M.D. PROGRAM SPECIFICATION

Plastic Surgery Department

Faculty of Medicine– Mansoura University

(A) Administrative information

(1) Program Title & Code	Postgraduate Doctorate degree of plastic surgery/ PSUR600
(2) Final award/degree	M.D
(3) Department (s)	Plastic and reconstructive surgery Department
(4) Coordinator	Prof Mohammed Radwan Elhadidy
(5) External evaluator (s)	Prof. Nader El-meligi (Tanta university)
(6) Date of last approval by the Department`s council	11/7/2016
(7) Date of last approval of programme specification by Faculty council	9/8/2016

(B) Professional information

(1) Program Aims:

The broad aims of the Program are as follows:

1- To provide the basic and applied knowledge about anatomy of different parts of the body.

2- To provide fellows with the basic and applied knowledge about pathological changes associated with different diseases related to plastic surgery.

3- To provide knowledge about pathological changes occurring with some surgical maneuvers.

4- To provide fellows with the skills required to perform as well-trained, productive independent consultants and primary care providers for burned patients, patients in need for reconstruction of any part of the body or those in need for aesthetic surgery. These goals are optimally met in a three-year program.

5- To provide basics and advances of LASER therapy and its uses in the field of plastic surgery.

6- To provide basic knowledge about how to deal with a burned patient admitted to intensive care unit.

7- To provide knowledge about basic principles of tissue engineering and biologic materials used.

8- To provide basic knowledge about stem cells and its applications in the field of plastic surgery.

(2) Intended Learning Outcomes (ILOs):

Intended learning outcomes (ILOs); Are four main categories: knowledge & understanding to be gained, intellectual qualities, professional/practical and transferable skills.

A- Knowledge and Understanding

Candidates must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social behavioral sciences, as well as the application of this knowledge to patient care. On successful completion of the programme, the candidate will be able:

A 1- Recognize the basic principles of structure of the different parts of the body. Matches knowledge of anatomy to the patient in need for surgical repair of the injured part and those in need for reconstruction of the lost part.

A 2- Recognize the pathology of different diseases related to plastic surgery and pathological changes occurring with some surgical maneuvers.

A 3- Analyze the pathophysiological changes occurring in burned patients.

A 4- Understand the basic principles of reconstructive surgery.

A 5- Recognize pathology, complications and management of burn cases.

A 6- know the basic principles of aesthetic surgery.

A 7- know the basic principles of hand and maxillofacial surgery.

A 8- Understand the basic principles of microsurgery.

A 9 - Identify recent advances and areas under research in the field of plastic and reconstructive surgery.

A10- Identify basics of health and patien's safety and safety procedures during practice.

A11- Identify proper patient care and patient's rights to obtain the optimum health care and effective treatment.

A12- Identify basics of ethics, medicolegal aspects, malpractice and common medical errors in plastic and reconstructive surgery.

A 13- Recognize principles and basic concepts of quality in professional practice including planning, improvement of performance and control of practicing outcomes.

A 14- Understand the basic principles of LASER therapy.

A 15- Recognize pathology, complications and safety with LASER therapy.

A 16- know the indications and contraindications of LASER therapy.

A 17- know the different types of LASER therapy in plastic surgery.

A 18- Understand the basic principles of ICU equipments.

A 19- know the indications of ICU admission.

A 20- know the basic principles of ICU infection control.

A 21- know the basic principles of patient resuscitation in ICU.

A 22- Understand the basic principles of tissue engineering.

A 23- Understand the basic principles of cell and tissue culture.

A 24- know the different biologic materials used in tissue engineering.

A 25- Understand the basic principles of stem cells and its applications in the field of plastic surgery.

B- Intellectual skills

B1 - Integrate the anatomy of the skin, musculoskeletal system, nerves and vessels of the human body with clinical examination and utilize major clinical applications of anatomical facts to reach proper diagnosis.

B2- Apply the surface landmarks of the joints, bones , muscles, tendons and nerves in clinical examination of these parts and during surgical repair or reconstructive procedures.

B3 - Integrate the pathological facts during clinical examination and interpret radiological studies and histopathological studies in order to reach a proper diagnosis and a proper plan for surgical interference.

B4 -Integrate the basic principles of plastic and reconstructive surgery with clinical examination and patient needs to reach the proper diagnosis and to make an appropriate plan for management.

B5 – Analyze expected complications and know how to deal with.

B6- Make decisions needed in different situations based on evidence-based medicine in plastic and reconstructive surgery.

B7- Resolve specialized problems with non-availability of some data.

B8- Consider effects of personal, social and cultural factors in the disease process and patient management.

B9- Apply ethical issues and resolve ethical dilemmas in relation to clinical practice.

B10- Demonstrate appropriate professional attitudes and behaviors in different practice situations.

B11 -Integrate the basic principles of LASER therapy with clinical examination and patient needs to reach the proper diagnosis and to make an appropriate plan for management.

B12 – Analyze expected complications with LASER therapy and know how to deal with.

B13 – Analyze expected complications with ICU admission and know how to deal with.

B14 – Analyze the arterial blood gases (ABG) and correct deficits.

B15–Analyze expected cell responses to surface and architecture of tissue engineering scaffolds.

C- Professional/practical skills

C 1- Apply the anatomical facts during clinical examination and interpret radiological and nerve conduction studies in order to reach a proper diagnosis and a proper plan for surgical interference.

C 2- In general terms, by the end of the course, candidates have to demonstrate:

- C 2a- Theoretical and practical knowledge related to surgery in general and to their specialty practice.
- C 2b- Technical and operative skills.
- C 2c- Clinical skills and judgement

C 3- Manage burn cases and deal with complications.

C 4- Apply the basic principles of plastic and reconstructive surgery.

C 5- Deal with hand and maxillofacial trauma.

C 6- Understand the new updates in aesthetic surgery and LASER therapy.

C7-Apply sound ethical principles in practice (e.g., informed consent, confidentiality, veracity, provision or withholding of care).

C 8-Apply the basic principles of LASER therapy in plastic and reconstructive surgery.

C 9- Deal with LASER equipments.

C 10- Manage complications associated with LASER therapy

C 11- Dressing of burned patients admitted to ICU.

C 12- Prepare the patient for surgery.

C 13- Manage complications associated with ICU admission.

C 14- Resuscitation of the patient whenever needed

D- Communication & Transferable skills

D 1- Be prepared for the lifelong learning needs of the profession in plastic and reconstructive surgery.

D 2- Use different resources to gain knowledge and information related to plastic and reconstructive surgery.

D 3- Retrieve, manage, and manipulate information by all means.

D 4- Use different resources to gain knowledge and information related to plastic and reconstructive surgery.

D 5- Present clearly, and effectively a scientific topic in front of audience using computer and power point skills.

D 6- Communicate ideas and arguments effectively.

D 7- Demonstrate caring/respectful behaviors with patients and staff.

D 8- Work effectively within a team and leadership teams in health care team or other various professional contexts.

D9-Communicate effectively in its different forms with other specialties and generate the ethos of a multidisciplinary approach in the clinical setting.

