



جمهورية مصر العربية

وزارة التعليم العالي
الوزيرة

قرار وزاري

رقم (٧٤٧) بتاريخ ٢٠٢٢/٣/١٤

بشأن تعديل اللائحة الداخلية لكلية الطب جامعة المنصورة

(مرحلة الدراسات العليا) بنظام الساعات المعتمدة

وزير التعليم العالي والبحث العلمي ورئيس المجلس الأعلى للجامعات

* بعد الاطلاع على القانون رقم ٤٩ لسنة ١٩٧٢ في شأن تنظيم الجامعات والقوانين المعدلة له.
* وعلى قرار رئيس الجمهورية رقم ٨٠٩ لسنة ١٩٧٥ بإصدار اللائحة التنفيذية لقانون تنظيم الجامعات والقرارات المعدلة له.

* وعلى القرار الوزاري (٦٩٤) بتاريخ ٢٠١١/٤/٣ بشأن إصدار اللائحة الداخلية لكلية الطب جامعة المنصورة (مرحلة الدراسات العليا) بنظام الساعات المعتمدة، والقرارات المعدلة له.

* وعلى موافقة مجلس جامعة المنصورة بجلسته بتاريخ ٢٠٢٠/٧/٢٧، ٢٠٢١/٨/٢٠

* وعلى موافقة لجنة قطاع الدراسات الطبية بجلستها بتاريخ ٢٠٢١/١١/٨، ٢٠٢١/١٢/٢٧

* وعلى موافقة المجلس الأعلى للجامعات بجلسته بتاريخ ٢٠٢٢/٢/١٧

قرر
(المادة الأولى)

يضاف مادة جديدة تحت رقم (٣ مكرر) إلى اللائحة الداخلية لكلية الطب جامعة المنصورة مرحلة الدراسات العليا (نظام الساعات المعتمدة) الصادرة بالقرار الوزاري رقم (٦٩٤) بتاريخ ٢٠١١/٤/٣ على النحو التالي:

مادة (٣ مكرر) الدبلومات المهنية
تمنح جامعة المنصورة بناء على طلب كلية الطب البشري الدبلومات المهنية الآتية:-

- ١-
- ٢-
- ٣- مكافحة العدوي
- ٤- أمراض الأوعية الدموية المخية والسكتة الدماغية
- ٥- التغذية الإكلينيكية
- ٦- زراعة نخاع العظام
- ٧- مجال طب الشبكية

(المادة الثانية)

يلحق باللائحة الداخلية المشار إليها بعالية الخطة الدراسية والإمتحانية المرفقة والخاصة بالدبلومات المهنية الآتية (مكافحة العدوي - أمراض الأوعية الدموية المخية والسكتة الدماغية - التغذية الإكلينيكية - زراعة نخاع العظام - مجال طب الشبكية)

(المادة الثالثة)

على جميع الجهات المختصة تنفيذ هذا القرار.

وزير التعليم العالي والبحث العلمي
ورئيس المجلس الأعلى للجامعات

(أ.د/ خالد عبد الغفار)



محرر



COURSE SPECIFICATION

Postgraduate Professional Diploma Degree of Hematopoietic Stem Cell
Transplantation

Faculty of Medicine- Mansoura University

(A) Administrative information

(1) Programme offering the course.	Diploma of Hematopoietic Stem Cell Transplantation
(2) Department offering the programme.	Internal Medicine Department
(3) Department responsible for teaching the course.	The Bone Marrow Transplantation Unit
(4) Parts of the programme.	4 semesters in two years
(5) Date of approval by the Department's council	2020
(6) Date of last approval of programme specification by Faculty council	2020
(7) Course title.	Hematopoietic Stem Cell Transplantation
(8) Course code.	BMT410
(9) Total teaching hours.	300 lectures-360 practical
(10) Credit hours	32

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(B) Professional information

(1) Course Aims.

The broad aims of the course are as follows.

The broad aims of the course are to provide the candidate with

1. Medical knowledge and skills essential for the practice of Hematopoietic Stem Cell Transplantation (HSCT) efficiently and properly according to the international standards
2. Skills necessary for proper diagnosis and management of patients in the field of HSCT including diagnostic, problem solving and decision making.
3. Ethical principles related to the practice in this specialty.
4. Maintenance of abilities necessary for continuous medical education.

