**Postgraduate Programme Specifications of Master Degree in Medical Oncology (MOMS).**

**A-Basic Information**

**1-Programme title: Master degree in Medical oncology**

**2- Programme type: Single Double Multiple √**

**3-Department (Course code):**

* **Physiology department (MOMS 01)**
* **Biochemistry department (MOMS 02)**
* **Anatomy Department (MOMS 03)**
* **clinical pathology Department (MOMS 04)**
* **Microbiology and Immunology department (MOMS 05)**
* **Pharmacology department (MOMS 06)**
* **Pathology department (MOMS 07)**
* **Principles of Surgical Oncology (MOMS 08)**
* **Principles of Radiotherapy (MOMS 09)**
* **Principles of Cancer Imaging (MOMS 10)**
* **General Cancer Pathology (MOMS 11)**
* **Cancer Biology (introduction) (MOMS 12 )**
* **Internal Medicine (MOMS 13)**
* **Solid Tumor (MOMS 14)**
* **Malignant Hematology & Bone Marrow Transplantation (MOMS 15)**

**4-Coordinator: Prof.,** **DR\Fouad AbuTaleb Professor of Medical Oncology, Zagazig University.**

**Prof., DR/ Rasha Mohamed Mostafa, prof. and head of Medical Oncology Department, Zagazig University.**

**Prof., DR/ Ahmed Abdulraheem, Assist.prof. Of Medical Oncology, Zagazig University.**

**Prof., DR/ Shereen Mostafa Elshorbagy, Assist.prof.of Medical Oncology, Zagazig University.**

**DR/ Amrallah Abdulmoneem, Assist.prof. of Medical Oncology, Zagazig University.**

**DR/ Ola Mohamed Ahmed, Assist.prof. of Medical Oncology, Zagazig University.**

**DR/ Heba Fekry Abdulmageed, Assist.prof. of Medical Oncology, Zagazig University.**

**5-External evaluators: prof., DR\HUSSAIN KHALED Professor of Medical oncology, National Cancer Institute, Cairo University; EX. Minster of Higher Education.**

**6-Last date of programme specifications approval: 31-1-2021**

**B-Professional Information**

**1-Programme aims:**

The aim of this program is to provide the postgraduate student with the medical knowledge and skills essential for the practice of specialty and necessary to gain further training and practice in the field of Medical Oncology through providing:

1. Scientific knowledge essential for the practice of Medical oncology according to the international standards.

2. Skills necessary for proper diagnosis and management of patients, including diagnostic, problem solving and decision-making skills.

3.Decision-making in his professional contexts.

4. To employ and preserve the available resources to achieve the highest benefit.

5-Ethical principles related to the practice in this highly sensitive specialty.

6. Active participation in community needs assessment and problems solving.

7. Maintenance of research interest and abilities.

**2. Intended learning outcomes (ILOs):**

**A- KNOWLEDGE and UNDRSTANDING**

 Program Intended Learning Outcomes (ILOs) a) Knowledge and Understanding:

By the end of the study of master program in Medical Oncology the Graduate should be able to:

KU1. Identify the function of different body systems and understand the physiological mechanisms involved in its regulation.

KU2.Describe the chemistry and structures of carbohydrates, lipids and proteins of biological importance, Nucleotides and nucleic acids, heme and, immunoglobulin.

KU3. Identify the basic principles of infection control in health care facilities.

KU4.Recognize normal anatomy of human body.

KU5. Mention the principles of clinical pathology and molecular biology related to cancer.

KU6. Mention the principles of basic pharmacology and cancer pathology.

KU7. Mention the principles of epidemiology, biostatistics, screening and chemoprevention

KU8. Explain the principles of chemotherapy.

KU9. Explain the principles of management of hematological malignancies.

KU10. Explain the principles that apply to cancer patient management, investigations, all medical emergencies, diseases problems and palliative care of cancer patients.

KU11. Tell the principles of internal medicine related to oncology.

KU12. Tell the principles of surgical oncology.