D 10- Manage and lead scientific meetings

D11- Analyze and use numerical data including the use of simple statistical methods.

D12- Organize workload in order to meet deadlines.

(3) Academic standards:

Academic standards for the program are attached in Appendix I. in which **NARS** issued by the National Authority for Quality Assurance & Accreditation in Education are used. External reference points/Benchmarks are attached in Appendix II.

3.a- External reference points/benchmarks are selected to confirm the appropriateness of the objectives, ILOs and structure of assessment of the programme:

- The intercollegiate surgical curriculum (the approved UK framework for surgical Training). The responsibility for setting these curriculum standards rests with the Royal

Colleges of Surgeons which operate through the Joint Committee on Surgical Training (JCST) and its ten Specialty Advisory Committees (SACs) and Core Surgical Training Committee (CSTC).

https://www.iscp.ac.uk/documents/syllabus_PLAS_2013.pdf

3. b- Comparison of the specification to the selected external reference/ benchmark:

- All program aims of the Benchmarks (as regard plastic surgery) are covered by the current program.
- The program courses are matched by 75% to those offered by the curriculum except in the context of credit hours, and the type of degree offered.

(4) Curriculum structure and contents:

4. a- Duration of the programme (in months): 36 months

4. b- programme structure:

** The programme consists of two parts;*

The first part:

Anatomy related to Plastic Surgery

Pathology related to Plastic Surgery.

The second part composed of two courses;

One of them is a compulsory course

The other course (out of three) is optional.

*Candidates should fulfill a total of 60 credit hours.

●4.b.1: Number of credit hours (minimum):

First part: 5 credit hours.

Second part: 25 credit hours.

Thesis: 15 credit hours.

Activities included in the log book: 15 credit hours.

(5) Programme courses:

First part (one semester =15 weeks duration/6 months)

a- Compulsory courses:

Course Title	Course Code	NO. of hours per week					Total teaching hours/15 weeks	Programme ILOs covered (REFERRING TO MATRIX)
		Theoretical		Laboratory /practical	Field	Total		
		Lectures	seminars					
Anatomy related to Plastic Surgery	**PSUR 601** **PSUR 633 APS**	2	------	------	----	2	30	**A** 1,4,9,13 **B** 1,2 **C** 1 **D** 1,2,3,4
Pathology related to Plastic Surgery	**PSUR 605** **PSUR 633 PPS**	3	------			3	45	**A** 2,3,5,7 **B** 5,8 **C** 3,5,8 **D** 1,2,4
Advanced studies in the medical field: * a- Scientific research methodology b- Medical statistics c- Use of computer in medical education		3				3	15hrs/5 weeks	**A** 9,10,11,12, 13 **B** 6,7,8 **C** 2a,7 **D** 1,2,3,4, 5,6,7,10,11

* Advanced studies in medical fields consist of one hour lecture, 3days/week for 5 weeks.

b- Elective courses: none

Second part (60 weeks duration= 4 semesters)

a- Compulsory courses:

1. **Plastic Surgery**

b- Elective courses:

The candidate has to choose one of the following optional courses:

1. **Laser physics & uses**
2. **Intensive care for burned patient**
3. **Tissue culture & tissue engineering**

Course Title	Course Code	NO. of hours per week				Total teaching hours/60 weeks	Programme ILOs covered (REFERRING TO MATRIX)
		Theoretical		Clinical /practical	Total		
		Lectures	seminars*				
Plastic Surgery:	**PSUR 633 PS**					240 lectures or tutorials hours and 600 clinical hours /60 weeks	**A** 1,2,4,5,6,7,8 9 **B** 1,2,4,5,6,7,9 10 **C** 3,4,5 All D
1. Third Semester		**4 hrs /week**		**10 hr /week**	**14 hrs /week**	210hrs/15wks	
2. Fourth Semester		**4 hrs /week**		**10 hr /week**	**14 hrs /week**	210hrs/15wks	
3- Fifth Semester		**4 hrs /week**		**10 hr /week**	**14 hrs /week**	210hrs/15wks	
4- Sixth Semester		**4 hrs /week**		**10 hr /week**	**14 hrs /week**	210hrs/15wks	
Optional courses:							
1. **Laser physics & uses**	**PSUR 633 LPH**	**3 hrs /week**		-	**3 hrs /week**	30 lectures hours	**A** 14,15,16 17 **B** 11,12 **C** 6,8,9,10
2. intensive care for burned patient.	**PSUR 633 ICB**	**3 hrs /week**			**6 hrs /week**	30 lectures hours	**A** 18,19,20 21 **B** 13,14 **C** 11,12,13 14
3. **Tissue culture & tissue engineering**	**PSUR 633 TCE**	**3 hrs /week**		-	**3 hrs /week**	30 lectures hours	**A** 22,23,24 25 **B** 15 **C** 7
Thesis						15 credit hours	**A** 4,5,6,9, 10,11,12 **B** 5,6,7,8,9, 10 **C** 3,4,5,7
Log book activities						15 credit (13 credit included in plastic surgery course)	**A**3,6,9,13,18, 19 **B** 3,4,5,6,7, 10 **C** 2b,2c,7

Program aims-ILOs Matrix

Program Aims	Intended Learning Outcomes (ILOs)
1- To provide the basic and applied knowledge about anatomy of different parts of the body.	A 1 B 1,2 C 1 D3
2- To provide fellows with the basic and applied knowledge abou pathological changes associated with different diseases related to plastic surgery.	A 2 B 3 C 1 D3
3- To provide knowledge about pathological changes occurring w some surgical maneuvers.	A 2 B 3
4- To provide fellows with the skills required to perform as well-trained, productive independent consultants and primary care pro for burned patients, patients in need for reconstruction of any par the body or those in need for aesthetic surgery. These goals are optimally met in a three-year program.	A 3,4,5,6,7,8,9,10,11,12,13 B 4,5,6,7,8,9,10 C 2,3,4,5,7,14 D 1,2,4,5,6,7,8,9,10,11,12
5- To provide basics and advances of LASER therapy and its use the field of plastic surgery.	A 14,15,16,17 B 11,12 C 6,8,9,10
6- To provide basic knowledge about how to deal with a burned p admitted to intensive care unit.	A 18,19,20,21 B 13,14 C 11,12,13
7- To provide knowledge about basic principles of tissue enginee and biologic materials used.	A 22,23,24 B 15
8- To provide basic knowledge about stem cells and its applicatio the field of plastic surgery.	A 25

Programme-Courses ILOs Matrix

Programme ILOs are enlisted in the first row of the table (by their code number: a1, a2……etc), then the course titles or codes are enlisted in first column, and an "x" mark is inserted where the respective course contributes to the achievement of the programme ILOs in question.

P.S. All courses` specifications are attached in Appendix III.

