



## إعتماد توصيف مقررات برنامج الدبلوم فى جراحة العظام

نقر نحن الموقعون على هذا أدناه أن توصيف وثيقة البرنامج التعليمى لدرجة الدبلوم فى جراحة العظام والمقررات الدراسية المكونة له قد تم وضعها بمعرفة الأقسام

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عميد الكلية



وكيل الكلية للدراسات العليا

## Peer Revision

Reviewers	University	Date of Revision
- Prof. Dawlat Salem	Cairo	10/12/2011
- Prof. Ahmad K. Mansur	Mansura	28/11/2011

# **PROGRAM SPECIFICATION for Diploma Degree of Orthopedic**

**Sohag University**

**Faculty of Medicine**

## **A. Basic Information**

1. Program title: Diploma degree in Orthopedic Surgery
2. Program type: Single
3. faculty: Faculty of Medicine
4. Department: Department of Orthopedic Surgery.
5. Coordinator: Dr. Ahmad Addosooki, lecturer of orthopedic surgery and traumatology.
6. Assistant Coordinator: Mohamed Abd El-hamid Ali, Assistant lecturer of orthopedic surgery
7. External evaluator: Prof. Dr. Osama Farouk , Prof . of Orthopedic surgery, Assiut University
8. Last date of program specifications approval: Faculty council No. "250", decree No. "1378" dated 28/12/2013..

## **B. Professional Information**

### **1. Program aims:**

The aim of that program is to provide the diploma graduate student with the medical knowledge and skills essential for the professional practice of orthopedic surgery at basic level through providing:

1. Scientific knowledge essential for the basic practice of orthopedic surgery and traumatology according to the international standards.
2. Skills necessary for proper diagnosis and management of patients in the field of orthopedic surgery and traumatology including diagnostic , problem solving , decision making and operative skills.
3. Ethical principles related to practice in the highly sensitive specialty.
4. Active participation in community needs management and problems solving
5. Maintenance of abilities necessary for continuous medical education.

### **2. Attributes of the post graduate:**

1. Application of the specific knowledge gained during practice of Orthopedic surgery.
2. Identification of professional problems in this specialty and suggest solutions for them.
3. Mastering professional skills and usage of suitable technologies in practice of Orthopedic Surgery.
4. Ability to efficiently communicate and lead team works throughout organized professional work.
5. Decision making at the lights of the available information.
6. Perfect utilization of available resources.

7. Awareness of his role in community development and maintain good environment.
8. Reflects the commitment to act with integrity, credibility and professional norms and accountability.
9. Recognize the need to develop himself and to engage in continuous learning.

### **3. Intended learning outcomes (ILOs)**

#### **a) Knowledge and understanding**

By the end of the program the student should be able to:

- a1. Mention the normal structure and function of the human musculoskeletal system and its relation to surgical procedures .
- a2. Illustrate the normal growth and development of the human musculoskeletal system.
- a3. List the abnormal structure, function of human musculoskeletal system
- a4. Mention the natural history of orthopedic diseases and traumatology problems.
- a5. Describe the causation of orthopedic diseases and their pathogenesis.
- a6. Mention methods of fixation of different fracture pattern.
- a7. List the clinical picture and differential diagnosis of orthopedic diseases.
- a8. List the common diagnostic and laboratory techniques necessary to establish diagnosis of orthopedic diseases.
- a9. Describe the various therapeutic methods/alternatives used for orthopedic diseases.
- a10. Define the knowledge of pathology and histopathology that is related to orthopedic diseases and fractures.
- a11. Define the knowledge of the general surgery.
- a12. Define trauma management.
- a13. Illustrate scientific developments in the field of orthopedic surgery and traumatology
- a14. Mention Ethical and legal principles of professional practice in the field of orthopedic surgery and traumatology.
- a15. Mention the principles and fundamentals of quality in professional practice in the field of orthopedic surgery and traumatology.
- a16. List the mutual influence between professional practice and its impacts on the environment.

#### **b) Intellectual skills**

By the end of the program the student should be able to:

- b1. Identify and analyze the information in the field of orthopedic surgery and traumatology and ranking them according to their priorities.
- b2. Evaluate and solve the problems in the area of orthopedic surgery and traumatology.

- b3. Read and analyze researches and issues related to orthopedic surgery and traumatology.
- b4. Evaluate the risk in professional practices in the field of orthopedic surgery and traumatology.
- b5. Plan professional decisions in basic orthopedic problems in light of the available data.