KU13. Mention the advanced studies and recent technologies in Medical oncology.

KU14.Mention scientific developments in the field of Medical Oncology.

KU15.Mention The mutual influence between professional practice and its impacts on the environment.

KU16.Mention Ethical and legal principles of professional practice in the field of Medical Oncology.

KU17.List The principles and fundamentals of quality in professional practice in the field of Medical Oncology.

KU18.Describe the basics and ethics of scientific research.

**b) Intellectual Skills By the end of the study of master program in Medical Oncology** ,

The Graduate should be able to:

IS1. Interpret data through history taking to reach a provisional diagnosis for oncological problems.

IS2. Select from different diagnostic alternatives the ones that help reaching a final diagnosis for oncological problems.

IS3. Link between knowledge for Professional problems' solving.

IS4. Conduct research study and/or write a scientific study on a research problem.

IS5. Assess risk in professional practices in the field of Medical Oncology.

IS6. Plan to improve performance in the field of Medical Oncology.

IS7. Identify oncological problems and find solutions.

IS8. Analyze researches and issues related to Medical oncology.

 **c) Professional and Practical Skills** :

By the end of the study of master program in Medical Oncology, the Graduate should be able to:

PS1. Master the basic and modern professional skills in the area of Medical Oncology.

PS2. Write and evaluate medical reports.

PS3. Assess methods and tools existing in the area of Medical Oncology.

**d) General and Transferable Skills** :

By the end of the study of master program in Medical Oncology the gratitude should be able to:

GS1. Communicate effectively by all types of effective communication.

GS2. Use information technology to serve the development of professional 's leadership in various professional contexts.

GS3. Assess himself and identify personal learning needs.

GS4. Use different sources to obtain information and knowledge.

GS5. Develop rules and indicators for assessing the performance of others.

GS6. Work in a team, and team leadership in various professional contexts

GS7. Manage time efficiently.

GS8. Learn himself continuously.

**3. Academic standards:**

 The Academic Standards are adopted from and the general academic reference standards for postgraduate studies published by the National Authority for Quality Assurance and Accreditation of Education NAQAAE, 2009.

3a External references for standards (Benchmarks)

The standards of the Accreditation Council for Graduate Medical Education (USA)ACGME, July 2017 are used as a benchmark. Benchmarking has, therefore, been restricted to the generic areas of activity.

3b Comparison of provision to external references

|  |  |  |
| --- | --- | --- |
| **External Reference** | **Comparable ILOs in the faculty programme** | **Remarks** |
| **(USA)ACGME****, learning outcomes** -Describe basic scientific principles of pathology, biology and tumor immunology-Outline principles of basic pharmacology, methods of microbiology and transfusion medicine-Define clinical trials methodology and biostatistics, epidemiology, screening and Chemoprevention-Outline principles of systemic therapy -Identify the key tools in basic science that apply to cancer patient management and investigations-List, diagnose and manage all medical emergencies and diseases problems highly relevant to cancer patients | COVERED BY:KU5, KU6KU3, KU6, KU8KU7, KU14, KU15, KU16, KU17, KU18KU6, KU8KU1, KU2, KU3, KU4, KU5, KU6, KU13KU9, KU10, KU11, KU12 | 90% FULFUILED |

**4- Curriculum structure and contents:**

4-a- Programme duration: 24 months …………………………………………………

4-b- Programme structure- -First part

 - Second part

- Dissertation: thesis, the candidate can start working on thesis after 6 months from registration on programme. The duration of thesis is 6 months.

 **5. Programme courses**

Level/Year at program…First part…………………………….