تاریخ



(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

- A1. To identify structure of the bone marrow, the hematopoietic microenvironment and the lymphoid tissues.
- A2. To describe the spectrum of clinical symptomatology and signs related to HSCT problems
- A3. To recognize the clinical spectrum of common hematological disorders with multisystem reflection.
- A4. To develop the concept of emergency management of acute and chronic complications of HSCT
- A5. To identify the principles of stem cell processing and stem cell infusion
- A6. To explain etiology, epidemiology, natural history, diagnosis, pathology, staging of neoplastic diseases and benign disorders indicated for HSCT
- A7. To stratify patients according to their risk categories at time of diagnosis to be able to determine the patient eligibility for a HSCT as part of the therapeutic approach

B- Intellectual skills

- B1. To correlate clinical information with cytology, histology, and immunodiagnostic imaging techniques.
- B2. To interpret the results of blood smears, bone marrow aspiration, and biopsy.
- B3. To interpret results of HLA typing and histocompatibility results for proper selection of a suitable donor for an allogeneic transplant
- B4. To interpret results of chimerism analysis to document engraftment after an allogeneic HSCT

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C- Professional/practical skills

- C1: To demonstrate competence in the selection of patients eligible for transplantation
- C2: To demonstrate competence in the performance and management of different complications of HSCT
- C3: To apply the following,
- C3a. Apheresis procedures
 - C3b. Performance and interpretation of HLA typing
 - C3c. Blood banking and current blood bank practice;
 - C3d. Clinical experience in bone marrow or peripheral stem cell harvest for transplantation;
 - C3e. Formal instruction and clinical experience in allogeneic HSCT
 - C3f. Formal instruction and clinical experience and autologous bone marrow transplantation
 - C3f. The indications, contraindications, limitations, complications, techniques, and interpretation of results of those diagnostic and therapeutic procedures integral to the discipline.
 - C3g. To educate patients about the rationale, technique, and complications of procedures and in obtaining procedure-specific informed consent.

تاريخ



D- Communication & Transferable skills

- D1. Demonstrate compassion, integrity, and respect for all human rights and treat all subjects equally regardless to their believes, culture and behavior.
- D2. Communicate effectively with patients, families, and the public.
- D3. Communicate effectively with physicians, other health professionals, and health related agencies.
- D4. Apply safety measures during practice.
- D4. Apply infection control measures during practice
- D5. Maintain comprehensive, timely and legible medical records
- D6. Conduct an effective lecture, presentation, case management according to the known standards and time schedule and participate in CME program and perform self-appraisal.
- D7. To participate in a multidisciplinary case management conference or discussion

تاريخه



(3) Course content.

I. Semester I. The Basics of the Hematopoietic Stem Cell Transplantation

II. Semester II. The Hematopoietic stem cells and the basics of transfusion

III. Semester III. The immunological aspects and the applications of the Hematopoietic stem cell transplantation

IV. Semester IV. The Complications of the Hematopoietic stem cell transplantation

Subjects	Code	Lectures	Clinical	Laboratory	Seminars	Total Teaching Hours
[I] Semester I.						
(1) General about HSCT	BMT410B	3			2	10
(2) Pharmacological basis for high- dose chemotherapy		2	1		3	5
(3) Preparative regimens		2	1		3	12
(4) Immunosuppressive agents		2		2		8
(5) Histocompatibility		2	2			14
(6) Documentation of engraftment and characterization of chimerism		2	2		2	16
(7) Hematopoietic cell donors		2	2		3	10
Logbook activities including clinical examinations, seminars, conferences, and cases presentations						
[II] Semester II.						
(1) Mobilization of hematopoietic stem cells	BMT410S	3	4	2	2	22
(2) Hematopoietic cell recruitment, processing and transplantation		5	6	3	3	32
(3) Cryopreservation of hematopoietic stem cells		4	4	3	2	25
(4) Principles of transfusion before and after HSCT and management of blood group incompatibility		3	2		3	16
Logbook activities including clinical examinations, seminars, conferences, and cases presentations						

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III. Semester III.						
(1) The pathophysiology of Graft-versus-Host disease	BMT410A	2	2		3	14
(2) Management of Graft-vs-Host-disease		2	2		3	12
(3) Graft Versus Tumor response		2	2		2	12
(4) Allogeneic HSCT for acquired diseases		3			4	12
(5) Allogeneic HSCT for inherited diseases		2			3	10
(6) Autologous HSCT for acquired diseases		2			2	10
Logbook activities including clinical examinations, seminars, conferences, and cases presentations						
Semester IV.						
(1) Infections after HSCT	BMT410C	2	1		2	8
(2) Gastrointestinal complications		2	1		2	8
(3) Hepatic complications		2	1		2	8
(4) Pulmonary complications		2	1		2	10
(5) Neurological complications		2	1		2	10
(6) Delayed complications		5	1		2	16
Logbook activities including clinical examinations, seminars, conferences, and cases presentations						

تاریخ



4. Teaching methods.

4.1. Power Point presentation.

4.2. Clinical training

4.3. Laboratory training

4.4. Case discussion.

5. Assessment methods.

5.1. Written exam for assessment of knowledge, intellectual skills

5.2. Oral exam for assessment of knowledge, intellectual skills

5.3. Clinical exam for assessment of knowledge, intellectual and practical skills.....etc)

5.4. MCQ exam continuous assessment

Assessment schedule. At end of each semester

5.5. Final exam

Written exam. 100 marks

Oral exam. 60 marks

Clinical exam 60 marks

MCQ exam. 80 marks

Total. 300 marks

6. References of the course.

- Text book. Thomas' Hematopoietic Cell Transplantation book

- Hand books.