Course Title/Code	Programme ILOs																																
	A1	A2	A3	A4	A5	A6	A7	A8	A9	A 10	A 11	A 12	A 13	A 14	A 15	A 16	A 17	A 18	A 19	A 20	A 21	A 22	A 23	A 24	A 25	B1	B2	B3	B4	B5	B6	B7	B8	B9
Anatomy related to Plastic Surgery	x			x					x				x													x	x							
Pathology related to Plastic Surgery		x	x		x		X																					X		x				
Plastic Surgery	x	x		x	x	x	X	x	x																	x	x		x	x	x	x		x
Laser physics & uses														X	x	x	X																	
Intensive care for burned patient.																		x	x	x	X													
Tissue culture & tissue engineering																						x	x	x	x									
Advanced studies in the medical field									x	x	x	x	x																	x	x	x		

Course Title/Code	Programme ILOs																																	
	B 10	B 11	B 12	B 13	B 14	B 15	C1	C2	C3	C4	C5	C6	C7	C8	C9	C 10	C 11	C 12	C 13	C 14	D 1	D 2	D 3	D 4	D 5	D 6	D 7	D 8	D 9	D 10	D 11	D 12
Anatomy related to Plastic Surgery																																	
Pathology related to Plastic Surgery																																	
Plastic Surgery	x							x	x	x	x		X	X							x	x	x	x	X	x	X	x	x	x	x	x	x
Laser physics & uses		x	x																														
Intensive care for burned patient.				x	X																												
Tissue culture & tissue engineering						x																											
Advanced studies in the medical field							x						X								x	x	x	x	X	x	X			x	x		

(6) Programme admission requirements:

General requirements:

According to the faculty postgraduate bylaws Appendix IV.

Specific requirements (if applicable):

No specific requirements

(7) Regulations for progression and programme completion:

- Student must complete minimum of 60 credit hours in order to obtain the M.D. degree, which include the courses of first and second parts, thesis and activities of the log book.
- Courses descriptions are included in Appendix III.
- Registration for the M.D. thesis is allowed 6 months from the day of registration to the programme and must fulfill a total of 15 credit hours including material collection, patient's selection and evaluation, laboratory work, patients follow-up, and meetings with supervisors.

Log book fulfillment:

- Student must fulfill a minimum of 15 credits of log book activities including;

1. Rotational clinical training in the outpatients clinics of plastic and reconstruction surgery. Clinical training must include also in-patients hospital requests.
2. Rotational clinical training in emergency hospital.
3. Attendance of surgical operations.
4. Conferences attendance and speaking.

- Student must present at least 10 lectures.
- Lectures must be documented in the log book and signed by the lecturer.
- Works related to thesis must be documented in the log book and signed by the supervisors.

- Any workshops, conferences and scientific meetings should be included in the log book and candidate must attend 40 weekly department meeting,

Final exam:

First part

Tools	Mark	Percentage of the total mark
Written exam: - **Anatomy related to Plastic Surgery** - **Pathology related to Plastic Surgery** } 2 papers with time allowed 2 hours each	80 written + 20MCQ 80 written + 20MCQ	50% 50%
Oral exam: ---		
Practical exam: -----		
Total marks: 200		

Second part

Tools	Mark	Percentage of the total mark
Written exam - Plastic surgery (2 papers with time allowed 3 hours each)	240 (90 1st paper +90 2nd paper+ 60 MCQ)	43.63%
- Optional module (one paper with time allowed 1.5 hours)	50	9.09%
- Commentary (one paper with time allowed 1.5 hours)	60	10.9%
Structured Oral exam	100	18.18%
Practical exam (OSCE)	100	18.18%
Total marks: 550		

- Written exam is directed to measure knowledge and intellectual skills

- MCQ exam is directed to measure knowledge and intellectual skills
- Structured oral exam is directed to measure knowledge, intellectual and communication skills
- OSCE exam is directed to measure knowledge, intellectual, practical and communication skills

(8) Evaluation of Program's intended learning outcomes (ILOs):

Evaluator	Tools*	Signature
Internal evaluator	**Focus group discussion Meetings**	
External Evaluator **Prof. Nader El-meligi**	**Reviewing according to external evaluator checklist report.**	
Senior student	**Personal communication**	
Alumni	**None**	
Stakeholder	**None**	
Others	**None**	

* TOOLS= QUESTIONNAIRE, INTERVIEW, WORKSHOP, COMMUNICATION, E_MAIL

We certify that all information required to deliver this programme is contained in the above specification and will be implemented. All course specifications for this program are in place.	
Program coordinator: Name: **Prof Mohammed Radwan Elhadidy**	Signature & date:
Dean: Name:	Signature & date:
Executive director of the quality assurance unit: Name:	Signature & date:

COURSE SPECIFICATION
OF ANATOMY RELATED TO PLASTIC SURGERY
Faculty of Medicine– Mansoura University

(A) Administrative information

(1) Programme offering the course:	Postgraduate Doctorate degree of plastic surgery/ PSUR600
(2) Department offering the programme:	Plastic and reconstructive surgery Department
(3) Department responsible for teaching the course:	Human Anatomy and Embryology Department
(4) Part of the programme:	First Part
(5) Date of last approval by the Department`s council	11/7/2016
(6) Date of last approval of programme specification by Faculty council	
(7) Course title:	Anatomy related to plastic surgery
(8) Course code:	PSUR 601 – PSUR 633 APS
(9) Total teaching hours:	30 hrs/ 15 weeks

(B) Professional information

(1) Course Aims:

The broad aims of the course are as follows: This course provides fellows with the ability to:

1- To provide the basic and applied knowledge about anatomy of different parts of the body.

(2) Intended Learning Outcomes (ILOs):

Intended learning outcomes (ILOs); Are four main categories: knowledge & understanding to be gained, intellectual qualities, professional/practical and transferable skills.

On successful completion of the course, the candidate will be able to:

A- Knowledge and Understanding

A 1- Recognize the basic principles of structure of the different parts of the body. Matches knowledge of anatomy to the patient in need for surgical repair of the injured part and those in need for reconstruction of the lost part.

B- Intellectual skills

B1 - Integrate the anatomy of the skin, musculoskeletal system, nerves and vessels of the human body with clinical examination and utilize major clinical applications of anatomical facts to reach proper diagnosis.

B2- Apply the surface landmarks of the joints , bones , muscles, tendons and nerves in clinical examination of these parts and during surgical repair or reconstructive procedures.