**c) Professional and practical skills**

By the end of the program the student should be able to:

- c1. Perform professional skills in the field of orthopedic surgery and traumatology.
- c2. Evaluate orthopedic and traumatology problems and find solutions.
- c3. Evaluate imaging and electrophysiological data in diagnosis of orthopedic and traumatology problems

**d) General and transferable skills:**

By the end of the program the student should be able to:

- d1. Present orthopedic cases in seminars effectively.
- d2. Use appropriate computer program package for writing reports, and presentation.
- d3. Write medical reports
- d4. Assess himself and identify his personal learning needs.
- d5. Obtain information and knowledge from library, internet and conferences
- d6. Work coherently and successfully as a part of a team and effectively manage time.
- d7. Leads a team in familiar professional contexts
- d8. Obtain knowledge continuously and independently in orthopedic surgery and traumatology field.

**4. Academic Standards:**

Sohag Faculty of Medicine adopted the general National Academic Standards (NARS) provided by the national authority for quality assurance and accreditation of education (naqaae) for postgraduate programs. This was approved by the Faculty Council decree NO.6754, in its session NO. 177 Dated 18/5/2009, Based on these NARS; Academic Reference Standards (ARS) were suggested for this program. These ARS were approved by the Faculty Council decree NO.7528, in its session NO. 191, dated 15/3/2010. The adoption of NARS and the suggested ARS were approved by University council degree No 587, in its session No.60. Dated 26-12-2011

**5. Curriculum Structure and Contents**

5.a- Program duration: 3 semester (1.5 years )

5.b- Program structure

Subject	Hours /week		
	Lectures	Practical	Clinical
<u>First Part:</u>			
Applied anatomy	3	4	
biostatistics	1	2	
Pathology	3	4	
<u>Second Part:</u>			
General Surgery module	2	1	1
Orthopedic surgery module	2	1	1

Traumatology module	1	1	1
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Code	Item	No	%	
b.i	Total credit hours	Compulsory	34	100
		Elective	0	0
		Optional	0	0
b.iii	credit hours of basic sciences courses	10	29.4	
b.iv	credit hours of courses of social sciences and humanities	0	0	
b.v	credit hours of specialized courses:	10	29.4	
b.vi	credit hours of other course	8	18.6	
b.viii	Program Levels (in credit-hours system):			
	Level 1: 1 <sup>st</sup> part	12	35	
	Level 2: 2 <sup>nd</sup> Part	22	64	

## 6. Program courses

### First Part (Semester 1)

#### A. Compulsory

Course Title	No. of Units	No. of hours/week			Program ILOs covered (By No.)
		Lect.	Lab.	Exer.	
biostatistics	2	1	2		a15, a16, b3, c1, d3
Applied Anatomy	5	3	2	2	a1
Pathology	5	3	2	2	a1

### Second Part:

#### A. Compulsory

Course Title	No. of Units	No. of hours/week			Program ILOs covered (By No.)
		Lect.	Lab.	Exer.	
General Surgery module	6	2	1	1	a4
Orthopedics module	6	2	1	1	a2, b1,b2,b3,b4,c2,c4, d1,d2,d3,d4,d5,d6,d7
Traumatology module	4	1	1	1	a3, b1,b2,b3,b4,c1,c2,c4, d1,d2,d3,d4,d5,d6,d7

## 7. Program admission requirements

- Candidates should have either:
  - MBBCh Degree from any Egyptian Faculties of Medicine, or
  - Equivalent Degree from Medical Schools abroad approved by the Ministry of Higher Education.
- Candidate should complete the house officer training year.
- Follow postgraduate regulatory rules of Sohag Faculty of Medicine

## 8. Regulations for progression and program completion

Duration of program is 3 semesters (1.5 years), starting from registration till t 2<sup>nd</sup> part of exam divided to:

First Part: (≥6 months=1 semester):

- Program-related basic sciences.
- At least six months after registration should pass before the student can ask for examination in the 1st part.
- Two sets of exams: 1st in April — 2nd in October.

- For the student to pass the first part exam, a score of at least 60% in each curriculum is needed (with at least 40% of the written exam)
- Those who fail in one curriculum need to re-exam it only.

Second Part: ( $\geq 12$  months=2 semesters):

1. Program related specialized science Orthopedic Surgery and Traumatology Courses
2. After passing at least :
  - 12 month training in the department of Orthopedic Surgery and Traumatology.
  - Basic sciences department actual work for 12 month as a trainee in the department
3. The student should pass the 1<sup>st</sup> part before asking for examination in the 2<sup>nd</sup> part.
4. Two sets of exams: 1st in April— 2nd in October.
5. For the student to pass the 2<sup>nd</sup> part exam , a score of at least 60% is needed ( with at least score 60% for the written exam and 50% of the oral , clinical and practical exam)
6. Fulfillment of the requirements in each course as described in the template and registered in