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Code No.  | Course Title | No. of units | Total No of hours | Program ILOs covered by No |
|  | Research Methodology & Medical Ethics & Biostatistics & Communication Skills | 0.75 | 11.25 h | KU7 |
| **CPR** | Cardiopulmonary Resuscitation | 0.5 | 7.5 h |  |
| **MOMS 01** | Physiology | 0.5 | 1 | KU1 |
| **MOMS 02** | Biochemistry | 1 | KU2 |
| **MOMS 03** | Anatomy | 1 | KU4 |
| **MOMS 04** | Clinical pathology | 1 | KU5 |
| **MOMS 05** | Microbiology & immunology | 1.5 | KU3 |
| **MOMS 06** | Pharmacology | 1 | KU6, KU8 |
| **MOMS 07** | Pathology | 1 | KU6 |
| **MOMS 08** | Principles of Surgical Oncology | 0.5 | 1.5  | KU12 |
| **MOMS 09** | Principles of Radiotherapy | 1.5 | KU13 |
| **MOMS 10** | Principles of Cancer Imaging | 1.5 | KU13 |
| **MOMS 11** | General Cancer Pathology | 1.5 | KU6 |
| **MOMS 12** | Cancer Biology (introduction) | 1.5 | KU5 |
| **MOMS 13** | مقرر دراسي في الباطنة العامة ( تشمل 3 شهور عناية مركزة باطنة عامة) | 1.75 | 26.25 | KU11 |
|  | التدريب الإكلينيكي العام | 2 | 60 | KU11 |
|  | **مقرر اختياري يحدده قسم طب الأورام** | 0.5 | 7.5 |  |
|  | تدريب إكلينيكي أساسي في تخصص طب الأورام | 2 | 60 |  |

Level/Year at program Second part……………………………….

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Code No. | Course Title | No. of units | No of hours  | Program ILOs covered by No. |
| **MOMS** 14**MOMS** 15 | Solid TumorsMalignant Hematology & Bone Marrow Transplantation | 21 | 30 HOURS15HOURS | KU8,10,13,14,15,KU9 |
| **MSTH** | Thesis | 3 |  | KU18 |

|  |  |  |
| --- | --- | --- |
| **Generic academic standards of master programme****المعايير الأكاديمية العامة لبرامج الدراسات العليا** **(برامج الماجستير**) | **ILOs of the MSc in Medical Oncology programme Faculty of medicine Zagazig University** | **Remarks** |
| 1 **-المعرفة و الفهم****ا-**النظريات و الأساسيات المتعلقة بمجال التعلم و كذا في المجالات ذات العلاقة**ب-**التأثير المتبادل بين الممارسات المهنية و انعكاسه**ت-**التطورات العلمية في مجال التخصص**ث-**مبادئ و أساسيات الجودة في الممارسات المهنية في مجال التخصص**ج-**أساسيات و أخلاقيات البحث العلمي | KU1, KU2, KU3, KU4KU5, KU6, KU7,KU8KU9,KU10,KU11,KU12.KU15KU13 KU14KU16, KU17KU18 | 100 % is fulfilled |
| 2- **المهارات الذهنية**ا-تحليل و تقييم المعلومات في مجال التخصص و القياس عليها لحل المشاكلب-حل المشاكل المتخصصة مع عدم توافر بعض المعطياتت-الربط بين المعارف المختلفة لحل المشاكل المهنيةث-اجراء دراسة بحثية\ أو كتابة دراسة علمية منهجية لحل مشكلة بحثيةج-تقييم المخاطر في الممارسات المهنية في مجال التخصصح-التخطيط لتطوير الأداء في مجال التخصصخ-أتخاذ القرارات المهنية في سياقات مهنية متنوعة | IS1IS2IS3IS 4IS5IS6IS7, IS8 | 100% is fulfilled |
| 3- **المهارات المهنية**ا-اتقان المهارات المهنية الأساسية و الحديثة في مجال التخصصب-كتابة و تقييم التقارير المهنيةت-تقييم الطرق و الأدوات القائمة في مجال التخصص | PS1PS2PS3 | 100% is fulfilled |
| 4- **المهارات العامة و المتنقلة**1. التواصل الفعال بأنواعه المختلفة
2. استخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية
3. التقييم الذاتي و تحديد احتياجاته التعليمية الشخصية
4. استخدام المصادر المختلفة للحصول علي احتياجاته التعليمية الشخصية
5. و ضع قواعد و مؤشرات تقييم أداء الأخرين
6. العمل في فريق و قيادة فرق في سياقات مهنية مختلفة
7. إدارة الوقت بكفاءة
8. التعلم الذاتي و المستمر
 | GS1GS2GS3GS4GS5GS6GS7GS8 | 100% is fulfilled |

