



جامعة كفر الشيخ - كلية الطب البشري
وحدة ضمان الجودة



المعيار : (7) المعايير الأكاديمية والبرامج التعليمية

المؤشر

(4/7) : نواتج التعلم لكل برنامج تعليمي تتسق مع مقرراته الدراسية، وتوصيف المقررات يوضح طرق التدريس والتقويم التي تحقق نواتج التعلم.

| الوثيقة | كود الوثيقة |
|---|-------------|
| توصيفات برامج المرحلة الجامعية الاولى (لائحة 2020) | 4- (1/4/7) |

المحتويات :

- مصفوفات المقررات الدراسية مع البرنامج (لائحة 2020)
- توصيف مقررات البرنامج الأكاديمي (لائحة 2020)
- موافقة عميد الكلية بتاريخ 2020/10/12 - على الاعتماد.
- إجراءات الكلية للأعلان ورقياً وإلكترونياً بتاريخ 2020/10/14

رسالة الكلية

تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تسهم في تنمية البيئة وخدمة المجتمع المحلي

رؤية الكلية

أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً و دولياً



جامعة كفر الشيخ - كلية الطب البشري
وحدة ضمان الجودة



مصفوفات التوافق بين
البرنامج التعليمي / المعايير الأكاديمية
البرنامج التعليمي / المقررات الدراسية
(لائحة ٢٠٢٠)

الإعتمادات:

عميد الكلية
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مدير وحدة ضمان الجودة
أ.د/ هاني حسين محمد

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

Program 2020

Annex1: Matrix of Program LO'S with NARS Competencies

| Program | 1- Graduate as a health care provider with NARS | | | | | | | | | | | | | | | | |
|---------|---|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|
| | NARS | | | | | | | | | | | | | | | | |
| | 1.1 | 1.2 | 1.3 | 1.4 | 1.5 | 1.6 | 1.7 | 1.8 | 1.9 | 1.10 | 1.11 | 1.12 | 1.13 | 1.14 | 1.15 | 1.16 | 1.17 |
| 1.1.1 | * | | | | | | | | | | | | | | | | |
| 1.1.2 | * | | | | | | | | | | | | | | | | |
| 1.1.3 | * | | | | | | | | | | | | | | | | |
| 1.2.1 | | * | | | | | | | | | | | | | | | |
| 1.3.1 | | | * | | | | | | | | | | | | | | |
| 1.4.1 | | | | * | | | | | | | | | | | | | |
| 1.4.2 | | | | * | | | | | | | | | | | | | |
| 1.5.1 | | | | | * | | | | | | | | | | | | |
| 1.6.1 | | | | | | * | | | | | | | | | | | |
| 1.7.1 | | | | | | | * | | | | | | | | | | |
| 1.8.1 | | | | | | | | * | | | | | | | | | |
| 1.9.1 | | | | | | | | | * | | | | | | | | |
| 1.10.1 | | | | | | | | | | * | | | | | | | |
| 1.11.1 | | | | | | | | | | | * | | | | | | |
| 1.12.1 | | | | | | | | | | | | * | | | | | |
| 1.12.2 | | | | | | | | | | | | * | | | | | |
| 1.12.3 | | | | | | | | | | | | * | | | | | |
| 1.13.1 | | | | | | | | | | | | | * | | | | |
| 1.14.1 | | | | | | | | | | | | | | * | | | |
| 1.15.1 | | | | | | | | | | | | | | | * | | |
| 1.16.1 | | | | | | | | | | | | | | | | * | |
| 1.17.1 | | | | | | | | | | | | | | | | | * |
| 1.17.2 | | | | | | | | | | | | | | | | | * |

