



إعتماد توصيف مقررات برنامج الدكتوراه فى جراحة العظام

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

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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 of MD degree in Orthopedic Surgery and Traumatology

Sohag University

Faculty of Medicine

A. Basic Information

1. Program title: Doctoral degree in Orthopedic Surgery and Traumatology
2. Program type: Single
3. Faculty: Faculty of Medicine
4. Department: Department of Orthopedic Surgery and Traumatology
5. Coordinator: Dr. Ahmad Addosooki, lecturer of orthopedic surgery and traumatology, Sohag University
6. Assistant Coordinator: Wael Adel Ahmed, assistant lecturer
7. External evaluator: Prof. Dr.Osama Farouk, professor 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 postgraduate student with the advanced medical knowledge and skills essential for the mastery of practice of specialty and necessary to provide further training and practice in the field of orthopedic surgery and traumatology through providing:

1. Recent scientific knowledge essential for the mastery of 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 assessment and problem identification.
5. Maintenance of learning abilities necessary for continuous medical education.
6. Updating research interest and abilities.

2. Attributes of the post graduate:

1. Efficient in carrying out the basics and methodologies of scientific research in Orthopedic Surgery.
2. The continuous working to add new knowledge in his field.
3. Applying the analytical course and critical appraisal of the knowledge in his specialty and related fields.
4. Merging the specialized knowledge with the other related knowledge with conclusion and developing the relationships in between them.
5. Showing a deep awareness with the ongoing problems, theories, and advanced sciences in his specialty.
6. Determination of the professional problems and creating solutions for them.
7. Efficient in carrying out the professional skills in his specialty.
8. Using advanced suitable technologies which serves his practice.
9. Efficient communication and leadership of team work in his specialty.
10. Decision making through the available information.
11. Using the available resources efficiently and working to find new resources.
12. Awareness with his role in the development of the society and preserve environment.
13. Behaving in a way which reflects his credibility, accountability, and responsibility.
14. Keeping continuous self development and transfer his experiences and knowledge to others.

3. Intended learning outcomes (ILOs)

a) Knowledge and understanding

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

- a1. Mention the recent advances in 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 and the basic biomechanics of the body.
- a3. List the recent advances in the abnormal structure, function, growth and development of human musculoskeletal system.
- a4. Explain recent advances in the natural history of orthopedic diseases and traumatology problems.

- a5. Explain recent advances in the causation of orthopedic diseases and their pathogenesis.
- a6. Illustrate recent methods of fixation of different fracture pattern.
- a7. List the clinical picture and differential diagnosis of orthopedic diseases.
- a8. Illustrate recent advances in the common diagnostic and laboratory techniques necessary to establish diagnosis of orthopedic diseases.
- a9. Describe recent advances in the various therapeutic methods/alternatives used for orthopedic diseases.
- a10. Explain basic knowledge of physiology, pathology and histology that is related to orthopedic diseases and fractures.
- a11. Define basic knowledge of the general surgery.
- a12. Define recent advanced trauma management.
- a13. Know principles, methodologies, tools and ethics of scientific research.
- a14. Mention the principles and fundamentals of ethics and legal aspects of professional practice in the field of orthopedic surgery and traumatology.
- a15. Describe the principles and fundamentals of quality assurance of professional practice in the field of orthopedic surgery and traumatology.
- a16. Enumerate the effect of professional practice on the environment and the methods of environmental development and maintenance.
- a17. Enumerate the recent advances in biostatistics and computer.

b) Intellectual skills

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

- b1. Interpret data acquired through history taking to reach a provisional diagnosis for orthopedic diseases.
- b2. Plan from different diagnostic alternatives the ones that help reaching a final diagnosis for orthopedic diseases.
- b3. Plan research studies that add to knowledge.
- b4. Formulate scientific papers in the area of orthopedic surgery and traumatology
- b5. Evaluate risk in professional practices in the field of orthopedic surgery and traumatology
- b6. Plan to improve performance in the field of orthopedic surgery and traumatology

- b7. Analyze orthopedic and traumatology problems and find solutions.
- b8. Have the ability to create nontraditional solutions to orthopedic and traumatology problems.
- b9. Manage scientific discussion based on scientific evidences and proofs.
- b10. Criticize researches related to orthopedic surgery and traumatology
- b11. Interpret data acquired through researches using different statistical tests
- b12. Identify and collect data variables impacting health and disease in the field of orthopedic surgery and traumatology

c) Professional and practical skills

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

- c1. Teach the basic and modern professional skills in the area of orthopedic surgery and traumatology.
- c2. Evaluate and develop methods and tools existing in the area of Orthopedic surgery and traumatology
- c3. Perform endoscopic and imaging evaluation of orthopedic problems.
- c4. Train junior staff through continuous medical education programs.
- c5. Design new methods, tools and ways of professional practice.
- c6. Perform the basic and modern professional skills in conducting researches in the field of orthopedic surgery and traumatology
- c7. Perform recent advanced technological methods in collection, analysis and interpretation of data and in management of prevalent problems in the field of orthopedic surgery and traumatology

d) General and transferable skills

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

- d1. Present reports in seminars effectively.
- d2. Use appropriate computer program package
- d3. Teach others and evaluate their performance.
- d4. Assess himself and identify his personal learning needs.
- d5. Use different sources for information and knowledge.
- d6. Work coherently and successfully as a part of a team and team's leadership.
- d7. Manage scientific meetings according to the available time.
- d8. Write and evaluate medical reports.