2019_Book_TheEBMTHandbook

ABMT-GEN-029 ABMT Clinic Daily Assessment of Adult Stem Cell Transplant

BBMT Handbook Comprehensive Guide for Patient Care 2nd ed 2015

Parenteral therapy Manual 1st edition 2011

Establishing a Hematopoietic Stem Cell Transplantation Unit, a practical guide

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7. Facilities and resources mandatory for course completion.

-Lecture Halls.

-Data show.

-Equipped Laboratory.

Course Supervisor:

Prof Mohamed Nasr

Course coordinators:

Prof. Sameh Shamaa

Prof. Mohamed Nasr

Prof. Emad Azmy

Head of the Department:

Prof. Aymen Menesy

Date of 1st approval 2020

Date of last approval 2020

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COURSE SPECIFICATION

Postgraduate Professional Diploma Degree of Hematopoietic Stem Cell
Transplantation

Faculty of Medicine- Mansoura University

(C) Administrative information

(11) Programme offering the course.	Diploma of Hematopoietic Stem Cell Transplantation
(12) Department offering the programme.	Internal Medicine Department
(13) Department responsible for teaching the course.	The Bone Marrow Transplantation Unit
(14) Part of the programme.	Semester I
(15) Date of approval by the Department's council	2020
(16) Date of last approval of programme specification by Faculty council	2020
(17) Course title.	Hematopoietic Stem Cell Transplantation
(18) Course code.	BMT410B
(19) Total teaching hours.	75 lectures-90 practical
(20) Credit hours	5 hrs theoretical-3 hr practical



(D) Professional information

(4) Course Aims.

The broad aims of the course are as follows.

The broad aims of the course are to provide the candidate with

5. General medical knowledge and skills essential for the practice of Hematopoietic Stem Cell Transplantation (HSCT) efficiently and properly according to the international standards
2. To give the candidate knowledge and competencies related to pharmacological basis of high-dose chemotherapy and the preconditioning regimens
3. To give our candidate knowledge and competencies related to immunosuppressive agents
4. To give our candidate knowledge and competencies related to donor selection for a bone marrow transplant



(5) 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

A1. Identify structure of the bone marrow, the hematopoietic microenvironment and the lymphoid tissues.

A2. Describe the spectrum of clinical symptomatology and signs related to HSCT problems

A3. Recognize the clinical spectrum of common hematological disorders with multisystem reflection.

A4. Develop the concept of emergency management of acute and chronic complications of HSCT

A5. Understand the pharmacological basis of high-dose chemotherapy

A6. Understand the pharmacological basis of immunosuppressive drugs

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B- Intellectual skills

- B1: To interpret the results of blood smears, bone marrow aspiration, and biopsy.
- B3: To interpret results of HLA typing
- B3: To interpret results of chimerism analysis
- B4: To get competency and skills in identifying the proper donor for an allogeneic HSCT

C- Professional/practical skills

- C1: To demonstrate competence in the selection of patients eligible for transplantation
- C2: To demonstrate competence in the selection of suitable donor
- C3: To apply the following:
 - C3a: Performance and interpretation of HLA typing
 - C3b: Formal instruction and clinical experience in allogeneic and autologous bone marrow
 - C3c: The indications, contraindications, limitations, complications, techniques, and interpretation of results of those diagnostic and therapeutic procedures integral to the discipline.
 - C3d: To educate patients about the rationale, technique, and complications of procedures and in obtaining procedure-specific informed consent.

کاروبار



D- Communication & Transferable skills

- D1. Demonstrate compassion, integrity, and respect for all human rights and treat all subjects equally regardless to their believes, culture and behavior.
- D2. Communicate effectively with patients, families, and the public.
- D3. Communicate effectively with physicians, other health professionals, and health related agencies.
- D4. Apply safety and infection control measures during practice.
- D5. Maintain comprehensive, timely, and legible medical records, if applicable
- D6. Conduct an effective lecture, presentation, case management according to the known standards and time schedule and participate in CME program and perform self-appraisal.
- D7. To participate in a multidisciplinary case management conference or discussion

(6) Course content.