(3) Course content:

Subjects	Lectures 2hrs/week For 15 weeks	Clinical	Laboratory	Field	Total Teaching Hours (30 hrs/ 15 weeks)
▪ Anatomy of the facial skeleton and the scalp	2 hrs/wk for one week				2 hrs/ one week
▪ Anatomy of the face (forehead–nose)	2 hrs/wk for one week				2 hrs/ one week
▪ Anatomy of the face (eyelids)	2 hrs/wk for one week				2 hrs/ one week
▪ Anatomy of the face (lips–ear)	2 hrs/wk for one week				2 hrs/ one week
▪ Facial nerve anatomy and muscles of facial expression	2 hrs/wk for one week				2 hrs/ one week
▪ Facial fat compartments	2 hrs/wk for one week				2 hrs/ one week
▪ Muscles, vessels and nerves of the upper limb	2 hrs/wk for one week				2 hrs/ one week
▪ Flaps of the upper limb	2 hrs/wk for one week				2 hrs/ one week
▪ Brachial plexus	2 hrs/wk for one week				2 hrs/ one week
▪ Anatomy of the hand	2 hrs/wk for one week				2 hrs/ one week
▪ Anatomy of the breast	2 hrs/wk for one week				2 hrs/ one week
▪ Anatomy and flaps of the chest wall	2 hrs/wk for one week				2 hrs/ one week
▪ Muscles, vessels and nerves of the lower limb	2 hrs/wk for one week				2 hrs/ one week
▪ Flaps of the lower limb	2 hrs/wk for one week				2 hrs/ one week
▪ Anterior abdominal wall and external genetalia	2 hrs/wk for one week				2 hrs/ one week

(4) Teaching methods:

4.1:.Lectures. ……

(5) Assessment methods:

5.1: Final written exam ……

Assessment schedule:

At the end of 6th month (first semester)…… ……

Percentage of each Assessment to the total mark:

Written exam: ……100 %

80 marks written

20 marks MCQ

- Written exam is directed to measure knowledge and intellectual skills
- MCQ exam is directed to measure knowledge and intellectual skills

(6) References of the course:

6.1: Hand books:…..Lecture notes handed to student

6.2: Text books:…… Gray's anatomy.

6.3: Journals: ……Am J of anatomy……

(7) Facilities and resources mandatory for course completion:

-Laptop and data show projector

-Laser pointer and white board

-Comfortable and well prepared classroom

Course coordinator: Dr. Mohammed Hassan Elfahar

Head of the department: Prof. Mohammed Radwan Elhadidy

Date:

COURSE SPECIFICATION
OF PATHOLOGY RELATED TO PLASTIC SURGERY
Faculty of Medicine– Mansoura University

(A) Administrative information

(1) Programme offering the course:	Postgraduate Doctorate degree of plastic surgery/ PSUR600
(2) Department offering the programme:	Plastic and reconstructive surgery Department
(3) Department responsible for teaching the course:	Pathology Department
(4) Part of the programme:	First Part
(5) Date of last approval by the Department`s council	11/7/2016
(6) Date of last approval of programme specification by Faculty council	
(7) Course title:	Pathology related to plastic surgery
(8) Course code:	PSUR 605 – PSUR 633 PPS
(9) Total teaching hours:	45 hrs/ 15 weeks

(B) Professional information

(1) Course Aims:

The broad aims of the course are as follows: This course provides fellows with the ability to:

1- To provide fellows with the basic and applied knowledge about pathological changes associated with different diseases related to plastic surgery.
2- To provide knowledge about pathological changes occurring with some surgical maneuvers.

(2) Intended Learning Outcomes (ILOs):

Intended learning outcomes (ILOs); Are four main categories: knowledge & understanding to be gained, intellectual qualities, professional/practical and transferable skills.

On successful completion of the course, the candidate will be able to:

A- Knowledge and Understanding

A 2- Recognize the pathology of different diseases related to plastic surgery and pathological changes occurring with some surgical maneuvers.
A 3- Analyze the pathophysiological changes occurring in burned patients.

B- Intellectual skills

B3 - Integrate the pathological facts during clinical examination and interpret radiological studies and histopathological studies in order to reach a proper diagnosis and a proper plan for surgical interference.

Subjects	Lectures 3hrs/week For 15 weeks	Clinical	Laboratory	Field	Total Teaching Hours (45 hrs/ 15 weeks)
▪ Pathology of burn	3 hrs/wk for one week				3 hrs/ one week
▪ Wound healing	3 hrs/wk for one week				3 hrs/ one week
▪ Skin graft and cartilage graft	3 hrs/wk for one week				3 hrs/ one week
▪ Premalignant, malignant and pigmented skin lesions	3 hrs/wk for one week				3 hrs/ one week
Cutaneous vascular anomalies and LASER therapy	3 hrs/wk for one week				3 hrs/ one week
▪ Hand infections and hand tumors	3 hrs/wk for one week				3 hrs/ one week
▪ Dupuytren's disease and rheumatoid arthritis	3 hrs/wk for one week				3 hrs/ one week
▪ Tissue expansion–distraction osteogenesis–bone graft	3 hrs/wk for one week				3 hrs/ one week
▪ Craniofacial anomalies	3 hrs/wk for one week				3 hrs/ one week
▪ Collagen–Elastin–TEN syndrome	3 hrs/wk for one week				3 hrs/ one week
▪ Pressure sores–Necrotizing fasciitis–Diabetic foot	3 hrs/wk for one week				3 hrs/ one week
▪ Pathology of peripheral nerve injury a nerve entrapment syndromes	3 hrs/wk for one week				3 hrs/ one week
▪ Jaw swelling and salivary gland Tumors	3 hrs/wk for one week				3 hrs/ one week
▪ Benign breast lesions and Gynecomastia	3 hrs/wk for one week				3 hrs/ one week
▪ Fat graft–Albinism–sun damage	3 hrs/wk for one week				3 hrs/ one week

(3) Teaching methods:

4.1.:Lectures. ……

(4) Assessment methods:

5.1: Final written exam ……

Assessment schedule:

At the end of 6th month (first semester)…… ……

Percentage of each Assessment to the total mark:

Written exam: ……100 %

80 marks written

20 marks MCQ

- Written exam is directed to measure knowledge and intellectual skills
- MCQ exam is directed to measure knowledge and intellectual skills

(5) References of the course:

6.1: Hand books:…..Lecture notes handed to student

…..Washington manual of surgical pathology

6.2: Text books:……Robbin's basic pathology

……Rosai and Ackerman's surgical pathology

(6) Facilities and resources mandatory for course completion:

-Laptop and data show projector

-Laser pointer and white board

-Comfortable and well prepared classroom

Course coordinator: Dr. Mohammed Hassan Elfahar

Head of the department: Prof. Mohammed Radwan Elhadidy

Date:

COURSE SPECIFICATION
OF PLASTIC SURGERY
Faculty of Medicine– Mansoura University

(A) Administrative information

(1) Programme offering the course:	Postgraduate Doctorate degree of plastic surgery/ PSUR600
(2) Department offering the programme:	Plastic and reconstructive surgery Department
(3) Department responsible for teaching the course:	Plastic and reconstructive surgery Department
(4) Part of the programme:	Second Part
(5) Date of last approval by the Department`s council	11/7/2016
(6) Date of last approval of programme specification by Faculty council	
(7) Course title:	Plastic surgery
(8) Course code:	PSUR 633 PS
(9) Total teaching hours:	240 lectures or tutorials hours and 210 clinical hours /60 weeks (23 credit hours in 4 semesters)

(B) Professional information

(1) Course Aims:

The broad aims of the course are as follows: This course provides fellows with the ability to:

1- To provide fellows with the skills required to perform as well-trained, productive independent consultants and primary care providers for burned patients, patients in need for reconstruction of any part of the body or those in need for aesthetic surgery. These goals are optimally met in a three-year program.