**6-Programme admission requirements**

The candidate should have the Bachelor of medicine and surgery (M.B.B.CH) approved by the Egyptian Ministry of higher education with the qualification grades according to the guidelines put annually by the Ministry of higher education with not less than good degree.

The candidate should exceed the house officer training year

 Candidates who are not residents in university hospitals should pass training for at least 12 months in Medical Oncology department.

 The candidate should follow postgraduate authoritarian policy of Zagazig University Faculty of medicine.

**7- Rules for succession and programme achievement 1st level/Year semester:**

The 1st level year fulfills 25% of the whole degree of the student and occupies the 1st 6 months.

The completion of the log book is a must with 75%achievement to go into the test of the 1st year.

The candidate should pass the first part by 60% achievement at least.

**2nd level/Year/semester:**

The second level year complies 75%of the whole marks of the master degree and occupies 18 months.

The candidate has to end English test (TOEFFL) with 400 at least with passing 3 courses in computer proficiency to be able to discuss his assay.

The candidate can defense his Thesis before or after ingoing to the 2nd part exam.

The candidate should pass the 2nd part with 60% achievement at least.

The candidate has to terminate the 3parts (1st, 2nd & thesis) to get his degree.

**8- Evaluation of programme intended learning outcomes**

|  |  |  |
| --- | --- | --- |
| **Evaluator** | **Tool** | **Sample** |
| 1- Exams results | Results analysis Report | All the students |
| 2- Students | Questionnaires | All the students |
| 3-Graduates after achieving MSc degree | Questionnaires – group discussion | 10 at least |
| **4-Stakeholders**\*- teaching staff.\*- Technicians.\*- Regional medical institutes\*- International medical institutes.\*- other Governmental faculties\*- Non governmental faculties | InterviewsInternet contactPhone callsQuestionnaires | 10 at least |
| 5-External Evaluator | Questionnaires |  |
| 6-Others(If Present) |  |  |

**10- References**:

**2- Essential Books:**

**\* MOMS** 0**1**

- Fox SI (2003): Human physiology, McGraw-Hill, USA.

-Gyton AC and Hall JE (2009): medical physiology.

**\* MOMS** 0**3**

- -Grays Anatomy text book

 **\* MOMS 13.**

* Harrison's principles of internal medicine (17th ed.)

**\* MOMS 14,15**

1. Course Notes (paper and /or electronic), Electronic lectures

2. Essential Books (Devita, Hellman, and Rosenberg's Cancer: Principles and Practice of Oncology (10th edition).

 -Manual of clinical oncology

 -MACLEOD Clinical Examination

**VII-B) SUGGESTED MATERIALS:**

-Browsing web sites of : www.Zu.edu.eg, Entrez pubmed -Medical journals of Oncology, Hematology, Ann of Oncology, NCCN guidelines ,ESMO guidelines.

**11- Supports for Candidates and their education:**

Candidates and their knowledge are supported in numerous ways:

printed copies of the programme and Medical Oncology courses (Candidates aware of the ILOs and requirement of the Master degree in Medical Oncology. Availability of University central library.

Availability of the Faculty postgraduate library

Availability of the Department Postgraduate library.

Availability of the faculty digital library.

Availability of the other educational resources included in every course.

Supervisors of the Master thesis (three Staff members according to the research specialty for each candidate).

**12- processes used for improving the programme:**

Teaching observations and feedback to the programme management team and the coordinator (written reports at the end of the courses).

Faculty appointed external examiners.

Evaluation of teaching for Candidates (Questionnaires).