Grand rounds	اجتماع علمي موسع
Training courses	دورات تدريبية
Conference attendance	حضور مؤتمرات علمية
Thesis discussion	حضور مناقشات رسائل
Workshops	حضور ورش عمل
Journal club	ندوة الدوريات الحديثة
Case presentation	تقييم حالة مرضية
Seminars	لقاء علمي موسع
Morbidity and Mortality conference	ندوة تحليل المخاطر المرضية أو الوفاة
Self education program	برنامج التعليم الذاتي

The log book is a prerequisite for candidates to be assessed and undertake part 1 and part 2 examinations; as following:

#### 9. Methods of student's assessment

Method of assessment	The assessed ILOs
1-Research assignment	- General transferable skills, intellectual skills
2-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	- Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills
3-OSCE	-Practical skills, intellectual skills, general transferable skills
4-Structured Oral Exam	- Knowledge, Intellectual skills, General transferable skills

**Assessment schedule:**

Part I:

- Applied Anatomy and Pathology: Written Exam (3hours) + structured oral Exam.

Part II:

-General Surgery, Orthopedics and Traumatology: Two Written Exam (3 hours for each) + OSCE + Structured oral Exam(Orthopedics and Traumatology)

**10. Evaluation of program**

Evaluator	Tool	Sample
1- Senior students	Questionnaire	40
2- Alumni	Questionnaire	40
3- Stakeholders ( Employers)	Questionnaire	19
4-External Evaluator(s) (External Examiner(s))	Report	1
5- Other		

## Course Specifications of Surgical anatomy and embryology for Orthopedic surgery and traumatology Diploma Degree

Sohag University

Faculty of Medicine

1. Program (s) on which the course is given: Surgical anatomy and embryology of the head, neck and upper limb, lower limb and vertebral column.
2. Minor element of program.
3. Department offering the program: Orthopedics department
4. Department offering the course: Human Anatomy & Embryology Department .
5. Academic year / Level: Diploma 1st part Orthopedics
6. Date of specification approval: Faculty council No. "250", decree No. "1378" dated 28/12/2013.

### A- Basic Information

**Title:** Anatomy & Embryology

**Code :** ANA 0523 100

	Lect.	Lab.	Exer.	Total hours	Credit hours
Applied Anatomy	45	30	30	105	5

### B- Professional Information

#### 1. Overall Aims of Course

##### Anatomy Module

By the end of the course the student should be able to have the professional knowledge about the anatomy and embryology upper limb, lower limb and vertebral column.

#### 2. Intended Learning Outcomes of Course (ILOs):

##### a) Knowledge and Understanding:

By the end of the course, the student should be able to:

- a1. Mention the normal structure of the human musculoskeletal system
- a2. Enumerate the normal development of the human musculoskeletal system.

##### b) Intellectual Skills

By the end of the course, the student should be able to:

- b1. Interpret data acquired to understand applied anatomy of orthopedic diseases.

##### c) Professional and Practical Skills

By the end of the course, the student should be able to:

- c1. Master the basic professional skills in surgical dissection on anatomical basis.

##### d) General and Transferable Skills

By the end of the course, the student should be able to:

- d1. Use of different sources for information and knowledge to learn more about abnormal anatomy of orthopedic disease.

#### 3. Contents

Topic	No. of hours		
	No. of hours	Lectures	Practical
Introduction	14	6	8
Anatomy and embryology of the upper limb	14	6	8
Anatomy and embryology of the vertebral column	14	6	8
Anatomy of the muscles of the back	14	6	8
Anatomy and embryology of the lower limb	14	6	8
Anatomy and embryology of the spinal nerves	16	6	10
Revision	19	9	10
<b>Total</b>	<b>105</b>	<b>45</b>	<b>60</b>
<b>Credit</b>	<b>5</b>	<b>3</b>	<b>2</b>

#### 4. Teaching and Learning Methods

4.1-Lectures.

4.2-practical lessons.

#### 5. Student Assessment Methods

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	- Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.3-Structured Oral Exam	- Knowledge, Intellectual skills, General transferable skills

#### Assessment Schedule

Assessment 1.... Final written exam.... Week ...24

Assessment 2.....Final Structured Oral Exam ..... Week ....24

#### Weighting of Assessments

Final written Examination 50 %

Structured Oral Exam. 50 %

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Total 100%

#### 6. List of References

6.1- Course Notes made by the staff of the department

6.2- Essential Books (Text Books): Gray's Anatomy

6.3- Recommended Books: A colored Atlas of Human anatomy and Embryology.

#### 7. Facilities Required for Teaching and Learning

Data show device for lectures.