Semester I. The Basics of the Hematopoietic Stem Cell Transplantation

Subjects	Code	Lectures	Clinical	Laboratory	Seminars	Total Teaching Hours
(1) General about HSCT	BMT410B	3			2	10
(2) Pharmacological basis for high- dose chemotherapy		2	1			5
(3) Preparative regimens		2	1		3	12
(4) Immunosuppressive agents		2	2			8
(5) Histocompatibility		2	2		3	14
(6) Documentation of engraftment and characterization of chimerism		2	2		2	16
(7) Hematopoietic cell donors		2			3	10

Logbook activities including clinical examinations, seminars, conferences, and cases presentations

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4. Teaching methods.

4.1. Power Point presentation.

4.2. Laboratory training

4.3. Case discussion.

5. Assessment methods.

MCQ exam for continuous assessment

Assessment schedule, at end of semester

Assessment 1, week/month, 12th week

Percentage of each assessment to the total mark.

MCQ exam, 20 marks

6. References of the course.

- Text book, Thomas' Hematopoietic Cell Transplantation book

- Hand books,

2019_Book_TheEBMTHandbook

ABMT-GEN-029 ABMT Clinic Daily Assessment of Adult Stem Cell
Transplant

BBMT Handbook Comprehensive Guide for Patient Care 2nd ed 2015

Parenteral therapy Manual 1st edition 2011

Establishing a Hematopoietic Stem Cell Transplantation Unit, a practical
guide

7. Facilities and resources mandatory for course completion.

-Lecture Halls.

-Data show.

-Equipped Laboratory.



Course Supervisor:
Prof Mohamed Nasr

Course coordinators:
Prof. Sameh Shamaa
Prof. Mohamed Nasr
Prof. Emad Azmy

Head of the Department:
Prof. Aymen Menesy

Date of 1st approval 2020
Date of last approval 2020



COURSE SPECIFICATION

Postgraduate Professional Diploma Degree of Hematopoietic Stem Cell
Transplantation

Faculty of Medicine- Mansoura University

(E) Administrative information

(21) Programme offering the course.	Diploma of Hematopoietic Stem Cell Transplantation
(22) Department offering the programme.	Internal Medicine Department
(23) Department responsible for teaching the course.	The Bone Marrow Transplantation Unit
(24) Part of the programme.	Semester II
(25) Date of approval by the Department's council	2020
(26) Date of last approval of programme specification by Faculty council	2020
(27) Course title.	Hematopoietic Stem Cell Transplantation
(28) Course code.	BMT410S
(29) Total teaching hours.	95 hrs lectures-90 practical
(30) Credit hours	6.5 hr theoretical- 3 practical

كارى عبد الله



(F) Professional information

(7) Course Aims.

The broad aims of the course are as follows.

The broad aims of the course are to provide the candidate with

7. Medical knowledge and skills essential for the practice of Hematopoietic Stem Cell Transplantation (HSCT) efficiently and properly according to the international standards
8. Skills necessary for mobilization and recruitment of stem cells
9. Skills necessary for cryopreservation of stem cells
4. The hematopoietic stem cells transplant procedure

تاريخ



(8) 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.

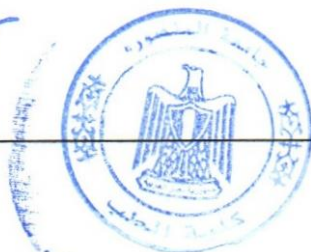
A- Knowledge and Understanding

- A1. Identify the principles of stem cell recruitment and processing
- A2. Get the skills of cryopreservation of the stem cells
- A3. Get the confidence and the skills of stem cell infusion
- A4. Identify the principles of transfusion before, during and after HSCT
- A5. Identify and manage problems related to blood group incompatibility

B- Intellectual skills

- B1. Interpretation of results stem cell collections
- B2. Calculation of the number of the collected CD34 cells
- B4. Prediction of the outcome in relation to the number of the collected CD34 cells
- B3. Principles of transfusion and prediction of complications according to the degree of incompatibility

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C- Professional/practical skills

C1. To apply the following:

C1a. Apheresis procedures

C1b. Performance and interpretation of HLA typing

C1c. Blood banking and current blood bank practice;

C1d. Clinical experience in bone marrow or peripheral stem cell harvest for transplantation;

C1e. Formal instruction and clinical experience in allogeneic and autologous bone marrow

C1f. The indications, contraindications, limitations, complications, techniques, and interpretation of results of those diagnostic and therapeutic procedures integral to the discipline.

D- Communication & Transferable skills

D1. Demonstrate compassion, integrity, and respect for all human rights and treat all subjects equally regardless to their believes, culture and behavior.