Contact with **National Cancer Institute, Cairo University asking for their support.**

**13- Committee with responsibility for checking and evaluating quality:**

Internal Evaluators:

**Prof., DR/ Heba Fekry Abdulmageed, Assist.prof. of Medical Oncology, Zagazig University.**

2- Member from Quality unit in the faculty.

External Evaluator: Prof. **DR\HUSSAIN KHALED Professor of Medical oncology, National Cancer Institute, Cairo University; EX. Minster of Higher Education.**

**Regulations of assessment by-laws of the master (MSc) degree postgraduate of the faculty of medicine:**

**Research Methodology & Medical Ethics & Biostatistics & Communication Skills**

|  |  |  |
| --- | --- | --- |
| **Tools** | **Mark** | **Percentage of the total mark** |
| Written exam | 50 | 67% |
| Oral exam | 25 | 33% |
| **Total marks** | 75 | 100% |

**MOMS** 0**1**

1- Attendance of at least 75% of the teaching courses.

2- Log book fulfilled and accepted by the head of the department.

|  |  |  |
| --- | --- | --- |
| **Tools** | **Mark** | **Percentage of the total mark** |
| Written exam | 6 | 60% |
| Oral exam | 4 | 40% |
| **Total marks** | 10 | 100% |

**MOMS** 0**2**

1- Attendance of at least 75% of the teaching courses.

2- Log book fulfilled and approved by the head of the department

|  |  |  |
| --- | --- | --- |
| **Tools** | **Mark** | **Percentage of the total mark** |
| Written exam | 6 | 60% |
| Oral exam | 4 | 40% |
| **Total marks** | 10 | 100% |

**MOMS** 0**3**

1-Attending at least 75% of the teaching courses.

2- Log book fulfilled and approved by the head of the department.

|  |  |  |
| --- | --- | --- |
| **Tools** | **Mark** | **Percentage of the total mark** |
| Written exam | 6 | 60% |
| Oral exam | 4 | 40% |
| **Total marks** | 10 | 100% |

**MOMS 04 and MOMS 05**

1-Attendance of at least 75% of the teaching courses.

2- Log book fulfilled and approved by the head of the department

|  |  |  |
| --- | --- | --- |
| **Tools** | **Mark** | **Percentage of the total mark** |
| Written exam | 12 | 60% |
| Oral exam | 8 | 40% |
| **Total marks** | 20 | 100% |

**MOMS 06**

1-Attendance of at least 75% of the teaching courses.

2- Log book fulfilled and approved by the head of the department.

|  |  |  |
| --- | --- | --- |
| **Tools** | **Mark** | **Percentage of the total mark** |
| Written exam | 10 | 66% |
| Oral exam | 5 | 34% |
| **Total marks** | 15 | 100% |

**MOMS** 0**7**

1-Attendance of at least 75% of the teaching courses.

2- Log book fulfilled and approved by the head of the department.

|  |  |  |
| --- | --- | --- |
| **Tools** | **Mark** | **Percentage of the total mark** |
| Written exam | 6 | 60% |
| Oral exam | 4 | 40% |
| **Total marks** | 10 | 100% |

**NB:** Examinations are conducted twice yearly.

**MOMS 08**

1-Attendance of at least 75% of the teaching courses.

2- Log book fulfilled and approved by the head of the department

|  |  |  |
| --- | --- | --- |
| **Tools** | **Mark** | **Percentage of the total mark** |
| Written exam | 12 | 60% |
| Oral exam | 8 | 40% |
| **Total marks** | 20 | 100% |

**MOMS 09**

1-Attendance of at least 75% of the teaching courses.

2- Log book fulfilled and approved by the head of the department.

|  |  |  |
| --- | --- | --- |
| **Tools** | **Mark** | **Percentage of the total mark** |
| Written exam | 10 | 62.5% |
| Oral exam | 6 | 37.5% |
| **Total Marks** | 16 | 100% |

**MOMS 10**

1-Attendance of at least 75% of the teaching courses.