(2) Intended Learning Outcomes (ILOs):

Intended learning outcomes (ILOs); Are four main categories: knowledge & understanding to be gained, intellectual qualities, professional/practical and transferable skills.

On successful completion of the course, the candidate will be able to:

A- Knowledge and Understanding

A 4- Understand the basic principles of reconstructive surgery.
A 5- Recognize pathology, complications and management of burn cases.
A 6- know the basic principles of aesthetic surgery.
A 7- know the basic principles of hand and maxillofacial surgery.
A 8- Understand the basic principles of microsurgery.
A 9 - Identify recent advances and areas under research in the field of plastic and reconstructive surgery.
A10- Identify basics of health and patient's safety and safety procedures during practice.

A11- Identify proper patient care and patient's rights to obtain the optimum health care and effective treatment.

A12- Identify basics of ethics, medicolegal aspects, malpractice and common medical errors in plastic and reconstructive surgery.

A 13- Recognize principles and basic concepts of quality in professional practice including planning, improvement of performance and control of practicing outcomes.

B- Intellectual skills

B4 -Integrate the basic principles of plastic and reconstructive surgery with clinical examination and patient needs to reach the proper diagnosis and to make an appropriate plan for management.

B5 – Analyze expected complications and know how to deal with.

B6- Make decisions needed in different situations based on evidence-based medicine in plastic and reconstructive surgery.

B7- Resolve specialized problems with non-availability of some data.

B8- Consider effects of personal, social and cultural factors in the disease process and patient management.

B9- Apply ethical issues and resolve ethical dilemmas in relation to clinical practice.

B10- Demonstrate appropriate professional attitudes and behaviors in different practice situations.

C-Professional/practical skills

C 2- In general terms, by the end of the course, surgeons have to demonstrate:

C 2a- Theoretical and practical knowledge related to surgery in general and to their specialty practice.

C 2b- Technical and operative skills.

C 2c- Clinical skills and judgement

C 3- Manage burn cases and deal with complications.

C 4- Apply the basic principles of plastic and reconstructive surgery.

C 5- Deal with hand and maxillofacial trauma.

C 6- Understand the new updates in aesthetic surgery and LASER therapy.

C7-Apply sound ethical principles in practice (e.g., informed consent, confidentiality, veracity, provision or withholding of care).

D- Communication & Transferable skills

D 3- Be prepared for the lifelong learning needs of the profession in plastic and reconstructive surgery.

D 4- Use different resources to gain knowledge and information related to plastic and reconstructive surgery.

D 5- Retrieve, manage, and manipulate information by all means.

D 6- Use different resources to gain knowledge and information related to plastic and reconstructive surgery.

D 7- Present clearly, and effectively a scientific topic in front of audience using computer and power point skills.

D 8- Communicate ideas and arguments effectively.

D 9- Demonstrate caring/respectful behaviors with patients and staff.

D 10- Work effectively within a team and leadership teams in health care team or other various professional contexts.

D11-Communicate effectively in its different forms with other specialties and generate the ethos of a multidisciplinary approach in the clinical setting.

D 12- Manage and lead scientific meetings

D 13- Analyze and use numerical data including the use of simple statistical methods.

D14- Organize workload in order to meet deadlines.

(3) Course content:

Third Semester (6credit hours) (15 weeks)					
Subjects	**Lectures (4 credit hrs/ 15 wks)**	**Clinical (2 credit hr/ 15 wks)**	**Lab**	**Field**	**Total Teaching Hours**
▪ Wound healing	4hrs/wk for 1week				4 hrs (4 hrs lectures)
▪ Necrotizing fasciitis	4hrs/wk for 1week	2hrs/wk for 1week			6 hrs (4 hrs lectures and 2 hrs clinical)
▪ Pressure sores	4hrs/wk for 1week	6hrs/wk for 1week			10 hrs (4 hrs lectures and 6 hrs clinical)
▪ Hypertrophic and keloid scars	4hrs/wk for 1week	2hrs/wk for 1week			6 hrs (4 hrs lectures and 2 hrs clinical)
▪ Burn wound dressing	4hrs/wk for 1week	6hrs/wk for 1week			10 hrs (4 hrs lectures and 6 hrs clinical)
▪ Acute burn	4hrs/wk for 1week	4hrs/wk for 1week			8 hrs (4 hrs lectures and 4 hrs clinical)
▪ Complications of burn	4hrs/wk for 1week	4hrs/wk for 1week			8 hrs (4 hrs lectures and 4 hrs clinical)
▪ Surgical management of burned patient	4hrs/wk for 1week	4hrs/wk for 1week			8 hrs (4 hrs lectures and 4 hrs clinical)
▪ Burn reconstruction and rehabilitation	4hrs/wk for 1week	4hrs/wk for 1week			8 hrs (4 hrs lectures and 4 hrs clinical)
▪ Electric injury	4hrs/wk for 1week	4hrs/wk for 1week			8 hrs (4 hrs lectures and 4 hrs clinical)
▪ Skin graft.	4hrs/wk for 1week	4hrs/wk for 1week			8 hrs (4 hrs lectures and 4 hrs clinical)
▪ Other tissue grafts.	4hrs/wk for 1week	4hrs/wk for 1week			8 hrs (4 hrs lectures and 4 hrs clinical)
▪ Local flaps and Z-plasty.	4hrs/wk for 1week	4hrs/wk for 1week			8 hrs (4 hrs lectures and 4 hrs clinical)
▪ Pedicled and free flaps.	4hrs/wk for 1week	8hrs/wk for 1week			12 hrs (4 hrs lectures and 8 hrs clinical)
▪ Tissue expansion.	4hrs/wk for 1week	4hrs/wk for 1week			8 hrs (4 hrs lectures and 4 hrs clinical)