D2. Communicate effectively with patients, families, and the public.

D3. Communicate effectively with physicians, other health professionals, and health related agencies.

D4. Apply safety and infection control measures during practice.

D5. Maintain comprehensive, timely, and legible medical records

D6. Conduct an effective lecture, presentation, case management according to the known standards and time schedule and participate in CME program and perform self-appraisal.

D7. To participate in a multidisciplinary case management conference or discussion

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(9) Course content.

Semester II. The Hematopoietic stem cells and the basics of transfusion

Subjects	Code	Lectures	Clinical	Laboratory	Seminars	Total Teaching Hours
Semester II.						
(1) Mobilization of Hematopoietic stem cells	BMT410S	3	4	2	2	22
(2) Hematopoietic cell recruitment, processing and transplantation		5	6	3	3	32
(3) Cryopreservation of hematopoietic stem cells		4	4	3	2	25
(4) Principles of transfusion before and after HSCT and management of blood group incompatibility		3	2		3	16
Logbook activities including clinical examinations, seminars, conferences, and cases presentations						

4. Teaching methods.

4.1. Power Point presentation.

4.2. Laboratory training

4.3. Case discussion.

5. Assessment methods.

MCQ exam for continuous assessment

Assessment schedule, at end of the semester

Assessment 2, week/month 24th week

Assessment method. MCQ exam. 20 marks



6. References of the course.

- Text book: Thomas' Hematopoietic Cell Transplantation book
- Hand books.
 - 2019_Book_TheEBMTHandbook
 - ABMT-GEN-029 ABMT Clinic Daily Assessment of Adult Stem Cell Transplant
 - BBMT Handbook Comprehensive Guide for Patient Care 2nd ed 2015
 - Parenteral therapy Manual 1st edition 2011
 - Establishing a Hematopoietic Stem Cell Transplantation Unit, a practical guide

7. Facilities and resources mandatory for course completion.

- Lecture Halls.
- Data show.
- Equipped Laboratory.

Course Supervisor.

Prof Mohamed Nasr

Course coordinators.

Prof. Sameh Shamaa

Prof. Mohamed Nasr

Prof. Emad Azmy

Head of the Department.

Prof. Aymen Menesy

Date of 1st approval 2020

Date of last approval 2020



COURSE SPECIFICATION

Postgraduate Professional Diploma Degree of Hematopoietic Stem Cell
Transplantation

Faculty of Medicine- Mansoura University

(G) Administrative information

(31) Programme offering the course.	Diploma of Hematopoietic Stem Cell Transplantation
(32) Department offering the programme.	Internal Medicine Department
(33) Department responsible for teaching the course.	The Bone Marrow Transplantation Unit
(34) Part of the programme.	Semesters III
(35) Date of approval by the Department's council	2020
(36) Date of last approval of programme specification by Faculty council	2020
(37) Course title.	Hematopoietic Stem Cell Transplantation
(38) Course code.	BMT410A
(39) Total teaching hours.	70 lectures-90 practical
(40) Credit hours	4.5 hrs theoretical-3 practical



(H) Professional information

(10) Course Aims:

The broad aims of the course are as follows.

The broad aims of the course are to provide the candidate with

10. Medical knowledge and skills essential for the practice of Hematopoietic Stem Cell Transplantation (HSCT) efficiently and properly according to the international standards
11. Skills necessary for proper diagnosis and management of patients in the field of HSCT including diagnostic, problem solving and decision making.
12. Ethical principles related to the practice in this specialty.
13. Maintenance of abilities necessary for continuous medical education.



(11) Intended Learning Outcomes (ILOs).

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

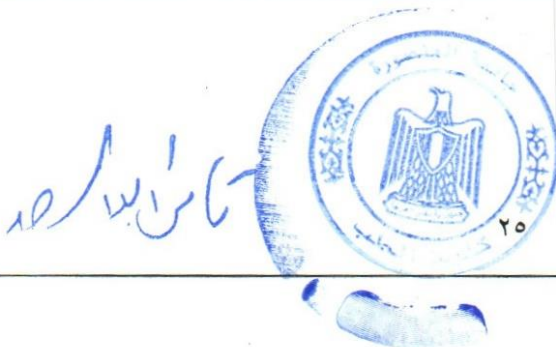
On successful completion of the course, the candidate will be able to:

A- Knowledge and Understanding

- A1. To describe the spectrum of clinical symptomatology and signs related to HSCT problems
- A3. To recognize the clinical spectrum of common hematological disorders with multisystem reflection.
- A4. To develop the concept of emergency management of acute and chronic complications of HSCT
- A5. To identify the principles of stem cell processing and stem cell infusion
- A6. To explain etiology, epidemiology, natural history, diagnosis, pathology, staging of neoplastic diseases and benign disorders indicated for HSCT
- A7. To stratify patients according to their risk categories at time of diagnosis to be able to determine the patient eligibility for a HSCT as part of the therapeutic approach