2- Log book fulfilled and approved by the head of the department.

|  |  |  |
| --- | --- | --- |
| **Tools** | **Mark** | **Percentage of the total mark** |
| Written exam | 14 | 58% |
| Oral exam | 10 | 42% |
| **Total Marks** | 24 | 100% |

**MOMS 11**

1-Attendance of at least 75% of the teaching courses.

2- Log book fulfilled and approved by the head of the department.

|  |  |  |
| --- | --- | --- |
| **Tools** | **Mark** | **Percentage of the total mark** |
| Written exam | 12 | 60% |
| Oral exam | 8 | 40% |
| **Total Marks** | 20 | 100% |

**MOMS 12**

1-Attendance of at least 75% of the teaching courses.

2- Log book fulfilled and approved by the head of the department.

|  |  |  |
| --- | --- | --- |
| **Tools** | **Mark** | **Percentage of the total mark** |
| Written exam | 12 | 60% |
| Oral exam | 8 | 40% |
| **Total Marks** | 20 | 100% |

**MOMS 13**

1-Attendance of at least 75% of the teaching courses.

2- Log book fulfilled and approved by the head of the department.

|  |  |  |
| --- | --- | --- |
| **Tools** | **Mark** | **Percentage of the total mark** |
| Written exam | 75 | 60% |
| Oral  | 50 | 40% |
| **Total Marks** | 125 | 100% |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Tools** | **Written exam****Mark**  | **Oral****Mark**  | **Practical****Mark**  | **Percentage of the total mark** |
| التدريب الإكلينيكي العام | -- | -- | 75 | 100% |
| تدريب إكلينيكي أساسي في تخصص طب الأورام | -- | -- | 150 | 100% |

**Thesis (MSTH)**

Preregistration seminar

Registration of the thesis title.

Perform the thesis within at least 6 months of registration.

After finishing the Master thesis, Candidate performs a seminar about the thesis results.

Three progression reports are introduced by each supervisor (one every 3 months).

Master thesis acceptance by the supervisors.

Master thesis acceptance by the judgment committee in an advertised public session by three professors including one of the supervisors, one from the faculty and third from another faculty.

Four copies of the thesis must be given to the postgraduate library.

Pass the exam of course MOMS 1,2,3,4,5,6,7,8,9,10,11,12,13 (at least 60% of total Mark).

Attendance of at least 75% of the teaching courses.

Log book fulfilled and approved by the head of the department.

**MOMS 14,15**

1- Pass the exam of course MOMS 1,2,3,4,5,6,7,8,9,10,11,12,13 (at least 60% of total Mark).

2-Attendance of at least 75% of the teaching courses.

3- Log book fulfilled and approved by the head of the department.

**MOMS 14**

1-Attendance of at least 75% of the teaching courses.

2- Log book fulfilled and approved by the head of the department.

|  |  |  |
| --- | --- | --- |
| **Tools** | **Mark** | **Percentage of the total mark** |
| Written exam | 240 | 40% |
| Oral exam | 120 | 20% |
| practical exam | 240 | 40% |
| **Total Marks** | 600 | 100% |

**MOMS 15**

1-Attendance of at least 75% of the teaching courses.

2- Log book fulfilled and approved by the head of the department.

|  |  |  |
| --- | --- | --- |
| **Tools** | **Mark** | **Percentage of the total mark** |
| Written exam | 240 | 40% |
| Oral exam | 120 | 20% |
| Practical exam | 240 | 40% |
| **Total Marks** | 600 | 100% |

**14- Rules for awarding the Master Degree in Medical Oncology:**

\* Candidates must pass the final exam of course MOMS 1,2,3,4,5,6,7,8 9,10,11,12,13as a prerequisite to register the master thesis, and course MOMS14,15

\* Master thesis must be accepted by the judgment committee before attend the final exam of MOMS 14,15

\* Candidates must pass the final exam of course MS 14,15 (at least 60%).