Fourth Semester (6credit hours) (15 weeks)					
Subjects	**Lectures (4 credit hrs/ 15 wks)**	**Clinical (2 credit hr/ 15 wks)**	**Lab**	**Field**	**Total Teaching Hours**
▪ Maxillofacial trauma.	4hrs/wk for 1week	4hrs/wk for 1week			8 hrs (4 hrs lectures and 4 hrs clinical)
▪ Jaw swellings. ▪ Mandibular reconstruction.	4hrs/wk for 1week	4hrs/wk for 1week			8 hrs (4 hrs lectures and 4 hrs clinical)
▪ Facial nerve palsy management.	4hrs/wk for 1week	4hrs/wk for 1week			8 hrs (4 hrs lectures and 4 hrs clinical)
▪ Reconstruction of the ear-nose-eyelids.	4hrs/wk for 1week	6hrs/wk for 1week			10 hrs (4 hrs lectures and 6 hrs clinical)
▪ Reconstruction of the lip-cheek-scalp.	4hrs/wk for 1week	6hrs/wk for 1week			10 hrs (4 hrs lectures and 6 hrs clinical)
▪ Cleft lip and palate.	4hrs/wk for 1week	4hrs/wk for 1week			8 hrs (4 hrs lectures and 4 hrs clinical)
▪ Craniofacial clefts.	4hrs/wk for 1week	2hrs/wk for 1week			6 hrs (4 hrs lectures and 2 hrs clinical)
▪ Craniosynostosis.	4hrs/wk for 1week	2hrs/wk for 1week			6 hrs (4 hrs lectures and 2 hrs clinical)
▪ Genioplasty.	4hrs/wk for 1week	4hrs/wk for 1week			8 hrs (4 hrs lectures and 4 hrs clinical)
▪ Velopharyngeal incompetence.	4hrs/wk for 1week	4hrs/wk for 1week			8 hrs (4 hrs lectures and 4 hrs clinical)
▪ Nerve compression syndromes.	4hrs/wk for 1week	4hrs/wk for 1week			8 hrs (4 hrs lectures and 4 hrs clinical)
▪ Facial resurfacing.	4hrs/wk for 1week	2hrs/wk for 1week			6 hrs (4 hrs lectures and 2 hrs clinical)
▪ Blepharoplasty. ▪ Tissue fillers.	4hrs/wk for 1week	4hrs/wk for 1week			8 hrs (4 hrs lectures and 4 hrs clinical)
▪ Rhinoplasty.	4hrs/wk for 1week	4hrs/wk for 1week			8 hrs (4 hrs lectures and 4 hrs clinical)
▪ Abdominoplasty. ▪ Liposuction.	4hrs/wk for 1week	6hrs/wk for 1week			10 hrs (4 hrs lectures and 6 hrs clinical)

Fifth Semester (6credit hours) (15 weeks)					
Subjects	**Lectures (4 credit hrs/ 15 wks)**	**Clinical (2 credit hr/ 15 wks)**	**Lab**	**Field**	**Total Teaching Hours**
▪ Augmentation mammoplasty.	4hrs/wk for 1week	4hrs/wk for 1week			8 hrs (4 hrs lectures and 4 hrs clinical)
▪ Reduction mammoplasty.	4hrs/wk for 1week	4hrs/wk for 1week			8 hrs (4 hrs lectures and 4 hrs clinical)
▪ Breast reconstruction.	4hrs/wk for 1week	4hrs/wk for 1week			8 hrs (4 hrs lectures and 4 hrs clinical)
▪ Male breast.	4hrs/wk for 1week	4hrs/wk for 1week			8 hrs (4 hrs lectures and 4 hrs clinical)
▪ Oncoplastic surgery.	4hrs/wk for 1week	4hrs/wk for 1week			8 hrs (4 hrs lectures and 4 hrs clinical)
▪ Premalignant and malignant skin lesions.	4hrs/wk for 1week	4hrs/wk for 1week			8 hrs (4 hrs lectures and 4 hrs clinical)
▪ Pigmented skin lesions.	4hrs/wk for 1week	2hrs/wk for 1week			6 hrs (4 hrs lectures and 2 hrs clinical)
▪ Lower limb trauma. ▪ Lower limb reconstruction.	4hrs/wk for 1week	4hrs/wk for 1week			8 hrs (4 hrs lectures and 4 hrs clinical)
▪ Foot reconstruction.	4hrs/wk for 1week	4hrs/wk for 1week			8 hrs (4 hrs lectures and 4 hrs clinical)
▪ Chronic wounds.	4hrs/wk for 1week	4hrs/wk for 1week			8 hrs (4 hrs lectures and 4 hrs clinical)
▪ Hypospadias. ▪ Penile reconstruction	4hrs/wk for 1week	4hrs/wk for 1week			8 hrs (4 hrs lectures and 4 hrs clinical)
▪ Perineal reconstruction.	4hrs/wk for 1week	4hrs/wk for 1week			8 hrs (4 hrs lectures and 4 hrs clinical)
▪ Flaps of the anterior trunk. ▪ Flaps of the back.	4hrs/wk for 1week	4hrs/wk for 1week			8 hrs (4 hrs lectures and 4 hrs clinical)
▪ Cutaneous vascular anomalies.	4hrs/wk for 1week	6hrs/wk for 1week			10 hrs (4 hrs lectures and 6 hrs

					clinical)
▪ Hair transplant.	4hrs/wk for 1week	4hrs/wk for 1week			8 hrs (4 hrs lectures and 4 hrs clinical)

Sixth Semester (5credit hours) (15 weeks)					
Subjects	**Lectures (4 credit hrs/ 15 wks)**	**Clinical (1 credit hr/ 15 wks)**	**Laboratory**	**Field**	**Total Teaching Hours**
▪ Hand trauma.	4hrs/wk for 1week	6hrs/wk for 1week			10 hrs (4 hrs lectures and 6 hrs clinical)
▪ Hand fractures.	4hrs/wk for 1week	6hrs/wk for 1week			10 hrs (4 hrs lectures and 6 hrs clinical)
▪ Brachial plexus.	4hrs/wk for 1week	2hrs/wk for 1week			6 hrs (4 hrs lectures and 2 hrs clinical)
▪ Congenital hand deformities.	4hrs/wk for 1week	4hrs/wk for 1week			8 hrs (4 hrs lectures and 4 hrs clinical)
▪ Acquired hand conditions.	4hrs/wk for 1week	2hrs/wk for 1week			6 hrs (4 hrs lectures and 2 hrs clinical)
▪ Soft tissue and bony reconstruction of the hand.	4hrs/wk for 1week	4hrs/wk for 1week			8 hrs (4 hrs lectures and 4 hrs clinical)
▪ Thumb reconstruction	4hrs/wk for 1week	2hrs/wk for 1week			6 hrs (4 hrs lectures and 2 hrs clinical)
▪ Fingertip injuries	4hrs/wk for 1week	2hrs/wk for 1week			6 hrs (4 hrs lectures and 2 hrs clinical)
▪ Tendon transfer	4hrs/wk for 1week	2hrs/wk for 1week			6 hrs (4 hrs lectures and 2 hrs clinical)
▪ Psychological aspects of plastic surgery	4hrs/wk for 1week				
▪ Lymphoedema.	4hrs/wk for 1week				
▪ LASER in plastic surgery.	4hrs/wk for 1week				
▪ Soft tissue sarcoma.	4hrs/wk for 1week				
▪ Alloplastic materials.	4hrs/wk for 1week				
▪ Stem cells in plastic surgery.	4hrs/wk for 1week				

(4) Teaching methods:

4.1:……Lectures……

4.2:……Tutorials……

4.3: ……problem-based learning scenarios (case presentations)……

4.4:……Clinical training……..

(5) Assessment methods:

5.1: Written exam..… for assessment of…. (A1,2,4,5,6,7,8,9,14,15,16,17, B1,2,4,11,13)

5.2: Written commentary…. for assessment of…..(A 2,4 , B 4,5,7,13)

5.3: Structured Oral exam……. for assessment of…….(A 1,2,4,9, B 5,7,10, D 3)

5.4: Clinical exam (OSCE)…. for assessment of…(A 1,2,4, B 3, D5,6,7,9)

5.5: MCQ exam …… for assessment of…(A 1,2,4,5,6,B2,3,4,C1,3,4,5)

5.6: Dissertation that clearly sets out the need for their research, justifies the research methods, presents results, and discusses the findings ……. for assessment of……(A 4,5,6,9,10,11, B 5,6,7,8,9,10,11, C3,4,5,7)

5.7: Log book…. for assessment of ……(A3,6,9,18,19, B 3,4,5,6,7,10, C 2b,2c,7)

Assessment schedule:

Assessment 1:…at the end of……36th month:……

Assessment 2:… at the end of ……36th month ……

Assessment 3: …at the end of……36th month:……

Assessment 4: …at the end of……36th month:……

Assessment 5: …after 24 month from the day of thesis registration according to the faculty bylaws.