B- Intellectual skills

- B1. To correlate the clinical information and the known comorbidity scores with the expected outcome of the transplant.
- B2. Early identification of complications
- B3. Identification and calculation of the grade and stage of graft-vs-host-disease

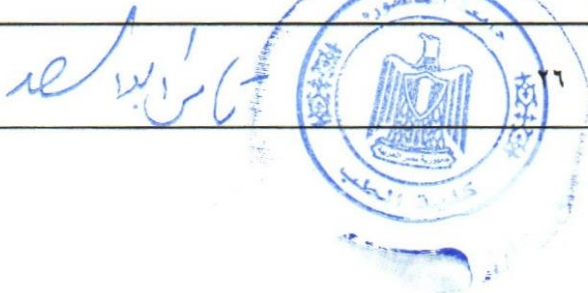


C- Professional/practical skills

- C1. To demonstrate competence in the selection of patients eligible for transplantation
- C2. To demonstrate competence in the performance and management of different complications of HSCT
- C3. To apply the following:
 - C3a. Formal instruction and clinical experience in autologous bone marrow transplantation
 - C3b. Formal instruction and clinical experience in allogeneic bone marrow transplantation
 - C3c. The indications, contraindications, limitations, complications, techniques, and interpretation of results of those diagnostic and therapeutic procedures integral to the discipline.
 - C3d. To educate patients about the rationale, technique, and complications of procedures and in obtaining procedure-specific informed consent.

D- Communication & Transferable skills

- D1. Demonstrate compassion, integrity, and respect for all human rights and treat all subjects equally regardless to their beliefs, culture and behavior.
- D2. Communicate effectively with patients, families, and the public.
- D3. Communicate effectively with physicians, other health professionals, and health related agencies.
- D4. Apply safety and infection control measures during practice.
- D5. Maintain comprehensive, timely, and legible medical records, if applicable
- D6. Conduct an effective lecture, presentation, case management according to the known standards and time schedule and participate in CME program and perform self-appraisal.
- D7. To participate in a multidisciplinary case management conference or discussion



(12) Course content.

Semester III. The immunological aspects and the applications of the Hematopoietic stem cell transplantation

Subjects	Code	Lectures	Clinical	Laboratory	Seminars	Total Teaching Hours
Semester III.						
(1) The pathophysiology of Graft-versus-Host disease	BMT410A	2	2		3	14
(2) Management of Graft-vs-Host-disease		2	2		3	12
(3) Graft Versus Tumor response		2	2		2	12
(4) Allogeneic HSCT for acquired diseases		3			4	12
(5) Allogeneic HSCT for inherited diseases		2			3	10
(6) Autologous HSCT for acquired Diseases		2			2	10
Logbook activities including clinical examinations, seminars, conferences, and cases presentations						

4. Teaching methods.

4.1. Power Point presentation.

4.2. Laboratory training

4.3. Case discussion.

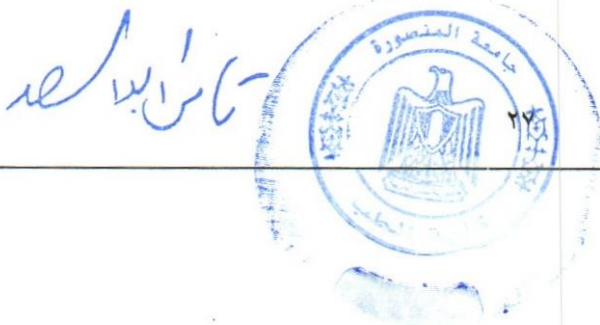
5. Assessment methods.

MCQ exam for continuous assessment

Assessment schedule. at end of the semester

Assessment 3. week/month 36th week

Assessment method. MCQ exam. 20 marks



6. References of the course.

- Text book, Thomas' Hematopoietic Cell Transplantation book
- Hand books.
 - 2019_Book_TheEBMTHandbook
 - ABMT-GEN-029 ABMT Clinic Daily Assessment of Adult Stem Cell Transplant
 - BBMT Handbook Comprehensive Guide for Patient Care 2nd ed 2015
 - Parenteral therapy Manual 1st edition 2011
 - Establishing a Hematopoietic Stem Cell Transplantation Unit, a practical guide

7. Facilities and resources mandatory for course completion.

- Lecture Halls.
- Data show.
- Equipped Laboratory.

