors to improve professional performance.

B8: Construct a research design and choose proper research methodology.

B9: Participate in identifying system errors and implementing potential systems solutions.

(3) Course content

Subject	Teaching houres
Introduction Types of bone & bone cells	4
• Acute inflammation, vascular and cellular changes, exudates, transudate, edema, margination, chemotaxis, phagocytosis Systemic effects of acute inflammation.	4
• Chronic Inflammation, non specific, specific (granulomatous)	2
• Osteomyelitis, acute hemalogenous & non hematogenous Chronic non specific, specific, T.B (Pott's disease) & Syphilis	4
• Repair, Regeneration, wound healing Bone Fracture, types, mechanism of bone healing, factors affecting healing, complications	4
• Necrosis, apoptosis, definition, morphologic changes	2
• Osteodystrophies, fibrous dysplasia, Paget's disease osteoporosis , Ricket's and ostcomalacis, Renal osteodystrophy.	2

Disorders of growth • Adaptation, Atrophy, hypertrophy, hyperplasia, • Definition, classification, nomenclature, structure • Differences between benign and malignant tumors, tumor grade & stage, invasion and spread, homing, locally malignant tumors	4
Diseases of joints • Introduction : synovial joint • Infective synovitis • Rheumatoid arthritis : osteo arthritis, Gout • Synovial tumors : Ganglion, giant cell tumour of tendon sheath, synovial sarcoma.	4

(4) Regulations for progression and programme completion:

- Student must complete minimum of 7 credit hours in order to obtain the Master degree, which include the courses of first and essay and activities of the log book.
- Courses description are included in Appendix III.
- Registration for the M.Sc. essay is allowed 6 months from the day of registration to the programme.

Log book fulfillment:

- Student must fulfill a minimum of 7credit of log book activities.
- Lectures and seminars of the previously described courses must be documented in the log book and signed by the lecturer.
- Number of activities to be done and recorded in the logbook:

1. Three workshops
2. Three conferences
3. Twenty scientific meetings (pathology specimen discussion)
4. Twenty specimen dissection and preparation
5. Ten demonstration session.

Final exam:

الجزء الأول

المقرر	الاختبار	الدرجة			إجمالي
		تحريري	شفهي	عملي	
باثولوجيا جراحية	اختبار تحريرى مدته ساعه واحدة	100 (20% MCQ)			
إجمالى الدرجة					100

- **Course Coordinator: Dre Adham Elsharkawy**

- **Head Of Department: Dr Hani Elmowafi**