Assessment 6: ……throughout the course duration……

Percentage of each Assessment to the total mark :

Written exam:……240 (180 marks written and 60 marks MCQ)

Written commentary…. .60……..……

Clinical exam (OSCE):……100…… ……..……

Structured Oral exam:……100…..…….. ……

Other assessment without marks: ……dissertation, log book

- Written exam is directed to measure knowledge and intellectual skills
- MCQ exam is directed to measure knowledge and intellectual skills
- Structured oral exam is directed to measure knowledge, intellectual and communication skills
- OSCE exam is directed to measure knowledge, intellectual, practical and communication skills

(6) References of the course:

6.1: Hand books

-Oxford handbook of plastic and reconstruction surgery.....

- Oxford handbook of hand surgery ……
- plastic surgery secrets ……

6.2: Text books:

- Michigen manual of plastic surgery…….
- Grabb and Smith's plastic surgery ……
- Green's operative hand surgery ……
- Guyuron's plastic surgery: indications, operations and outcomes ……
- Paediatric plastic surgery ……
- Georgiade plastic, maxillofacial and reconstructive surgery ……
- Grabb's encyclopedia of flaps ……
- Total burn care ……

6.3: Journals:

- Plastic and Reconstructive Surgery (PRS) …

- Annals of plastic surgery …….
- British journal of plastic surgery.....
- Burns …….
- ESPRS (Egyptian Society of Plastic and Reconstructive Surgery) .....
- Journal of reconstructive microsurgery.....
- Microsurgery …….
- Journal of hand surgery (JHS).....

6.4: Others ……Attending meetings & Conferences…… ……

(7) Facilities and resources mandatory for course completion:

1- Teaching tools: -Computers and laptop for lectures presentation
-Data show projector and screen
- Laser pointer and white board
-Comfortable well prepared classroom with comfortable desks, good source of aeration and good illumination.

2- Outpatient clinic for collection of clinical cases

Course coordinator: Dr. Mohammed Hassan Elfahar

Head of the department: Prof. Mohammed Radwan Elhadidy

Date:

COURSE SPECIFICATION
OF LASER PHYSICS & USES
Faculty of Medicine– Mansoura University

(A) Administrative information

(1) Programme offering the course:	Postgraduate Doctorate degree of plastic surgery/ PSUR600
(2) Department offering the programme:	Plastic and reconstructive surgery Department
(3) Department responsible for teaching the course:	Plastic and reconstructive surgery Department
(4) Part of the programme:	Second Part
(5) Date of approval by the Department`s council	11/7/2016
(6) Date of last approval of programme specification by Faculty council	
(7) Course title:	Laser physics & uses
(8) Course code:	PSUR 633LPH
(9) Total teaching hours:	30 lecturers hours throughout the 4 semesters

(B) Professional information

(1) Course Aims:

The broad aims of the course are as follows: This course provides fellows with the ability to:

1- To provide basics and advances of LASER therapy and its uses in the field of plastic surgery.

(2) Intended Learning Outcomes (ILOs):

Intended learning outcomes (ILOs); Are four main categories: knowledge & understanding to be gained, intellectual qualities, professional/practical and transferable skills.

On successful completion of the course, the candidate will be able to:

A- Knowledge and Understanding

A 14- Understand the basic principles of LAER therapy.
A 15- Recognize pathology, complications and safety with LASER therapy.
A 16- know the indications and contraindications of LASER therapy.
A 17- know the different types of LASER therapy in plastic surgery.

B- Intellectual skills

B11 -Integrate the basic principles of LASER therapy with clinical examination and patient needs to reach the proper diagnosis and to make an appropriate plan for management.
B12 – Analyze expected complications with LASER therapy and know how to deal with.

(3) Course content:

Subjects	Lectures 3hrs/week For 10 weeks	Clinical	Laboratory	Field	Total Teaching Hours (30 hrs)
▪ Physical properties of LASER	3 hrs/wk for one week				3 hrs/ one week
▪ Histologic effect of LASER therapy	3 hrs/wk for one week				3 hrs/ one week
▪ Ablative and non-ablative LASER	3 hrs/wk for one week				3 hrs/ one week
▪ LASER safety measures	3 hrs/wk for one week				3 hrs/ one week
▪ LASER therapy for cutaneous vascular anomalies	3 hrs/wk for one week				3 hrs/ one week
▪ LASER therapy for pigmented skin lesions	3 hrs/wk for one week				3 hrs/ one week
▪ LASER therapy for facial resurfacing	3 hrs/wk for one week				3 hrs/ one week
▪ LASER therapy for hair removal	3 hrs/wk for one week				3 hrs/ one week
▪ Complications of LASER therapy	3 hrs/wk for one week				3 hrs/ one week
▪ Contraindications of LASER therapy	3 hrs/wk for one week				3 hrs/ one week

(4) Teaching methods:

4.1:.Lectures. ……

(5) Assessment methods:

5.1: Final written exam ……

Assessment schedule:

At the end of 36th month …… ……

Percentage of each Assessment to the total mark:

Written exam:……40…….. ……..……

MCQ ……..10…….

- Written exam is directed to measure knowledge and intellectual skills
- MCQ exam is directed to measure knowledge and intellectual skills

(6) References of the course:

6.1: Hand books:…

-Oxford handbook of plastic and reconstruction surgery, ...

- plastic surgery secrets ……

6.2: Text books:……

- Michigen manual of plastic surgery…….

- Grabb and Smith's plastic surgery ……

6.3: Journals:

- Plastic and reconstructive surgery (PRS) …

- Annals of plastic surgery ……..

(7) Facilities and resources mandatory for course completion:

-Laptop and data show projector

-Laser pointer and white board

-Comfortable and well prepared classroom

Course coordinator: Dr. Mohammed Hassan Elfahar

Head of the department: Prof. Mohammed Radwan Elhadidy

Date:

COURSE SPECIFICATION
OF INTENSIVE CARE FOR BURNED PATIENT
Faculty of Medicine– Mansoura University

(A) Administrative information

(1) Programme offering the course:	Postgraduate Doctorate degree of plastic surgery/ PSUR600
(2) Department offering the programme:	Plastic and reconstructive surgery Department
(3) Department responsible for teaching the course:	Plastic and reconstructive surgery Department
(4) Part of the programme:	Second Part
(5) Date of approval by the Department`s council	11/7/2016
(6) Date of last approval of programme specification by Faculty council	
(7) Course title:	intensive care for burned patient
(8) Course code:	PSUR 633 ICB
(9) Total teaching hours:	30 lectures hours throughout the 4 semesters

(B) Professional information

(1) Course Aims:

The broad aims of the course are as follows: This course provides fellows with the ability to:

1- To provide basic knowledge about how to deal with a burned patient admitted to intensive care unit.