Course Supervisor,

Prof Mohamed Nasr

Course coordinators,

Prof. Sameh Shamaa

Prof. Mohamed Nasr

Prof. Emad Azmy

Head of the Department,

Prof. Aymen Menesy

Date of 1st approval 2020

Date of last approval 2020





COURSE SPECIFICATION

Postgraduate Professional Diploma Degree of Hematopoietic Stem Cell
Transplantation

Faculty of Medicine- Mansoura University

(I) Administrative information

(41) Programme offering the course.	Diploma of Hematopoietic Stem Cell Transplantation
(42) Department offering the programme.	Internal Medicine Department
(43) Department responsible for teaching the course.	The Bone Marrow Transplantation Unit
(44) Part of the programme.	Semesters IV
(45) Date of approval by the Department's council	2020
(46) Date of last approval of programme specification by Faculty council	2020
(47) Course title.	Hematopoietic Stem Cell Transplantation
(48) Course code.	BMT410C
(49) Total teaching hours.	60 lectures-90 practical
(50) Credit hours	4 theoretical-3 practical

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(J) Professional information

(13) Course Aims.

The broad aims of the course are as follows.

The broad aims of the course are to provide the candidate with

14. Medical knowledge and skills essential for the practice of Hematopoietic Stem Cell Transplantation (HSCT) efficiently and properly according to the international standards
15. Skills necessary for proper diagnosis and management of patients in the field of HSCT including diagnostic, problem solving and decision making.
16. Ethical principles related to the practice in this specialty.
17. Maintenance of abilities necessary for continuous medical education.

(14) Intended Learning Outcomes (ILOs).

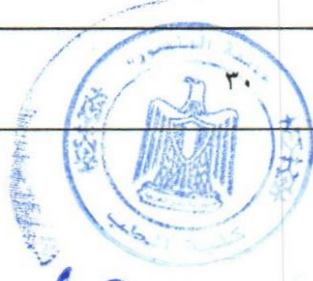
Intended learning outcomes (ILOs); Are four main categories: knowledge & understanding to be gained, intellectual qualities, professional/practical and transferable skills.

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

A- Knowledge and Understanding

- A1. To describe the spectrum of clinical symptomatology and signs related to HSCT problems
- A3. To recognize the clinical spectrum of common hematological disorders with multisystem reflection.
- A4. To develop the concept of emergency management of acute and chronic complications of HSCT
- A5. To identify the principles of stem cell processing and stem cell infusion
- A6. To explain etiology, epidemiology, natural history, diagnosis, pathology, staging of neoplastic diseases and benign disorders indicated for HSCT
- A7. To stratify patients according to their risk categories at time of diagnosis to be able to determine the patient eligibility for a HSCT as part of the therapeutic approach

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B- Intellectual skills

- B1. To correlate the clinical information and the known comorbidity scores with the expected outcome of the transplant.
- B2. Early identification of complications
- B3. Identification and calculation of the grade and stage of graft-vs-host-disease

C- Professional/practical skills

- C1. To demonstrate competence in the selection of patients eligible for transplantation
- C2. To demonstrate competence in the performance and management of different complications of HSCT
- C3. To apply the following:
 - C3a. Formal instruction and clinical experience in autologous bone marrow transplantation
 - C3b. Formal instruction and clinical experience in allogeneic bone marrow transplantation
 - C3c. The indications, contraindications, limitations, complications, techniques, and interpretation of results of those diagnostic and therapeutic procedures integral to the discipline.
 - C3d. To educate patients about the rationale, technique, and complications of procedures and in obtaining procedure-specific informed consent.

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D- Communication & Transferable skills

- D1: Demonstrate compassion, integrity, and respect for all human rights and treat all subjects equally regardless to their believes, culture and behavior.
- D2: Communicate effectively with patients, families, and the public.
- D3: Communicate effectively with physicians, other health professionals, and health related agencies.
- D4: Apply safety and infection control measures during practice.
- D5: Maintain comprehensive, timely, and legible medical records, if applicable
- D6: Conduct an effective lecture, presentation, case management according to the known standards and time schedule and participate in CME program and perform self-appraisal.
- D7: To participate in a multidisciplinary case management conference or discussion

(15) Course content:

Semester IV. The Complications of the Hematopoietic stem cell transplantation

Subjects	Code	Lectures	Clinical	Laboratory	Seminars	Total Teaching Hours
Semester IV.						
(1) Infections after HSCT	BMT410C	2	1		2	8
(2) Gastrointestinal complications		2	1		2	8
(3) Hepatic complications		2	1		2	8
(4) Pulmonary complications		2	1		2	10
(5) Neurological complications		2	1		2	10
(6) Delayed complications		5	1		2	16
Logbook activities including clinical examinations, seminars, conferences and cases presentations						



4. Teaching methods.

- 4.1. Power Point presentation.
- 4.2. Clinical training
- 4.3. Case discussion.

