



كيفية إعداد توصيف المقررات الدراسية للدراسات العليا

توصيف المقررات الدراسية يتضمن توضيح أقل المتطلبات الواجب توافرها في طالب الدراسات العليا للحصول على درجة الماجستير والدكتوراه. يشمل توصيف المقرر الدراسي الآتي:

- الأهداف التعليمية للدرجة العلمية
- المعرفة والمهارات التي يجب أن يحصل عليها الطالب في نهاية فترة الدراسة والتدريب
- طرق التدريس (مثال: محاضرات ، ورش عمل، تدريب معلمي)
- محتويات المنهج العلمي (الموضوعات العلمية ومراجعتها، عدد ساعات تدريس الجزء النظري والعملي والإكلينيكي)
- طرق تقييم الطالب (مثال: الامتحانات بكافة صورها، الحضور، المقال العلمي، log book)
- نظام الامتحانات وكيفية توزيع الدرجات
- طرق التقييم للمقرر الدراسي
- المراجعة السنوية والمسؤولين عنها.

PROGRAMME SPECIFICATION FOR POSTGRADUATE DEGREE

This specification provides a concise summary of the main features of the course and the learning outcomes that a typical candidate might reasonably be expected to achieve and demonstrate if he or she takes full advantage of the learning opportunities provided. More detailed information on the specific learning outcomes, context and the teaching, learning and assessment methods of each module can be found in the Programme Descriptions Handbook.



COURSE SPECIFICATION

Faculty of Medicine– Mansoura University

(A) Administrative information

| | |
|---|-------------------------------------|
| (1) Programme offering the course. | Master degree in Medical Physiology |
| (2) Department offering the programme. | Department of Medical Physiology |
| (3) Department responsible for teaching the course. | Department of Medical Physiology |
| (4) Part of the programme. | Second part |
| (5) Date of approval by the Department's council | 10/7/2016 |
| (6) Date of last approval of programme specification by Faculty council | 12/7/2016 |
| (7) Course title. | Aviation Physiology |
| (8) Credit hours. | 2 hrs |
| (9) Course code. | Phys 504 AP |
| (10) Total teaching hours. | 30 Hours |

(B) Professional information

(1) **Course Aims:**

The broad aims of the course are as follows: (either to be written in items or as a paragraph)

To enable students to understand basic facts about aviations which enable him to master the physiological responses of body systems to high altitude. Also, to develop skills related to physiological experimental work.

(2) Intended Learning Outcomes (ILOs):

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

A- Knowledge and Understanding

A6 Point out the mechanisms involved in regulations of different body systems including respiratory system, CVS, digestive, urinary and nervous systems under different conditions of health and disease such as ms exercise, pregnancy, aging and hypoxia ,acceleratory forces.

A\0 Describe the changes in partial pressures of gases on high altitude and effects of hypoxia on different body systems

A\1 Point out the mechanisms involved in adaption to high altitude

B- Intellectual skills

B5 Anayze the mechanisms adaptation of body systems to high altitude

B7 interpret the pathophysiological mechanisms of different diseases

B12 Plan for development of performance in the field of medical Physiology

B13 Take professional decisions in different situations

(3) course content.

| Subjects | Lectures |
|--|----------|
| 1. Effects of Low Oxygen Pressure on the Body | 2 |
| 2. Alveolar PO ₂ at Different Elevations | 4 |
| 3. Effect of Breathing Pure Oxygen on Alveolar PO ₂ at Different Altitudes | 5 |
| 4. The “Ceiling” When Breathing Air and When Breathing Oxygen in an Unpressurized Airplane | 3 |
| 5. Acute Effects of Hypoxia | 2 |
| 6. Acclimatization to Low PO ₂ | 2 |

| | |
|---|---------------|
| 7. Natural Acclimatization of Native Human Beings Living at High Altitudes | 2 |
| 8. Acute Mountain Sickness and High-Altitude Pulmonary Edema | 2 |
| 9. Chronic Mountain Sickness | 1 |
| 10. Effects of Acceleratory Forces on the Body in Aviation and Space Physiology | 2 |
| 11. Effects of Linear acceleratory Forces on the Body | 1 |
| 12. "Artificial Climate" in the Sealed Spacecraft | 2 |
| 13. Weightlessness in Space | 1 |
| 14. Physiologic Problems of Weightlessness (Microgravity) | 1 |
| Total teaching hours | 30 hrs |

(4) Matrix of ILOs of cell and electrophysiology

| CONTENT | ILOs | | | | | | | | | | | | | | | | |
|---|-----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|
| | Knowledge and understanding | | | | | | | | | | | | | | | | |
| | A 1 | A 2 | A 3 | A 4 | A 5 | A 6 | A 7 | A 8 | A 9 | A 10 | A 11 | A 12 | A 13 | A 14 | A 15 | A 16 | A 17 |
| Effects of Low Oxygen Pressure on the Body | | | | | | √ | | | | √ | √ | | | | | | |
| Alveolar PO ₂ at Different Elevations | | | | | | | | | | √ | √ | | | | | | |
| Effect of Breathing Pure Oxygen on Alveolar PO ₂ at Different Altitudes | | | | | | | | | | √ | √ | | | | | | |
| The "Ceiling" When Breathing Air and When Breathing Oxygen in an Unpressurized Airplane | | | | | | √ | | | | | | | | | | | |
| Acute Effects of Hypoxia | | | | | | √ | | | | √ | √ | | | | | | |

| | | | | | | | | | | | | | | | | |
|---|--|--|--|--|---|--|--|--|---|---|--|--|--|--|--|--|
| Acclimatization to Low PO2 | | | | | √ | | | | √ | √ | | | | | | |
| Natural Acclimatization of Native Human Beings Living at High Altitudes | | | | | √ | | | | √ | √ | | | | | | |
| Acute Mountain Sickness and High-Altitude Pulmonary Edema | | | | | √ | | | | √ | √ | | | | | | |
| Chronic Mountain Sickness | | | | | √ | | | | √ | √ | | | | | | |
| Effects of Acceleratory Forces on the Body in Aviation and Space Physiology | | | | | √ | | | | | | | | | | | |
| Effects of Linear acceleratory Forces on the Body | | | | | √ | | | | | | | | | | | |
| "Artificial Climate" in the Sealed Spacecraft | | | | | √ | | | | | | | | | | | |
| Weightlessness in Space | | | | | √ | | | | | | | | | | | |
| Physiologic Problems of Weightlessness (Microgravity) | | | | | √ | | | | | | | | | | | |

| CONTENT | ILOs | | |
|---------|---------------------|------------------|----------------------|
| | Intellectual skills | Practical skills | Transferrable skills |

[illegible]

The facilities include: appropriate teaching accommodation, teaching aids, laboratories, laboratory equipment, computer, etc, facilities for field work, site visits, etc, which are necessary for teaching the course.

(9) Facilities and resources mandatory for course completion.

8.1- Attendance Criteria.

Minimum acceptance attendance in each course is 75%

8. 2- Assessment tool.

Minimum percentage accepted is 60% of total marks

Course coordinator: Dr. Abdelaziz Hussein

Head of the department: Dr. Sabry Mohamed Awad Gad