**Course Coordinator:** Dr .Salwa Ewas .

**Head of Department:** Dr. Ahmed M. Eldsoky

**Date:** 18/12/2011, **Revised:**1/9/2012, **Revised:**1/12/2013

# Course Specifications of Pathology for Orthopedic surgery and traumatology Diploma Degree

Sohag University

Faculty of Medicine

1. Program (s) on which the course is given: Surgical pathology.
2. Minor element of program.
3. Department offering the program: Orthopedics department
4. Department offering the course: Pathology Departement.
5. Academic year / Level: Diploma 1st part Orthopedics
6. Date of specification approval: Faculty council No. "250", decree No. "1378" dated 28/12/2013.

## A. Basic Information

**Title:** Pathology

**Code:** PAT 0523 100

Lect.	Lab.	Total no	Credit hour
45	60	105	5

## B. Professional Information

### 1. Overall Aims of Course

By the end of the course the post graduate students should be able to have the professional knowledge of the pathology of medical diseases.

### 2. Intended Learning Outcomes of Course (ILOs):

#### a) Knowledge and Understanding:

By the end of the course the student should be able to:

- a1. Develop understanding of the general and systemic pathology.
- a2. Become familiar with etiology, pathogenesis and pathologic manifestation of diseases especially musculoskeletal & soft tissue disorders.
- a3. Enumerate sufficient information about the fate and complications and prognosis of different diseases especially musculoskeletal & soft tissue disorders

#### b) Intellectual Skills:

By the end of the course the student should have the ability to:

- b1. Correlate gross and histopathology with the clinical basis of diseases especially musculoskeletal & soft tissue disorders.
- b2. Interpret data acquired to understand pathophysiology of orthopedic disease
- b3. Interpret in a professional manner a pathology report.

#### c) Professional and Practical Skills:

By the end of the course the student should have the ability to:

- c1. Identify the macroscopic and microscopic criteria of the altered structure (pathology) of the musculoskeletal system.

#### d) General and Transferable Skills:

By the end of the course the student should have the ability to:  
 d1. Effectively utilize various computer based instruction tools and E-learning of Pathology and utilize a variety of computer-based self assessment tools.

### 3. Contents

Topic	No of hours	Lecture	Practical
<b>1- General Pathology:</b>			
1.1. Inflammation & repair.	8	4	4
1.2. Cell response to injury and aging.	8	4	4
1.3. Disturbances of circulation.	8	4	4
1.4. Bacterial infection & Pott's disease.	8	4	4
1.5. Osteoporosis, rickets & osteomalasia.	7	3	4
1.6. General pathology of tumors.	7	3	4
<b>2- Musculoskeletal system:</b>			
2.1. Osteomyelitis.	8	3	5
2.2. Bone tumors.	9	4	5
2.3. Soft tissue tumors.	8	3	5
2.4. Osteodystrophies.	8	3	5
2.5. Artheritis & synovitis.	8	4	4
2.6. Tumors of joints.	7	3	4
2.7. Plasma cell dyscrasis & multiple myeloma.	7	3	4
2.8. Bone lymphoma.	8	4	4
<b>Total</b>	<b>105</b>	<b>45</b>	<b>60</b>
<b>Credit</b>	<b>5</b>	<b>3</b>	<b>2</b>

### 4. Teaching and Learning Methods

- 4.1-Lectures.
- 4.2-practical lessons.

### 5. Student Assessment Methods

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	- Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.3-Structured Oral Exam	- Knowledge, Intellectual skills, General transferable skills

### Assessment Schedule

Assessment 1.... Final written exam.... Week ...24  
 Assessment 2.....Final Structured Oral Exam ..... Week ....24

### Weighting of Assessments

Final written Examination 50 %  
 Structured Oral Exam. 50 %

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Total 100%

## **6. List of References**

**6.1-** Course Notes made by the staff of the department

**6.2-** Essential Books (Text Books):

-Muir's text book of pathology.

-Robbins pathologic basis of diseases.

**6.3-** Recommended Books:

-Rosi & Ackerman text book of pathology.

-Sternberg text book of pathology.

**6.4-** Periodicals, American journal of pathology

-Pathology

-Human pathology

Web Sites: <http://www.ncbi.nlm.nih.gov/pubmed/>

## **7. Facilities Required for Teaching and Learning**

Data show device for lectures.

**Course Coordinator:** Dr .Fatma Elzahra.

**Head of Department:** Dr. Eman Mohammed Salah El Deen

**Date:** 18/12/2011, **Revised:**1/9/2012, **Revised:**1/12/2013

## Course Specification of Biostatistics in Diploma Degree of Orthopedics

Sohag University

Faculty of Medicine

1. Program on which the course is given: Diploma Degree of Orthopedics
2. Major or minor element of program: minor
3. Department offering the program: Orthopedics
4. Department offering the course: Community Medicine and public Health department.
5. Academic year/ Level: first part
6. Date of specification approval: Faculty council No. "250", decree No. "1378" dated 28/12/2013.

### A. Basic Information

**Program title** Course Specification of medical Biostatistics in Diploma degree in Orthopedics

**Code:** COM 0523-100

Course	Lectures	Practical:	Total:	Total credit hours
Medical Biostatistics	15 hrs	30	45	2 hrs

### B. Professional Information

#### 1. Overall Aims of Course

To develop a graduate who will apply the knowledge and skills learned, and is able to utilize the basics of medical statistics in his career and research

#### 2. Intended Learning Outcomes of Course (ILOs):

According to the intended goals of the faculty

##### a) Knowledge and understanding:

By the end of the course, the student is expected to practice the following:

- a1. Define the screening tests pertinent to selected diseases and the at-risk approach in the application of screening tests
- a2. Explain the usefulness of screening tests, and calculate sensitivity, specificity, and predictive values Define terms of research methodology

##### b) Intellectual Skills

By the end of the course, the student is expected to practice the following:

- b1. Identify and collect data variables impacting health and disease
- b2. Assess risk in professional practices in the field of Chest Diseases and Tuberculosis.
- b3. Analyze research and issues related to the Chest Diseases and Tuberculosis

##### c) Professional and Practical Skills:

By the end of the course, the student is expected to practice the following:

- c1. Perform community diagnosis

- c2. Conduct Social & Health Surveys
- c3. Diagnose an epidemic

**d) General and Transferable Skills**

By the end of the course, the student is expected to practice the following:

- d1. Use different sources to obtain information and knowledge.
- d2. Work coherently and successfully as a part of a team and team's leadership.
- d3. Use different sources to obtain information and knowledge and collect data

**3. Course Contents:**

<b>Topic</b>	<b>No. of hours</b>	<b>Lecture</b>	<b>Practical</b>
Methodology & statistics Terminology and rationale Data collection Types of Data Tabulation of data Graphical presentation of data Measures of central tendency Measures of dispersion Normal distribution curves International classification of diseases International death certificate Study design: Cross sectional study and the prevalence rate Cohort study, incidence rate, relative & attributable risk Case-control study, Odd's ratio Sampling Investigation of an epidemic, the attack rates		15	30
<b>Total</b>	<b>45</b>	<b>15</b>	<b>30</b>
<b>Credit</b>	<b>2</b>	<b>1</b>	<b>1</b>

**4. Teaching and Learning Methods:**

- 4.1. Lectures.
- 4.2 practical sessions
- 4.3- Computer search assignments

**5. Student Assessment Methods**

<b>Method of assessment</b>	<b>The assessed ILOs</b>
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	- Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.3-Structured Oral Exam	- Knowledge, Intellectual skills, General transferable skills
5.4 Computer search assignment	-General transferable skills, intellectual skills

## Assessment Schedule

Assessment 1. Written examination	24week
Assessment 2. Structured Oral Exam	24week
Assessment 3. Attendance and absenteeism	

## Weighting of Assessments

Final-term Written Examination	50 %
Structured Oral Examination	50 %
Total	100%

Formative only assessments: attendance and absenteeism and Computer search assignments

## 6. List of References

6.1- Course Notes

Lecture notes prepared by staff members in the department

Epidemiology in medical practice, 5<sup>th</sup> edition. Churchill Livingstone. New York, London and Tokyo, 2003.

6.4- Periodicals, Web Sites etc

1-American Journal of Epidemiology

2-British Journal of Epidemiology and Community Health

3- WWW. CDC and WHO sites

## 7. Facilities Required for Teaching and Learning

**1-Adequate infrastructure:** including teaching places (teaching class), comfortable desks, good source of aeration, bathrooms, good illumination and safety and security

**2-Teaching tools:** including screens, computers data shows, projectors, flip charts, white board, video player, digital video camera, scanner, copier, color and laser printers

**Course Coordinator: Dr. Ahmed Fathy Hammed**

**Head of Department: Prof. Eman Abd El-Baset Mohammed**

**Date: 18/12/2011, Revised:1/9/2012, Revised:1/12/2013**

## Course Specification of General Surgery in Diploma degree in Orthopedics

University... Sohag

Faculty ...Medicine

1. Program on which the course is given: Diploma degree in Orthopedics
2. Major or minor element of program: Minor
3. Department offering the program: Orthopedics.
4. Department offering the course: General Surgery department
5. Academic year / Level: 2<sup>nd</sup> second part
6. Date of specification approval: Faculty council No. "250", decree No. "1378" dated 28/12/2013.

### A. Basic Information

**Title: Course Specification of General Surgery in Diploma degree in Orthopedics**

**Code: GEN0523-100**

Lecture	Practical	Clinical	Total	Credit
60		60	120	6

### B. Professional Information

#### 1. Overall Aims of Course

By the end of the course of General Surgery, the candidate should be able to:

- 1- Deal with common surgical conditions on the basis of adequate history taking, physical examination interpretation of relevant investigations and management.
- 2- Deal with acute surgical emergencies safely.
- 3- Identify the indications and logistics of referring patients to higher levels of experience or specialization.

#### 2. Intended Learning Outcomes of Course (ILOs)

##### a) Knowledge and Understanding:

By the end of the course, the student is expected to be able to:

- a1. Mention the natural history of genito-urinary problems that are related to the General Surgery practice.
- a2. Mention the various diagnostic and laboratory techniques necessary to establish diagnosis of various genito-urinary illnesses that need surgical intervention.

##### b) Intellectual Skills:

By the end of the course, the student is expected to be able to:

- b1. Integrate data acquired through history taking to reach a provisional diagnosis for various genito-urinary problems that are related to General Surgery.
- b2. Link between knowledge of General Surgery for Professional problems' solving.

**c) Professional and Practical Skills:**

By the end of the course, the student is expected to be able to:

- c1. Perform physical examination of patients for genito-urinary problems that are related to General Surgery.
- c2. Master the basic modern general surgical skills.

**d) General and Transferable Skills**

By the end of the course, the student is expected to be able to:

- d1. Use information technology of general surgery to serve the development of professional practice.
- d2. Learn himself continuously the general surgical principles that serve his profession.

**3. Contents:**

Topic	No. of hours	lectures	clinical
<u>A) General:</u>			
Antibiotics	2	1	1
Haemorrhage	2	1	1
Anuria	2	1	1
Shock	2	1	1
Blood transfusion	2	1	1
Fluid and electrolyte balance	5	3	2
Wound healing	2	1	1
Suture materials	2	1	1
Abdominal incisions	6	3	3
Postoperative complications	6	3	3
Injuries of intra-abdominal structures	6	3	3
Intestinal obstruction	6	3	3
Polytraumatized patient.	6	3	3
DVT & pulmonary embolism	3	2	1
parathyroid gland	3	2	1
<u>B) Special</u>			
Hernia ( incisional, femoral, umbilical & para-umbilical hernias,).	6	3	3
D.D. of Acute abdomen	6	3	3
D.D. of Inguino-scrotal swelling	6	3	3
Acute scrotum	2	1	1
Varicocele	2	1	1
Hydrocele	2	1	1

D.D. of Abdominal mass	6	3	3
colonic & small intestine surgery (2 Hrs).	7	3	4
Abdominal trauma (1 Hr)..	8	3	5
Fecal fistula (1 Hr)..	8	3	5
colostomy (1 Hr).	6	3	3
Total	120	60	60
Credit	6	4	2

## II- CLINICAL 3hours/week (90 Hrs):

- History taking, conducting clinical examination, diagnosing & suggesting investigations in different surgical patients especially those with abdominal masses, , DVT & hernias AND DISCUSSING THESE CASES WITH STAFF MEMBERS IN DUTY.

-Sharing in pre-operative preparation of surgical patients.

-Observing post-operative patients in the department of surgery & sharing in their management.

-Studying surgical instruments, jars , suture materials & x-rays.

### 4. Teaching and Learning Methods:

4.1- Lectures

4.2- Clinical lessons

4.3- Assignment

### 5. Student Assessment Methods:

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	- Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.3-Structured Oral Exam	- Knowledge, Intellectual skills, General transferable skills

### Assessment Schedule

- 1- Assessment 1: written examination week 24
- 2- Assessment 2: Structured Oral Exam week 24
- 3- Assessment of attendance & absenteeism throughout the course

### Weighting of Assessments

Final-term written examination	50 %
Structured Oral Exam	50 %
Total	100%

Formative only assessments: attendance and absenteeism

**Formative only assessment: simple research assignment, attendance and absenteeism**

## **6. List of References:**

### **6.1- Course Notes**

Lectures notes prepared by staff members in the department.

### **6.2- Essential Books (Text Books)**

Principles of General Surgery, prof. Nawara, 2002

### **6.3- Recommended Books**

Bailey & Love textbook of Surgery, 1987

### **6.4- Periodicals, Web Sites, ... etc**

International Journal of General Surgery

American Journal of General Surgery

## **7. Facilities Required for Teaching and Learning**

- Lecture rooms
- Round rooms
- Accessibility to hospital wards, clinics and emergency department
- Audio-visual teaching equipments (computers, data show projector, video, etc.)
- Models and mannequins
- Video tapes and scientific pictures archives.
- Radiology collections and archives.
- Library for the department.