(2) Intended Learning Outcomes (ILOs):

Intended learning outcomes (ILOs); Are four main categories: knowledge & understanding to be gained, intellectual qualities, professional/practical and transferable skills.

On successful completion of the course, the candidate will be able to:

A- Knowledge and Understanding

A 18- Understand the basic principles of ICU equipments.
A 19- know the indications of ICU admission.
A 20- know the basic principles of ICU infection control.
A 21- know the basic principles of resuscitation.

B- Intellectual skills

B13 – Analyze expected complications with ICU admission and know how to deal with.
B14– Analyze the arterial blood gases (ABG) and corrects deficits.

(3) Course content:

Subjects	Lectures for 8 weeks	Clinical	Laboratory	Field	Total Teaching Hours (30 hours)
▪ Indications of ICU admission	4hrs/wk for 1week				4hrs/ one week
▪ ABG analysis	4hrs/wk for 1week				4hrs/ one week
▪ Monitoring of patient in ICU	4hrs/wk for 1week				4hrs/ one week
▪ ICU infection control and safety measures	4hrs/wk for 1week				4hrs/ one week
▪ Dressing of burned patients in ICU	4hrs/wk for 1week				4hrs/ one week
▪ Resuscitation of the patient	4hrs/wk for 1week				4hrs/ one week
▪ Bronchoalveolar lavage	4hrs/wk for 1week				4hrs/ one week
▪ Preparation of the patient for surgery and postoperative monitoring	2hrs/wk for 1week				4hrs/ one week

(4) Teaching methods:

4.1:.Lectures. ……

(5) Assessment methods:

5.1: Final written exam …….....

Assessment schedule:

At the end of 36th month …… ……

Percentage of each Assessment to the total mark:

Written exam:……40…… ……..……

MCQ……10……..

- Written exam is directed to measure knowledge and intellectual skills
- MCQ exam is directed to measure knowledge and intellectual skills

(6) References of the course:

6.1: Hand books:… -Oxford handbook of plastic and reconstruction surgery, ...

- plastic surgery secrets ……

6.2: Text books:……- Michigen manual of plastic surgery……

- Grabb and Smith's plastic surgery ……
- Paediatric plastic surgery ……
- Total burn care ……

6.3: Journals: - Plastic and reconstructive surgery (PRS) …

- Annals of plastic surgery ……
- IPRAS (International journal of Plastic, Reconstructive and Aesthetic Surgery).....
- Burns ……

6.4: Others ……Attending meetings & Conferences…… ……

(7) Facilities and resources mandatory for course completion:

-Laptop and data show projector

-Laser pointer and white board

-Comfortable and well prepared classroom

Course coordinator: Dr. Mohammed Hassan Elfahar

Head of the department: Prof. Mohammed Radwan Elhadidy

Date:

COURSE SPECIFICATION
OF TISSUE CULTURE & TISSUE ENGINEERING
Faculty of Medicine- Mansoura University

(A) Administrative information

(1) Programme offering the course:	Postgraduate Doctorate degree of plastic surgery/ PSUR600
(2) Department offering the programme:	Plastic and reconstructive surgery Department
(3) Department responsible for teaching the course:	Plastic and reconstructive surgery Department
(4) Part of the programme:	Second Part
(5) Date of approval by the Department`s council	11/7/2016
(6) Date of last approval of programme specification by Faculty council	
(7) Course title:	Tissue culture & tissue engineering
(8) Course code:	PSUR 633 TCE
(9) Total teaching hours:	30 lecturers hours throughout the 4 semesters

(B) Professional information

(1) Course Aims:

The broad aims of the course are as follows: This course provides fellows with the ability to:

1- To provide knowledge about basic principles of tissue engineering and biologic materials used.
2- To provide basic knowledge about stem cells and its applications in the field of plastic surgery.

(2) Intended Learning Outcomes (ILOs):

Intended learning outcomes (ILOs); Are four main categories: knowledge & understanding to be gained, intellectual qualities, professional/practical and transferable skills.

On successful completion of the course, the candidate will be able to:

A- Knowledge and Understanding

A 22- Understand the basic principles of tissue engineering.
A 23- Understand the basic principles of cell and tissue culture.
A 24- know the different biologic materials used in tissue engineering.
A 25- Understand the basic principles of stem cells and its applications in the field of plastic surgery.

B- Intellectual skills

B15 – Analyze expected cell responses to surface and architecture of tissue engineering scaffolds.

(3) Course content:

Subjects	Lectures 3hrs/week For 10 weeks	Clinical	Laboratory	Field	Total Teaching Hours (30 hrs)
▪ Basic principles of tissue engineering	3 hrs/wk for one week				3 hrs/ one week
▪ Cell and tissue culture	3 hrs/wk for one week				3 hrs/ one week
▪ Biologic materials in tissue culture	3 hrs/wk for one week				3 hrs/ one week
▪ Basic principles of tissue transplantation	3 hrs/wk for one week				3 hrs/ one week
▪ Skin bank	3 hrs/wk for one week				3 hrs/ one week
▪ Gene therapy	3 hrs/wk for one week				3 hrs/ one week
▪ Cell responses to surface and architecture of tissue engineering scaffolds	3 hrs/wk for one week				3 hrs/ one week
▪ Angiogenesis and vascularity for tissue engineering applications	3 hrs/wk for one week				3 hrs/ one week
▪ Role of stem cells in plastic surgery	3 hrs/wk for one week				3 hrs/ one week
▪ Growth factors and cytokines and their role in tissue engineering	3 hrs/wk for one week				3 hrs/ one week

(4) Teaching methods:

4.1:.Lectures. ……

(5) Assessment methods:

5.1: Final written exam ……

Assessment schedule:

At the end of 36th month …… ……

Percentage of each Assessment to the total mark:

Written exam:……50…….. ……..……

- Written exam is directed to measure knowledge and intellectual skills

(6) References of the course:

6.1: Hand books:

-Oxford handbook of plastic and reconstruction surgery, ...

- plastic surgery secrets ……

6.2: Text books:

- Michigen manual of plastic surgery…….

- Grabb and Smith's plastic surgery ……

- Total burn care ……

6.3: Journals:

- Plastic and reconstructive surgery (PRS) …

- Annals of plastic surgery ……..

- IPRAS (International journal of Plastic, Reconstructive and Aesthetic Surgery).....

- Burns ……..

- Tissue engineering ……..

6.4: Others ……Attending meetings & Conferences…… ……

(7) Facilities and resources mandatory for course completion:

-Laptop and data show projector

-Laser pointer and white board

-Comfortable and well prepared classroom

Course coordinator: Dr. Mohammed Hassan Elfahar

Head of the department: Prof. Mohammed Radwan Elhadidy

Date: