



PROGRAMME SPECIFICATION
Faculty of Medicine- Mansoura University

(A) Administrative information

(1) Program Title & Code	Doctorate Degree of Orthopaedic & Traumatology
(2) Final award/degree	Doctorate Degree
(3) Department (s)	Orthopaedic Surgery Department
(4) Coordinator	Dr. Adham El-Sharkawy
(5) External evaluator (s)	Prof. Dr. Gamal Hosny
(6) Date of approval by the Department`s council	11-5-2016
(7) Date of last approval of program specification by Faculty council	9/8/2016
(8) Credit hours	60

B- Professional Information

1 – Overall Aims of Course

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

1. Manage orthopedic Patients in professional way.
2. Learn and practice the advanced trauma management protocol.
3. Know the advanced updated knowledge about musculoskeletal disorders.
4. Manage complex trauma cases.
5. Learn to leader a team.
6. Perform all of the general surgical procedures and most of special surgical procedures.
7. Should master the basics of scientific research and apply the analytic methods for knowledge in the orthopedic surgery field.
8. Use the computer and technology in administration and research.

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. Explain the normal growth of the human musculoskeletal system.
- A3. List the abnormal structure, function, growth and development of human musculoskeletal system.
- A4. Discuss the natural history of orthopedic diseases and traumatology problems.
- A5. Discuss 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. Discuss the knowledge of the general surgery.
- A11. Define the trauma management
- A12. Discuss 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. Discuss 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. 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. Apply the appropriate decision Making in light of the available data

C- Professional and Practical Skills:

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

- C1. Perform the basic professional clinical and surgical skills in the area of orthopedic surgery and traumatology.
- C2. Be able to write medical reports.
- C3. Use imaging, electrophysiological and endoscopic data in diagnosis of orthopedic and traumatology problems

D- Communication 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-Curriculum structure and contents:

3. a- Duration of the program : 36 months.

3. b- program structure:

Candidates should fulfill a total of 60 credit hours

- 3.b.1: Number of credit hours:

First part: 5 credit hours. **Second part:** 25 credit hours. **Thesis:** 15 credit hours.

Practical: 15 Credit Hours.

Total credit hours for MD degree= 60 credit hours

5- Teaching and Learning Methods

- 5.1 Lectures.
- 5.2 Practical / surgical /clinical lessons
- 5.3 Discussion sessions.
- 5.4 Information collection from different sources.
- 5.5 Attending and participating in scientific meeting and workshops

6- Student Assessment Methods

- 6.1 **Written examination:** to assess knowledge and intellectual ILOs.
- 6.2 **MCQ exam to assess knowledge and intellectual ILOs.**
- 6.2 **Objective Structured Clinical examination (OSCE):** to assess knowledge; intellectual; practical and communication skills.
- 6.3 **Structured Oral examination:** to assess knowledge.

Assessment Schedule

➤ 1st part

Subject	Assessment		Mark
	Written	MCQ	
Surgical anatomy	80	20	100
Surgical pathology	80	20	100
Biomechanic and biomaterial in orthopaedic	80	20	100

➤ 2nd part

Subject	Assessment						Total
	Written	MCQ	Oral	Clinical	Practical	commentary	
Orthopaedic	82	28	50	50	50	30	290
Trauma	82	28	50	50	50	30	290
Elective Course	16	4					20
Total							600

7- List of References

7.1- Essential Books

(Text Books)

Campbell's Operative Orthopedic

7.2- Recommended Books:

- Manual of internal fixation
- Stanley's Surgical approaches

8- Periodicals and Web Sites:

Spine Journal

British bone and joint Journal

American bone and joint Journal

Journal of hand and microsurgery

Clinical Orthopedic Journal

9- Facilities Required for Teaching and Learning

-Adequate infrastructure including teaching rooms, comfortable desks.

-Teaching tools including screen, slide Projector, computer and data show.

10-Programme admission requirements:

According to the faculty postgraduate bylaws.

11-Regulations for progression and program completion:

- Student must complete minimum of 60 credit hours in order to obtain the Doctorate degree, which include the courses of first and second parts, thesis and activities of the log book.
- Registration for the MD. thesis is allowed *** months from the day of registration to the program.

Log book fulfillment:

- Student must fulfill a minimum of 16 credits of log book activities including conferences attendance or speaking.
- Lectures and seminars of the previously described courses must be documented in the log book and signed by the lecturer.
- Any workshops, conferences and scientific meetings should be included in the log book.
- Continuous assessment: in a weekly seminar, monthly meeting.

Final assessment: written exam at the end of the first part and written ,oral and clinical exams at the end of the second part.

First part:15 week

Course Title	Course Code	NO. of hours per week			Total teaching hours (15 weeks)	Programme ILOs covered (REFERRING TO MATRIX)	
		Theoretical		Laboratory /practical			Credit hours
		Lectures	seminars				
Orthopaedic Surgical Anatomy	OSURG 625 SA				2	30	A1, A3,a10,C1
Orthopaedic pathology	OSURG 625 SP				2	30	A1,A4,A5,A10,C1
Orthopaedic Biomechanics and biomaterials	OSURG 625 BB				1	15	A1,A2

Second part: 45 weeks

Course Title	Course Code	NO. of hours per week				Total Credits	Total teaching hours	Programme ILOs covered (REFERRING TO MATRIX)
		Theoretical		practical				
		Lectures	seminars					
Orthopaedic Surgery	OSURG 625					12	180 Hours	A4→A15 B1→B5 C1→C3 D1→ D6
Traumatology	OSURG 625 TR					12	180 Hours	
Log Book	OSURG 625C OSURG 625P					15	225 Hours	
Thesis						15	225 Hours	

Aim	Intended learning outcomes (ILOS)																												
	Knowledge															intellectual					practical			communication					
	a1	a2	a3	a4	a5	a6	a7	a8	a9	a10	a11	a12	a13	a14	a15	b1	b2	b3	b4	b5	c1	c2	c3	d1	d2	d3	d4	d5	d6
1				*	*	*	*	*	*	*	*	*	*	*	*	*				*	*								
2											*																		
3	*	*	*																										
4											*	*	*	*	*		*		*	*									
5																								*	*		*	*	
6																					*		*						
7																	*					*							*
8																		*									*		

أ- المعرفة والفهم

المقررات التي تحقق المعايير الأكاديمية للبرامج	مخرجات التعلم المستهدفة ILOs	(ARS)	(NARS) المعايير القومية الأكاديمية القياسية العامة لبرامج قطاع الدراسات العليا (درجة الدكتوراة في جراحة العظام)
1-Orthopaedic surgical anatomy 2-Orthopaedic pathology 3-Orthopaedic biomechanics and biomaterials 4-Orthopaedic surgery	A1 ,A2 ,A3 A4 ,A5 ,A6	A1. Mention the normal structure and function of the human musculoskeletal system and its relation to surgical procedures. A2. Explain the normal growth of the human musculoskeletal system. A3. List the abnormal structure, function, growth and development of human musculoskeletal system. A4. Discuss the natural history of orthopedic diseases and traumatology problems. A5. Discuss the causation of orthopedic diseases and traumatology problems and their pathogenesis. A6. Enumerate methods of fixation of different fracture pattern.	1. The theories, concepts and modern knowledge in the field of specialization and other related field
1-Orthopaedic surgery 2-Traumatology 3-Log book	A13	A13. Mention Ethical and legal principles of professional practice in the field of orthopedic surgery and Traumatology	2. The basics, methodologies, ethics of scientific research and its versatile tools
1-Orthopaedic surgery 2-Traumatology 3-Log book	A13	A13. Mention Ethical and legal principles of professional practice in the field of orthopedic surgery and Traumatology .	3. The moral and legal ethics of the professional practice in the area of specialization
1-Orthopaedic surgery 2-Traumatology 3-Log book	A12	A12. Discuss scientific developments in the field of orthopedic surgery and traumatology	4. The concepts and principles of quality of the professional practice in the area of specialization
1-Orthopaedic surgery 2-Traumatology 3-Log book	A15	A15. Discuss the mutual influence between professional practice and its impacts on the environment	5. The knowledge on the effects of professional practice on the environment and ways of development and maintenance of the environment

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1-Orthopaedic surgery 2-Traumatology 3-Log book	B1	B1. Interpret data acquired through history taking to reach a provisional diagnosis for orthopedic diseases.	1) Analyze and evaluate of information in the field of specialization and make full use of such information to solve problems
1-Orthopaedic surgery 2-Traumatology 3-Log book	B5	B5. Apply the appropriate decision Making in light of the available data	2) Solve specific problems on the basis of limited and contradictory information
1-Orthopaedic surgery 2-Traumatology 3-Log book	B3	B3. Analyze researches and issues related to orthopedic surgery and traumatology.	3) Carry out a research studies to add new information to the knowledge
1-Orthopaedic surgery 2-Traumatology 3-Log book	B3	B3. Analyze researches and issues related to orthopedic surgery and traumatology.	4) Write scientific papers
1-Orthopaedic surgery 2-Traumatology 3-Log book	B1	B1. Interpret data acquired through history taking to reach a provisional diagnosis for orthopedic diseases.	5) Assess and analyze risks in the field of specialization
1-Orthopaedic surgery 2-Traumatology 3-Log book	B4	B4. Assess risk in professional practices in the field of orthopedic surgery and traumatology.	6) Plan to improve performance in the field of specialization
1-Orthopaedic surgery 2-Traumatology 3-Log book	B5	B5. Apply the appropriate decision Making in light of the available data	7) Make good decisions in different professional aspects
1-Orthopaedic surgery 2-Traumatology 3-Log book	B2	B2. Solve the problems in the area of orthopedic surgery and traumatology	8) Have innovation/creativity
1-Orthopaedic surgery 2-Traumatology 3-Log book	B3	B3. Analyze researches and issues related to orthopedic surgery and traumatology.	9) Discuss and negotiate in high level of confidence based upon proofs and evidences

ج-المهارات العملية:

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1-Orthopaedic surgery 2-Traumatology 3-Log book	C1	C1. Perform the basic professional clinical and surgical skills in the area of orthopedic surgery and traumatology.	1) Apply modern and principle professional skills in the area of specialization
1-Orthopaedic surgery 2-Traumatology 3-Log book	C2	C2. Be able to write medical reports.	2) Write and evaluate technical reports
1-Orthopaedic surgery 2-Traumatology 3-Log book	C3	C3. Use imaging, electrophysiological and endoscopic data in diagnosis of orthopedic and traumatology problems	3) Adopt assessment methods and tools existing in the area of specialization.
1-Orthopaedic surgery 2-Traumatology 3-Log book	C3	C3. Use imaging, electrophysiological and endoscopic data in diagnosis of orthopedic and traumatology problems	4) Use of the appropriate technological means to serve the professional practice.
1-Orthopaedic surgery 2-Traumatology 3-Log book	C1	C1. Perform the basic professional clinical and surgical skills in the area of orthopedic surgery and traumatology.	5) Plan to improve the performance of the professional practice and development of the performance of others

د- مهارات الاتصال:

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1-Orthopaedic surgery 2-Traumatology 3-Log book	D4	D4. Work coherently and successfully as a part of a team and effectively manage time.	1) Communicate effectively in different aspects
1-Orthopaedic surgery 2-Traumatology 3-Log book	D2 , D6	D2. Assess himself and identify his personal learning needs. D6. Obtain knowledge continuously and independently in orthopedic surgery and traumatology field.	2) Demonstrate efficient IT capabilities in such a way that serves in the development of the professional practice
1-Orthopaedic surgery 2-Traumatology	D4	D4. Work coherently and successfully as a part of a	3) Manage the scientific meetings

3-Log book		team and effectively manage time.	and manage time
1-Orthopaedic surgery 2-Traumatology 3-Log book	D2	D2. Assess himself and identify his personal learning needs.	4) Adopt self-assessment and Adopt life-long learning
1-Orthopaedic surgery 2-Traumatology 3-Log book	D3	D3. Use of different sources for information and knowledge of orthopedic diseases and traumatology.	5) Use different resources for information and knowledge
1-Orthopaedic surgery 2-Traumatology 3-Log book	D4	D4. Work coherently and successfully as a part of a team and effectively manage time.	6) Collaborate effectively within multidisciplinary team and lead team works
1-Orthopaedic surgery 2-Traumatology 3-Log book	D1	D1. Present orthopedic cases in seminars effectively.	7) Demonstrate a high level of competence in the management of time and scientific meetings

- **Course Coordinator: Dre Adham Elsharkawy**
- **Head Of Department: Dr Hani Elmowafi**

المعايير الأكاديمية القياسية
لدرجة دكتوراه جراحة العظام
جامعة المنصورة

اعتمد مجلس قسم جراحة العظام بتاريخ ١١.٥.٢٠١٦ المعايير الآتية لبرنامج الدكتوراه :

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. Explain the normal growth of the human musculoskeletal system.
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B- Intellectual Skills

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- B1. Interpret data acquired through history taking to reach a provisional diagnosis for orthopedic diseases.
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- B5. Apply the appropriate decision Making in light of the available data

C- Professional and Practical Skills:

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

- C1. Perform the basic professional clinical and surgical skills in the area of orthopedic surgery and traumatology.
- C2. Be able to write medical reports.
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D- Communication and Transferable Skills:

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- 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.

رئيس القسم
ا.د/هانى الموفى