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: 3.5 years (7 semesters)

5. b- Program structure

5.b.i- No. of hours per week

Subject	hours /week		
	Lectures	Practical/ surgical	Clinical
<u>First Part:</u>			
minors			
Bio Statistics& Computer	2	2	
Research Methodology	2	2	
Primary medical reports	1	2	
Applied anatomy	2		
Surgical pathology	2		
Clinical physiology	2		
Biomechanics	1		
<u>Second Part:</u>			
Orthopedic surgery Traumatology	6.5	6.5	6.5

code	Item	No	%	
b.i	Total credit hours	Compulsory	90	100
		Elective	0	0
		Optional	0	0
b.iii	credit hours of basic sciences courses	7	6.3	
b.iv	credit hours of courses of social sciences and humanities	0	0	
b.v	credit hours of specialized courses:	52	57.7	
b.vi	credit hours of other course	8	8.8	
b.vii	Practical/Field Training	8	8.9%	
b.viii	Program Levels (in credit-hours system):			
	Level 1: 1 st part	15	16.7	
	Level 2: 2 nd Part	52	57.8	
	Level 3: Thesis	15	16.7	

6. Program courses: 9 Compulsory course

6 1- Level of Program

Semester...1.....

First Part:**A. Compulsory**

Course Title	Total hours	No. of hours/week			Program ILOs Covered (By No.)
		Lecture	practical/ surgical	clinical	
Biostatistics, Computer.	3	2	2		a17,b11,b12,c8,d2,d5
Research methodology	3	2	2		a13,b3,b4,b8,b10,c6,c7, d5, d6
Primary medical reports	2	1	2		A13, a14, b1,c2,d3
Applied Anatomy	2	2			a1,a2,b1,c1,d5
Surgical Pathology	2	2			a10,b1,c1,c2,d3,d5
Clinical Physiology	2	2			a10,b1,c1,d3
Biomechanics	1	1			a1,b1,c6,d3

Second Part:**A. Compulsory**

Orthopedic surgery and Traumatology	52	6.5	6.5	6.5	a1,a2,a3,a4,a5,a6,a7,a8,a9,a11,a12,a15,a16,b1,b2,b3,b4,b5,b6,b7,b8,b9,b10,c1,c3,c4,c4,c6,d1,d2,d3,d4,d5,d7
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7. Program Admission Requirements**I- General Requirements.**

- Candidate should have either MBBch degree from any Egyptian Faculty of Medicine or Equivalent Degree from Medical Schools abroad approved by the ministry of high Education.
- Candidate should know how to speak & write English well
- Candidate should have computer skills.
- Follow postgraduate bylaw Regulatory rules of Sohag Faculty of Medicine approved by the ministerial decree No. (44), dated 6/1/2010.

II- Specific Requirements

- Master degree in Orthopedic with at least "Good Rank".

8. Regulations for Progression and Program Completion

Duration of program is 90 credit hours (≥ 7 semesters ≥ 3.5 years), starting from registration till acceptance of the thesis; divided to:

First Part: (15 Credit hours ≥ 6 months ≥ 1 semester):

- Program-related basic science, Research Methodology, Ethics & medical reports, Biostatistics and computer.
- 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 October — 2nd in April after fulfillment of the credit hours.
- At least 60% of the written exam and 60% of the total oral and practical/clinical is needed to pass in each course.

- For the student to pass the first part exam, a score of at least 60% (Level D) in each course is needed.
- Those who fail in one course need to re-exam it only.
- GPA of ≥ 1.3 is needed to pass this level (semester).

Second Part: (50-60 Credit hours ≥ 24 months= 4 semesters):

- Program related specialized science of Orthopedic courses. At least 24 months after passing the 1st part should pass before the student can ask for examination in the 2nd part.
- Fulfillment of the requirements in each course as described in the template and registered in the log book (8 Credit hours; with obtaining $\geq 75\%$ of its mark) is a prerequisite for candidates to be assessed and undertake part 1 and part 2 examinations; the credit hours of the logbook are calculated as following:
 - Each Cr. Hr.= 60 working Hrs.
 - Logbook= 8 Cr. Hr. X 60 working Hrs = 480 Working Hrs.
 - Collection of working Hrs. is as following:

Activity		Hrs
Grand rounds	اجتماع علمي موسع	6
Training courses	دورات تدريبية	12/ day
Conference attendance	حضور مؤتمرات علمية داخلي خارجة	12/day 18/day
Thesis discussion	حضور مناقشات رسائل	6
Workshops	حضور ورش عمل	12/day
Journal club	ندوة الدوريات الحديثة	6
Seminars	لقاء علمي موسع	6
Morbidity and Mortality conference	ندوة تحليل المخاطر المرضية أو الوفاة	6
Self education program	برنامج التعليم الذاتي	6

- Two sets of exams: 1st in October - 2nd in April.
- At least 60% of the written exam is needed to be admitted to the oral and practical exams.
- 4 times of oral and practical exams are allowed before the student has to re-attend the written exam.

Third Part (Thesis) (15 Credit hours =24-48 months=4-8 semester):

- Documentation of the subject should not be delayed for > 1.5 years after registration.
- Could start after registration and should be completed, defended and accepted after passing the 2nd part final examination, after passing of at least 24 months after documentation of the subject of the thesis and after publishing of at least one paper from the thesis in a specialized peer-reviewed journal.

- Accepting the thesis is enough to pass this part.

9. Methods of student assessments:

Method of assessment	weight	The assessed ILOs
1-Research assignment		- General transferable skills, intellectual skills
2-Written Exams: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	50%	- Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills
3-OSCE/ OSPE	50%	-Practical skills, intellectual skills, general transferable skills
4-Structured Oral Exams		- Knowledge, Intellectual skills, General transferable skills

Assessment schedule:

Part I:

- Biostatistics & Computer: Written Exam (2 hours) + Structured oral Exam+ OSPE
- Research Methodology: Written Exam (2 hours) + structured oral Exam+ OSPE
- Primary medical reports: Written Exam (2 hour) + Structured oral Exam+ OSPE
- Applied Anatomy: Written Exam (2 hours) + structured oral Exam.
- Surgical Pathology: Written Exam (2 hours) + structured oral Exam.
- Clinical Physiology: Written Exam (2 hours) + structured oral Exam.
- Biomechanics: Written Exam (2 hours) + structured oral Exam.

Part II:

- Orthopedics and Traumatology: Two Written Exam (3 hours for each) + one written exam containing commentary (1.5 hours) + OSCE + Structured oral Exam + Operative exam.

10. Evaluation of program

Evaluator	Tool	Sample
1- Senior students	Questionnaire	10
2- Alumni	Questionnaire	5
3- Stakeholders (Employers)	Questionnaire	5
4-External Evaluator(s) (External Examiner(s))	Report	1
5- Other		

Course Specification of Biostatistics and Computer in MD degree in Orthopedic Surgery and Traumatology

Sohag university

Faculty of medicine

1. Program(s) on which the course is given: Biostatistics and Computer in MD degree in Orthopedic Surgery and traumatology
2. Minor or major element of program: minor
3. Department offering the course: Community Medicine and public Health Department
4. Department offering the program: Orthopedic Surgery and Traumatology Department
5. Academic year / Level: 1st part.
6. Date of specification approval: Faculty council No. "250", decree No. "1378" dated 28/12/2013.

A. Basic Information

Title: Biostatistics and Computer in MD degree in Orthopedic Surgery and traumatology

Code: COM 0523-300

Title	Lecture	Practical	Total	Credit
Applied biostatistics	30	30	60	2

B. Professional Information

1. Overall Aims of Course

1. The aim of this course is to provide the postgraduate student with the advanced medical knowledge and skills essential for computer programs use

2. Intended Learning Outcomes of Courses (ILOs)

a) **Knowledge and understanding:**

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

- a1. Enumerate different programs of analysis of data and statistical packages
- a2. Define the recent advances of sources of data and methods of collection.
- a3. Summarize data, construct tables and graphs
- a4. Calculate measures of central tendency and measures of dispersion
- a5. Describe the normal curves and its uses
- a6. Illustrate selected tests of significance and the inferences obtained from such tests
- a7. Illustrate selected tests of significance for parametric and non parametric inferences
- a8. Identify factor analysis and discrimination analysis

b) **Intellectual Skills**

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

b1. Identify and collect data variables impacting health and disease in the field of orthopedic surgery and traumatology

b2. Interpret data acquired through researches using different statistical tests

c) Professional and Practical Skills:

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

c1. Perform recent advanced technological methods in collection, analysis and interpretation of data and in management of prevalent problems in the field of orthopedic surgery and traumatology

d) General and Transferable Skills:

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

d1. Use appropriate computer program packages.

d2. Use of different sources for information and knowledge about biostatistics

3. Contents

Topic	No. of hours	Lecture	Tutorial/ Practical
Recent advances in collection, analysis and interpretation of data	6	3	3
-Details of Tests of significance: Proportion test	4	2	2
Chi-square test	6	3	3
Student T test	6	3	3
Paired T test	6	3	3
-Correlation	6	3	3
-Regression	6	3	3
-ANOVA test	4	2	2
-Discrimination analysis	6	3	3
Factor analysis	6	3	3
- parametric and non parametric tests	4	2	2
Total	60	30	30
Credit Hours	3	2	1

4. Teaching and Learning Methods

4.1- Lectures

4.2- Practical sessions

4.3- Computer search assignments

4.4- Computer application

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:	- 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 1Final written exam	Week: 24
Assessment 2Final Structured Oral Exam	Week: 24
Assessment 3	Attendance and absenteeism throughout the course	
Assessment 4	Computer search assignment performance throughout the course	

Weighting of Assessments

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

Formative only assessments: attendance and absenteeism and Computer search assignments performance.

6. List of References

6.1- Course Notes

Department notes, lectures and handouts

6.2- Essential Books (Text Books)

1-Maxy-Rosenau Public health and preventive medicine, Prentice – Hall International Inc.

6.3- Recommended Books

1- Dimensions of Community Health, Boston Burr Ridge Dubuque.

2- Short Textbook of preventive and social Medicine. Prentice-Hall International Inc.

3- Epidemiology in medical practice, 5th edition. Churchill Livingstone. New York, London and Tokyo.

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 conditioned space for staff and assistants.

2- Adequate conditioned teaching facilities.

3- Audiovisual Aids: Data show, overhead and slide projectors and their requirements

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 Research Methodology in MD degree in Orthopedic Surgery and Traumatology

Sohag university

Faculty of medicine

1. Program(s) on which the course is given: Research Methodology in MD degree in Orthopedic Surgery and traumatology
2. Minor element of program.
3. Department offering the course: Community Medicine and public Health Department
4. Department offering the program: Orthopedic Surgery and Traumatology Department
5. Academic year / Level: 1st part.
6. Date of specification approval: Faculty council No. "250", decree No. "1378" dated 28/12/2013.

A. Basic Information

Title: Research Methodology

Code: COM 0523-300

Title	Lecture	Practical	Total	Credit
Research methods	30	30	60	3

B. Professional Information

1- Overall Aims of Course

The aim of this course is to provide the postgraduate student with the advanced medical knowledge and skills essential for the mastery of research principles and influence the students to adopt an analytical thinking for evidence based medicine

2- Intended Learning Outcomes of Courses (ILOs)

a) Knowledge and understanding:

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

- a1. Define the recent advances of 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.
- a3. Describe the study design, uses, and limitations.
- a4. Enumerate the recent advances of principles, methodologies, tools and ethics of scientific research.
- a5. Explain the strategies and design of researches.
- a6. Describe bias and confounding.
- a7. Describe sampling techniques and list advantages of sampling
- a8. Identify principles of evidence based medicine.

b) Intellectual Skills

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

- b1. Conduct research studies that add to knowledge.

b2. Formulate scientific papers in the area of orthopedic surgery and traumatology

b3. Innovate and create researches to find solutions to prevalent problems in the field of Orthopedic Surgery and traumatology

b4. Criticize researches related to orthopedic surgery and traumatology

c) Professional and Practical Skills:

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

c1. Master the basic and modern professional skills in conducting researches in the field of orthopedic surgery and traumatology

c2. Design new methods, tools and ways of professional practice.

d) General and Transferable Skills:

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

d1. Use of different sources for information and knowledge to serve research.

d2. Work coherently and successfully as a part of a team and team's leadership in conducting researches and field studies.

3- Contents

Topic	No. of hours	Lecture	Tutorial/ Practical
Details of epidemiological studies (case control, cohort and cross sectional)	10	5	5
Clinical trials, Quasi experimental study	6	3	3
Bias and errors	6	3	3
Setting a hypothesis	6	3	3
Recent advances in screening	6	3	3
- Evidence – based Medicine: Concept and examples Applicability Scientific writing: A protocol - A curriculum	6	3	3
Setting an objective -Critical thinking	6	3	3
Formulation of papers	6	3	3
Total	60	30	30
Credit hours	3	2	1

4- Teaching and Learning Methods

4.1- Lectures.

4.2- Computer search assignments

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 Computer search assignment	-General transferable skills, intellectual skills

Assessment Schedule

- Assessment 1 Final written exam Week: 24
 Assessment 2 Structured Oral Exam Week: 24
 Assessment 3 Attendance and absenteeism throughout the course
 Assessment 4 Computer search assignment performance throughout the course

Weighting of Assessments

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

formative only assessments Attendance and absenteeism throughout the course
 Computer search assignment performance throughout the course

6- List of References

6.1- Course Notes

Department notes, lectures and handouts

6.2- Essential Books (Text Books)

1-Maxy-Rosenau Public health and preventive medicine, Prentice – Hall International Inc.

6.3- Recommended Books

- 1- Dimensions of Community Health, Boston Burr Ridge Dubuque.
- 2- Short Textbook of preventive and social Medicine. Prentice-Hall International Inc.
- 3- Epidemiology in medical practice, 5th edition. Churchill Livingstone. New York, London and Tokyo.

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 conditioned space for staff and assistants.
2. Adequate conditioned teaching facilities.
3. Audiovisual Aids: Data show, overhead and slide projectors and their requirements

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 Primary Medical Report in MD degree in Orthopedic Surgery and Traumatology

Sohag university

Faculty of medicine

1. Program (s) on which the course is given: MD degree in Orthopedic Surgery and traumatology
2. Minor element of program.
3. Department offering the course: Dept. of Forensic Medicine and Clinical Toxicology
4. Department offering the program: Orthopedic Surgery and Traumatology Department
5. Academic year / Level: 1st part of Doctoral degree
6. Date of specification approval: Faculty council No. "250", decree No. "1378" dated 28/12/2013.

A- Basic Information

Title: Primary Medical Report in MD degree in Orthopedic Surgery and raumatology

CODE:FOR 0523-300

Title	lecture	practical	total	credit
Primary Medical Report	15	30	45	2

B- Professional Information

1. Overall Aims of Course

1. Provide basic knowledge of medicolegal aspects of different types of general and special types of wounds
2. Provide basic knowledge of different medicolegal aspects of medical practice.
3. Provide basic knowledge of medical ethics and malpractice.
4. Describe the theories and principles that govern ethical decision-making, especially of the major ethical dilemmas in medicine.