**Course Coordinator:** Prof. Nabil Yusef Abo El Dahab

**Head of Department:** Prof. Alaa El-Dean Hassan

**Date:** 18/12/2011, **Revised:** 1/9/2012

## **Course Specification of Orthopedic Surgery and Traumatology in Diploma degree in Orthopedic Surgery and traumatology**

**Sohag University**

**Faculty of Medicine**

1. Program on which the course is given: Diploma degree in Orthopaedic Surgery and Traumatology
2. Major element of program.
3. Department offering the course: Orthopaedic Surgery and Traumatology department
4. Department offering the program: Orthopedic Surgery and Traumatology Department
5. Academic year / Level: 2<sup>nd</sup> part of Diploma
7. Date of specification approval: Faculty council No. "250", decree No. "1378" dated 28/12/2013.

### **A. Basic Information**

**Title:** Orthopedics Surgery and Traumatology

**Code:** ORT 0523 100

Subject	Lectures	Practical	Total no	Credit
Orthopedic surgery	60	60	120	6
Traumatology	30	60	90	4

### **B. Professional Information**

#### **1. Overall Aims of Course**

By the end of the program the student should be able to manage orthopedic disease patients and trauma cases, and perform all of the general surgical procedures. Also he should master the basics of scientific research and apply the analytic methods for knowledge in the orthopedic surgery field.

#### **2. Intended Learning Outcomes of Course (ILOs):**

##### **a) Knowledge and understanding:**

By the end of the course, the student is should be able to:

- a1. Mention the normal structure and function of the human musculoskeletal system and its relation to surgical procedures
- a2. Enumerate the normal growth of the human musculoskeletal system.
- a3. List the abnormal structure, function, growth and development of human musculoskeletal system.
- a4. Enumerate the natural history of orthopedic diseases and traumatology problems.
- a5. Enumerate the causation of orthopedic diseases and traumatology problems and their pathogenesis.
- a6. Enumerate methods of fixation of different fracture pattern.

- a7. List the clinical picture and differential diagnosis of orthopedic diseases.
- a8. Enumerate the common diagnostic and laboratory techniques necessary to establish diagnosis of orthopedic diseases.
- a9. Describe the various therapeutic methods/alternatives used for orthopedic diseases.
- a10. Enumerate the knowledge of the general surgery.
- a11. Define the trauma management.
- a12. Enumerate scientific developments in the field of orthopedic surgery and traumatology
- a13. Mention Ethical and legal principles of professional practice in the field of orthopedic surgery and Traumatology
- a14. Mention the principles and fundamentals of quality in professional practice in the field of orthopedic surgery and traumatology.
- a15. Enumerate the mutual influence between professional practice and its impacts on the environment

**b) Intellectual Skills**

By the end of the course, the student should be able to:

- b1. Interpret data acquired through history taking to reach a provisional diagnosis for orthopedic diseases.
- b2. Solve the problems in the area of orthopedic surgery and traumatology
- b3. Read and analyze researches and issues related to orthopedic surgery and traumatology.
- b4. Assess risk in professional practices in the field of orthopedic surgery and traumatology.
- b5. Make professional decisions in light of the available data.

**c) Professional and Practical Skills:**

By the end of the course, the student should be able to:

- c1. Master the basic professional clinical and surgical skills in the area of orthopedic surgery and traumatology.
- c2. Write medical reports.
- c3. Use imaging, electrophysiological and endoscopic data in diagnosis of orthopedic and traumatology problems

**d) General and Transferable Skills:**

By the end of the course, the student should be able to:

- d1. Present orthopedic cases in seminars effectively.
- d2. Assess himself and identify his personal learning needs.
- d3. Use of different sources for information and knowledge of orthopedic diseases and traumatology.
- d4. Work coherently and successfully as a part of a team and effectively manage time.
- d5. lead a team in familiar professional contexts
- d6. Obtain knowledge continuously and independently in orthopedic surgery and traumatology field.

### 3. Contents

Topic	No of hrs	Lecture	clinical
GENERAL PRINCIPLES	10	5	5
* Surgical Techniques and Approaches			
ARTHRODESIS	10	5	5
* Arthrodesis of Ankle, Knee, and Hip			
* Arthrodesis of Shoulder, Elbow, and Wrist			
ARTHROPLASTY	10	5	5
*Introduction and Overview			
* Arthroplasty of the Knee			
* Arthroplasty of Hip			
AMPUTATIONS	10	5	5
General Principles of Amputations			
Amputations About Foot			
Amputations of Lower Extremity			
Amputations of Hip and Pelvis			
Amputations of Upper Extremity			
Amputations of Hand	10	5	5
INFECTIONS			
General Principles of Infection			
Osteomyelitis			
Infectious Arthritis			
Tuberculosis and Other Unusual Infections			
TUMORS			
*General Principles of Tumors	15	5	10
*Benign Tumors of Bone			
*Benign (Occasionally Aggressive) Tumors of Bone			
*Malignant Tumors of Bone			
* Soft Tissue Tumors and Nonneoplastic Conditions			
Simulating Bone Tumors			
NONTRAUMATIC SOFT TISSUE DISORDERS	15	5	10
* Nontraumatic Soft Tissue Disorders			
* Miscellaneous Nontraumatic Disorders			
CONGENITAL ANOMALIES	15	5	10
* Congenital Anomalies of Lower Extremity			
* Congenital and Developmental Anomalies of Hip and Pelvis			
* Congenital Anomalies of Trunk and Upper Extremity			
OSTEOCHONDROSIS			
Osteochondrosis or Epiphysitis and Other Miscellaneous Affections			
NERVOUS SYSTEM DISORDERS IN CHILDREN	10	5	5
Cerebral Palsy			
Paralytic Disorders			
Neuromuscular Disorders			
FRACTURES AND DISLOCATIONS IN CHILDREN	10	5	5
THE SPINE			
* Spinal Anatomy and Surgical Approaches			
*Fractures, Dislocations, and Fracture-Dislocations of Spine			

*Arthrodesis of Spine			
*Pediatric Cervical Spine			
* Scoliosis and Kyphosis			
* Lower Back Pain and Disorders of Intervertebral Discs			
* Infections of Spine			
* Other Disorders of Spine			
SPORTS MEDICINE	15	5	10
Ankle Injuries			
Knee Injuries			
Shoulder and Elbow Injuries			
Recurrent Dislocations			
Traumatic Disorders	20	10	10
ARTHROSCOPY			
General Principles of Arthroscopy	20	10	10
FRACTURES AND DISLOCATIONS			
General Principles of Fracture Treatment			
Fractures of Lower Extremity			
Fractures of Hip			
Fractures of Acetabulum and Pelvis			
Fractures of Shoulder, Arm, and Forearm			
Malunited Fractures			
Delayed Union and Nonunion of Fractures			
Acute Dislocations			
Old Unreduced Dislocations			
PERIPHERAL NERVE INJURIES	30	15	15
MICROSURGERY			
THE HAND			
Basic Surgical Technique and Aftercare			
Acute Hand Injuries			
Flexor and Extensor Tendon Injuries			
Fractures, Dislocations, and Ligamentous Injuries			
Nerve Injuries			
Wrist Disorders			
Paralytic Hand			
Arthritic Hand			
Compartment Syndromes and Volkmann Contracture			
Dupuytren Contracture			
Carpal Tunnel, Ulnar Tunnel, and Stenosing Tenosynovitis			
Tumors and Tumor Conditions of Hand			
Hand Infections			
THE FOOT AND ANKLE			
Surgical Techniques	20	10	10
Disorders of Hallux			
Pes Planus			
Diabetic Foot			
Disorders of Tendons and Fascia			
Fractures and Dislocations of Foot			
Surgical procedures	60		60
Attend a clinical study in the Department of Orthopaedic Surgery University Hospitals	90	--	60
		30	

<b>Total</b>	<b>210</b>	<b>90</b>	<b>120</b>
<b>Credit</b>	<b>16</b>	<b>8</b>	<b>8</b>

#### 4. Teaching and Learning Methods

- 4.1 Lectures.
- 4.2 Practical / surgical /clinical lessons
- 4.3 Discussion sessions.
- 4.4 Information collection from different sources.
- 4.5 Attending and participating in scientific meeting and workshops

#### 5. Student Assessment Methods

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	- Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.3-Structured Oral Exam	- Knowledge, Intellectual skills, General transferable skills
5.4-OSCE	-Practical skills, intellectual skills General transferable skills

#### Assessment Schedule

Assessment 1 ... Written exam...	Week: 48
Assessment 2.... OSCE ...	Week: 48
Assessment 3..... Structured Oral Exam .....	Week: 48

#### Weighting of Assessments

Structured Oral Exam.	50%
OSCE	50%

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Total	100%
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#### 6. List of References

##### 6.1- Essential Books (Text Books)

Campell"s Operative Orthopedic

##### 6.2- Recommended Books:

- Manual of internal fixation
- Stanley"s Surgical approaches

##### 6.3-Periodicals and Web Sites:

Spine Journal  
British bone and joint Journal  
American bone and joint Journal

Journal of hand and microsurgery  
Journal of Clinical Orthopedics

## **7. Facilities Required for Teaching and Learning**

- Adequate infrastructure including teaching rooms, comfortable desks.
- Teaching tools including screen, slide Projector, computer and data show.

**Course Coordinator:** Dr .Ahmad Addo sooki

**Head of Department:** Prof. Dr .El Shazly S. Mousa

**Date:** 18/12/2011, **Revised:**1/9/2012, **Revised:**1/12/2013