5. Assessment methods.

MCQ exam for continuous assessment
Assessment schedule. at end of the semester
Assessment 4, week/month 48th week
Assessment method. MCQ exam. 20 marks

6. References of the course.

- Text book. Thomas' Hematopoietic Cell Transplantation book
- Hand books.
2019_Book_TheEBMTHandbook
ABMT-GEN-029 ABMT Clinic Daily Assessment of Adult Stem Cell Transplant
BBMT Handbook Comprehensive Guide for Patient Care 2nd ed 2015
Parenteral therapy Manual 1st edition 2011
Establishing a Hematopoietic Stem Cell Transplantation Unit, a practical guide

7. Facilities and resources mandatory for course completion.

- Lecture Halls.
- Data show.
- Equipped Laboratory.

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Course Supervisor:
Prof Mohamed Nasr

Course coordinators:
Prof. Sameh Shamaa
Prof. Mohamed Nasr
Prof. Emad Azmy

Head of the Department:
Prof. Aymen Menesy

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Date of last approval 2020

أحمد عبد الله



٨- لائحة الدبلومة المهنية في زراعة نخاع العظام

Professional Diploma Degree of Hematopoietic Stem Cell Transplantation (BMT410)

تقسم للاحاديث الامراض الباطنه

المفترقات التراسية وتوزع الساعات المحترقة

الساعات المحترقة	الكود	Course	القرن	التصنيف التراسية
5	BMT410B	The basics of the Hematopoietic Stem Cell Transplantation	الاساسيات لزراعة نخاع العظام	التصنيف التراسية الاولى
6.5	BMT410S	The Hematopoietic Stem Cell and the basics of transfusion	خلايا الجذعية ونقل مكونات الدم	التصنيف التراسية الثانية
4.5	BMT410A	The immunological aspect and the applications of the Hematopoietic Stem Cell Transplantation	التطبيقات المناعية وتطبيقات زراعة نخاع العظام	التصنيف التراسية الثالثة
4	BMT410C	The complications of the Hematopoietic Stem Cell Transplantation	مضاعفات زراعة نخاع العظام	التصنيف التراسية الرابعة
12	Degrees activities including clinical examinations, research, conferences, and course presentation			
32			تربوي الساعات المحترقة	

نظام الامتحانات (الدرجة المهنية في زراعة نخاع العظام)

١. امتحانات التقييم المستمر: تمتد وقد يجرى كل فصل دراسي

الدرجة	الاختبار	التقييم
20	MCQ	١. أساليب زرع نخاع العظام
20	MCQ	٢. علاج المرضى بعد مكونات الدم
20	MCQ	٣. نظم الرعاية وتعليمات زرع نخاع العظام
20	MCQ	٤. مضاعفات زرع نخاع العظام

٢. الامتحان النهائي للفصل: يتم بعد الفصل الدراسي الرابع

إجمالي	الدرجة			الاختبار
	كلينيكي	عقلي	عمومي	
220	60	60	100	١) عمومي مع حالات حالات ٢) امتحان عقلي ٣) امتحان كلينيكي

يجوز للطلاب الذين حصلوا على 20 من درجة الامتحان العمومي و MCQ و 20 من درجات الامتحان العقلي والكلينيكي

مروط التمدد في الألبوم للحمية في زراعة نخاع العظام:

من بين ما تقدم السجل على الألبوم للحمية في زراعة نخاع العظام:

للصغير من الألبوم:

- ١) خويجي كليات الطب من مختلف الجامعات الحاصلين على درجة **الماجستير** أو الدكتوراه في أمراض الدم الإكلينيكية
- ٢) خويجي كليات الطب من مختلف الجامعات الحاصلين على درجة **الماجستير** أو الدكتوراه في طب الأورام بشرط ان تكون الرسالة في أمراض الدم الحبيثة.

للصغير من الخرج:

- ١) خويجي كليات الطب من مختلف الجامعات الحاصلين على درجة **الماجستير** أو الدكتوراه في أمراض الدم الإكلينيكية أو مايجادلها في نفس التخصص.
- ٢) خويجي كليات الطب من مختلف الجامعات الحاصلين على درجة **الماجستير** أو الدكتوراه في طب الأورام أو ما يطنها بشرط ان تكون رسالة الدكتوراه في أمراض الدم الحبيثة
- ٣) خويجي كليات الطب من مختلف الجامعات الحاصلين على درجة **الماجستير** أو الدكتوراه في الأمراض الباطنة أو مايجادلها بشرط ان تكون رسالة **الماجستير** أو الدكتوراه في أمراض الدم الحبيثة أو الحبيثة