2. Intended Learning Outcomes of Courses (ILOs)

a) Knowledge and understanding:

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

- a1. Mention principles and tools to write medical reports
- a2. Define different types of wounds
- a3. Identification of firearms injuries
- a4. Enumerate medicolegal aspect of professional practice
- a5. Mention the principles and fundamentals of ethics and legal aspects of professional practice in the field of orthopedic surgery and traumatology.

b) Intellectual Skills

- By the end of the course, the student is expected to be allowed to:
- b1. Interpret data to write medical reports efficiently
 - c) Professional and Practical Skills:**
By the end of the course, the student is expected to practice the following:
 - c1. Write and evaluate medical reports
 - d) General and Transferable Skills:**
By the end of the course, the student is expected to be able to:
 - d1. Teach others how to write medical report

3. Contents

Topic	No. of hours	Lecture	Practical
The pathology of wounds, chest and abdominal injuries, self inflicted injury	3	1	2
The systemic effect of trauma& Permanent infirmity	3	1	2
Head and spinal injuries	5	2	3
The medicolegal aspects of firearm injuries	4	1	3
Burn and scold	3	1	2
How to write a medicolegal report& How to write death certificate	5	2	3
The medicolegal aspect of deaths associated with surgical procedures and toxicological sampling	3	1	2
Obligation of physicians (towards patients, colleagues, community)	5	2	3
Consent, and professional secrecy	3	1	2
Types of malpractice, and items of medical responsibility	4	1	3
Medicolegal aspects of organ transplantation, intersex states, euthanasia, assisted reproduction techniques	3	1	2
ethical considerations of medical research involving human subjects	4	1	3
Total hours	45	15	30
Credit Hours	2	1	1

4. Teaching and Learning Methods

- 4.1- Lectures
- 4.2- 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
5.4 assignment	-General transferable skills, intellectual skills

Assessment Schedule

Assessment 1: Final written exam	24 week
Assessment 2; Final Structured Oral Exam	24 week

Weighting of Assessments

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

6. List of References

6.1- Course Notes made by the staff of the department

Department notes, lectures and handouts

6.2- Essential Books (Text Books)

- Simpson's Forensic Medicine by Knight, B
- Medical ethics. by Jones & Barlett

6.3- Recommended Books

6.4- Periodicals and websites:

Forensic Science International, Egyptian Journals of Forensic Medicine and Clinical Toxicology, International Journals of Forensic Medicine and Clinical Toxicology www.sciencedirect.com

7. Facilities Required for Teaching and Learning:

- 1- Adequate conditioned space for staff and assistants.
- 2- Adequate conditioned teaching facilities.
- 3- Audiovisual Aids: Data show, overhead and slide projectors and their requirements
- 4- Appropriate teaching accommodation, including museums, laboratory equipments and teaching aids (photographs, jars contain soft tissue specimens, bones, firearm cartridges and some instruments used in causing wounds).

Course Coordinator: Dr. Soheir Ali Mohamed

Head of Department: Dr. Maha Abdel Hamed Hilal

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

Course Specification of Applied Anatomy in MD degree in Orthopaedic Surgery and Traumatology

University Sohag

Faculty of Medicine

1. Program (s) on which the course is given: MD degree in Orthopaedic Surgery and traumatology
2. Minor or major element of program: minor
3. Department offering the course: Human Anatomy & Embryology Department-
4. Department offering the program: Orthopedic Surgery and Traumatology Department
5. Academic year / Level: 1st part.
6. Date of specification approval: Faculty council No. "250", decree No. "1378" dated 28/12/2013.

A. Basic Information

Title: Course Specification of Applied Anatomy in MD degree in Orthopaedic Surgery and Traumatology

CODE:ANA 0523-300

Title	Lecture	Practical	Total	Credit
Applied Anatomy module	30	-	30	2

B. Professional Information

1. Overall Aims of Course

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 is expected to be able to:

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

b) **Intellectual Skills**

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

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

d) **General and Transferable Skills:**

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

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

3. Contents

Topic	No. of hours	Lecture
Introduction	1	5
Anatomy and embryology of the upper limb	1	5
Anatomy and embryology of the vertebral column	1	4
Anatomy of the muscles of the back	1	5
Anatomy and embryology of the lower limb	1	4
Anatomy and embryology of the spinal nerves	1	4
Revision	1.5	3
Total	30	30
Credit	2	2

4. Teaching and Learning Methods

4.1- Lectures.

4.2- Assignments for the students to empower and assess the general and transferable skills

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 assignment	-General transferable skills, intellectual skills

Assessment Schedule

Assessment 1. Written examination	24 Week
Assessment 2. Structured Oral Exam	24 Week

Weighting of Assessments

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

6. List of References

6.1- Course Notes

Notes of the department and practical notebook

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 Specification of Surgical Pathology in MD degree in Orthopaedic Surgery and Traumatology

University Sohag

Faculty of Medicine

1. Program (s) on which the course is given: MD degree in Orthopaedic Surgery and traumatology
2. Major or minor element of program: Minor
3. Department offering the course: Pathology Department
4. Department offering the program: Orthopedic Surgery and Traumatology Department
5. Academic year / Level: 1st part.
6. Date of specification approval: Faculty council No. "250", decree No. "1378" dated 28/12/2013.

A. Basic Information

Title: Surgical Pathology in MD degree for Orthopaedic Surgery and Traumatology

CODE:PAT 0523-300

Title	Lecture	Practical	Total
Surgical Pathology module	30	-----	30

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 orthopedic diseases.

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 should be able to:

- a1. Develop understanding of recent advances of general and systemic pathology.
- a2. Become familiar with etiology, pathogenesis and pathologic manifestation of diseases especially musculoskeletal & soft tissue disorders.
- a3. Define and discuss the main disease categories that may affect the body (general pathology).

b) **Intellectual Skills:**

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

- b2. Correlate gross and histopathology with the clinical basis of diseases especially musculoskeletal & soft tissue disorders.
- b3. Interpret data acquired to understand pathophysiology of orthopedic disease
- b4. 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 body and its major organs and systems that are seen in various diseases.

- c2. Identify various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, and degenerative) and mechanisms of diseases and the way through which they operate in the body (pathogenesis).
- c3. Write a report commenting on a pathological specimen

d) General and Transferable Skills:

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

- d1. Teach others the surgical pathology of orthopedic disease
- d2. Effectively utilize various computer based instruction tools and E-learning of Pathology and utilize a variety of computer-based self assessment tools.

3. Course contents:

Topic	No. of hours	Lecture	Practical
1- General Pathology:			
1.1. Inflammation & repair.	2	2	
1.2. Cell response to injury and aging.	2	2	
1.3. Disturbances of circulation.	2	2	
1.4. Bacterial infection & Pott's disease.	2	2	
1.5. Osteoporosis, rickets & osteomalasia.	2	2	
1.6. General pathology of tumors.	2	2	
2- Musculoskeletal system:			
2.1. Osteomyelitis.	2	2	
2.2. Bone tumors.	3	3	
2.3. Soft tissue tumors.	2	2	
2.4. Osteodystrophies.	3	3	
2.5. Arthritis & synovitis.	2	2	
2.6. Tumors of joints.	2	2	
2.7. Plasma cell dyscrasia & multiple myeloma.	2	2	
2.8. Bone lymphoma.	2	2	
Total	30	30	
Credit Hours	1	1	

4. Teaching and Learning Methods

- 4.1. Lectures.

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. Written examination 24 week

Assessment 2. Structured Oral Exam 24 week

Weighting of Assessments

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

6. List of References

6.1- Course Notes made by staff member of the department.

6.2- Essential Books (Text Books):

1- Muir's text book of pathology.

2- Robbins pathologic basis of diseases.

6.3- Recommended Books:

1. Rosi & Ackerman text book of pathology.

2. 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:

a. Library & textbooks.

b. Computer & data show.

c. Internet connection.

Course Coordinator: Dr. Fatma El zhraa

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

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

Course Specification of Clinical Physiology in MD degree in Orthopaedic Surgery and Traumatology

Sohag University

Faculty of Medicine

1. Program on which the course is given: MD degree in Orthopaedic Surgery and Traumatology
2. Major or minor element of program: Minor
3. Department offering the course: Medical Physiology Department
4. Department offering the program: Orthopedic Surgery and Traumatology Department
5. Academic year / Level: 1st part.
6. Date of specification approval: Faculty council No. "250", decree No. "1378" dated 28/12/2013.

A. Basic Information

Title: Clinical Physiology in MD degree in Orthopaedic Surgery and Traumatology
CODE : PHY0523-300

Title	Lecture	Practical	Total
Clinical Physiology module	30	----	30

B. Professional Information

1. Overall Aims of Course

By the end of the program the postgraduate student should be able to manage orthopedic disease patients and trauma cases, and perform all of the general surgical procedures and most of special 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):

According to the intended goals of the faculty

a) **Knowledge and Understanding:**

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

- a1. Enumerate recent advances of pain transmission
- a2. Identify the effect of spinal cord injury
- a3. List Hormonal control of Calcium homeostasis
- a4. Enumerate recent advances in development of shock and how to correct
- a5. Identify body response to trauma

b) **Intellectual Skills:**

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

- b1. Interpret data acquired to understand pathophysiology of orthopedic disease

c) **Professional and Practical Skills:**

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

- c1. Assess the function of the skeletal system.
- c2. identify the conditions with acid base disturbance

d) **General and Transferable Skills:**

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

- d1. Teach others the physiology of the musculoskeletal system and its relation to orthopedic disease

3. Course contents:

Topic	No. of hours	lectures
Cardio-vascular system -hemorrhage & shock -tissue fluid formation & oedema	5	5
Endocrine physiology of endocrine -parathyroid gland and phosphorus ,calcium homeostasis	5	5
Kidney - water balance -acid base balance	5	5
Blood -hemostasis	5	5
Physiology of C.N.S. Hypothalamus And body response to trauma Pain sensation	5	5
Metabolism -fever & its mechanism	5	5
Total	30	30
Credit	1	1

4. Teaching and Learning Methods

4.1. Lectures.

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. Written examination	24 Week
Assessment 2. Structured Oral Exam	24 Week

Weighting of Assessments

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

6. List of References

6.1- Course Notes made by physiology department

6.2- Essential Books (Text Books):

Guyton textbook of physiology

7. Facilities Required for Teaching and Learning:

a. Library & textbooks.

b. Computer & data show.

c. Internet connection.

Course Coordinator: Dr. Hoda Mostafa

Head of Department: PROF: Ahmed Mostafa

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

Course Specification of Medical Biomechanics in MD degree in Orthopaedic Surgery and Traumatology

University Sohag

Faculty of Medicine

1. Program on which the course is given: MD degree in Orthopaedic Surgery and Traumatology
2. Major or minor element of program: Minor
3. Department offering the course: **Medical Biomechanics** Department
4. Department offering the program: Orthopedic Surgery and Traumatology Department
5. Academic year / Level: 1st part.
6. Date of specification approval: Faculty council No. "250", decree No. "1378" dated 28/12/2013.

A. Basic Information

Title: Biomechanics in MD degree in Orthopaedic Surgery and Traumatology

Code: BIO 0523-300

Title	Lecture	Practical	Total
Biomechanics	15	--	15

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 biomechanics of orthopedic diseases.

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 should be able to:

- a1. Mention the recent advances in the normal function of the human musculoskeletal system from the mechanical point of view

b) **Intellectual Skills:**

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

- b1. Interpret data acquired to understand biomechanics of orthopedic diseases.

c) **Professional and Practical Skills:**

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

- c1. Design new methods and tools to evaluate biomechanics of orthopedic disease.

d) **General and Transferable Skills:**

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

- d1. Teach others the biomechanics of orthopedic disease

3. Course contents

Topic	No. of hours	Lecture
Introduction and basic principles of biomechanics	3	3
Biomechanics of instrumentation	3	3
Biomechanics of hip	3	3
Biomechanics of knee	3	3
Biomechanics of spine	3	3
Total	15	15
Credit	1	1

4. Teaching and Learning Methods

4.1. Lectures.

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. Written examination	24 Week
Assessment 2. Structured Oral Exam	24 Week

Weighting of Assessments

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

6. List of References

6.1- Essential Books (Text Books)
Wheless' Textbook of Orthopedics

7. Facilities Required for Teaching and Learning:

- Library & textbooks.
- Computer & data show.
- Internet connection.

Course Coordinator: Dr .Aida Abdeen

Head of Department: Dr. Nagwa Sayed Ahmed

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

Course Specification of Orthopaedic Surgery and Traumatology in MD degree in Orthopaedic Surgery and traumatology

Sohag University

Faculty of Medicine

1. Program (s) on which the course is given: MD degree in Orthopaedic Surgery and Traumatology
2. Minor or major element of program: major
3. Department offering the course: Orthopaedic Surgery and Traumatology department
4. Department offering the program: Orthopedic Surgery and Traumatology Department
5. Academic year / Level: 2nd part.
6. Date of specification approval: Faculty council No. "250", decree No. "1378" dated 28/12/2013.

A. Basic Information

Title: Orthopaedic Surgery and Traumatology

CODE:ORT 0523-300

Title	Lecture	Surgical	Clinical	Total	Credit
Orthopaedic Surgery and Traumatology	390	390	390	1170	52

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 and most of special 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 expected to be able to:

- a1. Mention the relation of the recent advances in the normal structure and function of the human musculoskeletal system to surgical procedures
- a2. Enumerate recent advances in the normal growth of the human musculoskeletal system.
- a3. List the recent advances in the abnormal structure, function, growth and development of human musculoskeletal system.
- a4. Enumerate recent advances in the natural history of orthopedic diseases and traumatology problems.
- a5. Enumerate recent advances in the causation of orthopedic diseases and traumatology problems and their pathogenesis.
- a6. Enumerate recent methods of fixation of different fracture pattern.
- a7. List the clinical picture and differential diagnosis of orthopedic diseases.
- a8. Enumerate recent advances in the common diagnostic and laboratory techniques necessary to establish diagnosis of orthopedic diseases.
- a9. Describe recent advances in the various therapeutic methods/alternatives used for orthopedic diseases.
- a10. Enumerate recent advances in the knowledge of the general surgery.

- a11. Define recent advances in the trauma management.
- a12. Enumerate the principles and fundamentals of quality assurance of professional practice in the field of orthopedic surgery and traumatology.
- a13. Enumerate the effect of professional practice on the environment and the methods of environmental development and maintenance.

b) Intellectual Skills

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

- b1. Interpret data acquired through history taking to reach a provisional diagnosis for orthopedic diseases.
- b2. Select from different diagnostic alternatives the ones that help reaching a final diagnosis for orthopedic diseases.
- b3. Conduct research studies that add to knowledge.
- b4. Formulate scientific papers in the area of orthopedic surgery and traumatology.
- b5. Assess risk in professional practices in the field of orthopedic surgery and traumatology.
- b6. Plan to improve performance in the field of orthopedic surgery and traumatology.
- b7. Identify orthopedic and traumatology problems and find solutions.
- b8. Have the ability to innovate nontraditional solutions to orthopedic and traumatology problems.
- b9. Manage scientific discussion based on scientific evidences and proofs.
- b10. Criticize researches related to orthopedic surgery and traumatology.

c) Professional and Practical Skills:

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

- c1. Master the basic and modern professional clinical and surgical skills in the area of orthopedic surgery and traumatology.
- c2. Evaluate and develop methods and tools existing in the area of orthopedic surgery and traumatology.
- c3. Perform endoscopic and imaging evaluation of orthopedic problems.
- c4. Train junior staff through continuous medical education programs.
- c5. Design new methods, tools and ways of professional practice

d) General and Transferable Skills:

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

- d1. Present reports in seminars effectively.
- d2. Use appropriate computer program packages for computer assisted navigation surgery
- d3. Teach others orthopedic surgery and traumatology and evaluate their performance.
- d4. Assess himself and identify his personal learning needs.
- d5. Use of different sources for information and knowledge of orthopedic diseases and traumatology.
- d6. Manage scientific meetings according to the available time.

3. Contents

Topic	Total No. of hours	lectures	surgical	clinical
GENERAL PRINCIPLES	60	20	20	20
Surgical Techniques and Approaches				
ARTHRODESIS	50	10	20	20
Arthrodesis of Ankle, Knee, and Hip Arthrodesis of Shoulder, Elbow, and Wrist				
ARTHROPLASTY	80	40	20	20
Introduction and Overview				
Arthroplasty of Ankle and Knee				
Arthroplasty of Hip				
Arthroplasty of Shoulder and Elbow				
AMPUTATIONS	60	20	20	20
General Principles of Amputations				
Amputations About Foot				
Amputations of Lower Extremity				
Amputations of Hip and Pelvis				
Amputations of Upper Extremity				
Amputations of Hand				
INFECTIONS	70	30	20	20
General Principles of Infection				
Osteomyelitis				
Infectious Arthritis				
Tuberculosis and Other Unusual Infections				
TUMORS	80	40	20	20
*General Principles of Tumors				
*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	50	10	20	20
* Nontraumatic Soft Tissue Disorders				
* Miscellaneous Nontraumatic Disorders				
CONGENITAL ANOMALIES	60	20	20	20
* Congenital Anomalies of Lower Extremity				
* Congenital and Developmental Anomalies of Hip and Pelvis				

Topic	Total No. of hours	lectures	surgical	clinical
* Congenital Anomalies of Trunk and Upper Extremity				
OSTEOCHONDROSIS	50	10	20	20
Osteochondrosis or Epiphysitis and Other Miscellaneous Affections				
NERVOUS SYSTEM DISORDERS IN CHILDREN	50	10	20	20
Cerebral Palsy				
Paralytic Disorders				
Neuromuscular Disorders				
FRACTURES AND DISLOCATIONS IN CHILDREN	80	20	30	30
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	60	20	20	20
Ankle Injuries				
Knee Injuries				
Shoulder and Elbow Injuries				
Recurrent Dislocations				
Traumatic Disorders				
ARTHROSCOPY	80	20	30	30
General Principles of Arthroscopy				
Arthroscopy of Lower Extremity				
Arthroscopy of Upper Extremity				
FRACTURES AND DISLOCATIONS	80	20	30	30
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				

Topic	Total No. of hours	lectures	surgical	clinical
Delayed Union and Nonunion of Fractures				
Acute Dislocations				
Old Unreduced Dislocations				
PERIPHERAL NERVE INJURIES	60	20	20	20
MICROSURGERY	50	10	20	20
THE HAND	60	20	20	20
Basic Surgical Technique and Aftercare				
Acute Hand Injuries				
Flexor and Extensor Tendon Injuries				
Fractures, Dislocations, and Ligamentous Injuries				
Nerve Injuries				
Wrist Disorders				
Special Hand Disorders				
Paralytic Hand				
Cerebral Palsy of the Hand				
Arthritic Hand				
Compartment Syndromes and Volkmann Contracture				
Dupuytren Contracture				
Carpal Tunnel, Ulnar Tunnel, and Stenosing Tenosynovitis				
Tumors and Tumorous Conditions of Hand				
Hand Infections				
Congenital Anomalies of Hand				
THE FOOT AND ANKLE	90	50	20	20
Surgical Techniques				
Disorders of Hallux				
Pes Planus				
Lesser Toe Abnormalities				
Rheumatoid Foot				
Diabetic Foot				
Neurogenic Disorders				
Disorders of Nails and Skin				
Disorders of Tendons and Fascia				
Fractures and Dislocations of Foot				
Total	1170	390	390	390
Credit	52	26	13	13

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- Log book	- General transferable skills
5.3-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	- Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.4-Structured Oral Exam	- Knowledge, Intellectual skills, General transferable skills
5.5-OSCE	-Practical skills, intellectual skills General transferable skills
5.6 Computer search assignment	-General transferable skills, intellectual skills

Assessment Schedule

Assessment 1 ... Assignment	Week: 30-31
Assessment 2 ... Written exam	Week: 96
Assessment 3.... OSCE ...	Week: 96
Assessment 4..... Structured Oral Exam	Week: 96

Weighting of Assessments

Final-Written Examination Separate exam
Passing in the written exam is a condition to attend the following exams

Structured Oral Exams	50	%
OSCE	50	%
Total	100	%

Formative only assessment: single research assignment, log book, attendance and absenteeism

6. List of References

6.1- Essential Books (Text Books)

Campell's Operative Orthopedic

6.2- Recommended Books:

- o Manual of internal fixation
- o Stanley's Surgical approaches

Periodicals and Web Sites:

Spine Journal
British bone and joint Journal
American bone and joint Journal
Journal of hand and microsurgery

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 Addosooki

Head of Department: Prof. Dr. El Shasly S. Mousa

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