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| 2- The Graduate as a health Promoter with NARS | | | | | | | | | |
|--|------|-----|-----|-----|-----|-----|-----|-----|-----|
| Program | NARS | | | | | | | | |
| | 2.1 | 2.2 | 2.3 | 2.4 | 2.5 | 2.6 | 2.7 | 2.8 | 2.9 |
| 2.1.1 | * | | | | | | | | |
| 2.2.1 | | * | | | | | | | |
| 2.2.2 | | * | | | | | | | |
| 2.3.1 | | | * | | | | | | |
| 2.3.2 | | | * | | | | | | |
| 2.4.1 | | | | * | | | | | |
| 2.5.1 | | | | | * | | | | |
| 2.6.1 | | | | | | * | | | |
| 2.6.2 | | | | | | * | | | |
| 2.6.3 | | | | | | * | | | |
| 2.7.1 | | | | | | | * | | |
| 2.8.1 | | | | | | | | * | |
| 2.9.1 | | | | | | | | | * |
| 2.9.2 | | | | | | | | | * |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| 3- The Graduate as a Professional with NARS | | | | | | | | | |
|---|------|-----|-----|-----|-----|-----|-----|-----|-----|
| Program | NARS | | | | | | | | |
| | 3.1 | 3.2 | 3.3 | 3.4 | 3.5 | 3.6 | 3.7 | 3.8 | 3.9 |
| 3.1.1 | * | | | | | | | | |
| 3.1.2 | * | | | | | | | | |
| 3.2.1 | | * | | | | | | | |
| 3.2.2 | | * | | | | | | | |
| 3.3.1 | | | * | | | | | | |
| 3.4.1 | | | | * | | | | | |
| 3.5.1 | | | | | * | | | | |
| 3.5.2 | | | | | * | | | | |
| 3.5.3 | | | | | * | | | | |
| 3.6.1 | | | | | | * | | | |
| 3.7.1 | | | | | | | * | | |
| 3.8.1 | | | | | | | | * | |
| 3.9.1 | | | | | | | | | * |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| 4- The Graduate as scholar and scientist with NARS | | | | | | | | |
|--|------|-----|-----|-----|-----|-----|-----|-----|
| Program | NARS | | | | | | | |
| | 4.1 | 4.2 | 4.3 | 4.4 | 4.5 | 4.6 | 4.7 | 4.8 |
| 4.1.1 | * | | | | | | | |
| 4.1.2 | * | | | | | | | |
| 4.2.1 | | * | | | | | | |
| 4.2.2 | | * | | | | | | |
| 4.2.3 | | * | | | | | | |
| 4.3.1 | | | * | | | | | |
| 4.3.2 | | | * | | | | | |
| 4.3.3 | | | * | | | | | |
| 4.4.1 | | | | * | | | | |
| 4.5.1 | | | | | * | | | |
| 4.5.2 | | | | | * | | | |
| 4.5.3 | | | | | * | | | |
| 4.5.4 | | | | | * | | | |
| 4.6.1 | | | | | | * | | |
| 4.6.2 | | | | | | * | | |
| 4.7.1 | | | | | | | * | |
| 4.8.1 | | | | | | | | * |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| 5- The graduate as a member of the health team and the health care system with NARS | | | | | | | | | | | | |
|---|------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| Program | NARS | | | | | | | | | | | |
| | 5.1 | 5.2 | 5.3 | 5.4 | 5.5 | 5.6 | 5.7 | 5.8 | 5.9 | 5.10 | 5.11 | 5.12 |
| 5.1.1 | * | | | | | | | | | | | |
| 5.2.1 | | * | | | | | | | | | | |
| 5.2.2 | | * | | | | | | | | | | |
| 5.3.1 | | | * | | | | | | | | | |
| 5.4.1 | | | | * | | | | | | | | |
| 5.4.2 | | | | * | | | | | | | | |
| 5.5.1 | | | | | * | | | | | | | |
| 5.6.1 | | | | | | * | | | | | | |
| 5.7.1 | | | | | | | * | | | | | |
| 5.8.1 | | | | | | | | * | | | | |
| 5.9.1 | | | | | | | | | * | | | |
| 5.10.1 | | | | | | | | | | * | | |
| 5.11.1 | | | | | | | | | | | * | |
| 5.12.1 | | | | | | | | | | | | * |

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| 6- The graduate as a lifelong learner and researcher with NARS | | | | | | | | | | |
|--|------|-----|-----|-----|-----|-----|-----|-----|-----|------|
| Program | NARS | | | | | | | | | |
| | 6.1 | 6.2 | 6.3 | 6.4 | 6.5 | 6.6 | 6.7 | 6.8 | 6.9 | 6.10 |
| 6.1.1 | * | | | | | | | | | |
| 6.2.1 | | * | | | | | | | | |
| 6.3.1 | | | * | | | | | | | |
| 6.4.1 | | | | * | | | | | | |
| 6.5.1 | | | | | * | | | | | |
| 6.6.1 | | | | | | * | | | | |
| 6.7.1 | | | | | | | * | | | |
| 6.8.1 | | | | | | | | * | | |
| 6.9.1 | | | | | | | | | * | |
| 6.10.1 | | | | | | | | | | * |

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Annex II: Program ILO'S /course

Competency Area I: The graduate as a health care provider

| Code | Module | ILOS | | | | | | | | | | | | | | | | |
|---------|--|------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| S1M1/AH | Principles of anatomy, Embryology, general histology, and cell biology | | | | | | | | * | * | | | | | | | | |
| S1M2/PP | Principles of physiology and pharmacology | | | | | | | | * | * | | | | | | | | * |
| S1M3/B | Principles of biochemistry and basics of science | | | | | | * | | * | * | | | | | | | | |
| S1M4/MP | Principles of pathology, microbiology, immunology, and parasitology | | | | | | | | * | * | | | | | | | | |
| S1M5/QM | Principles of Quality and Medical Education | | | | | | | | | | | | | | | | | |
| S1M6/HR | Human rights and anti-corruption practice | | | | | | | | | | | | | | | | | |
| S2M1/C | Cardiovascular system | | | | | | * | | | * | * | | | | | | | |

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| Code | Module | ILOS | | | | | | | | | | | | | | | | |
|------------|------------------------------|------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| S2M2/R | Respiratory system | | | | | | * | | | * | * | | | | | | | |
| S2M3/IBL | Immune, blood, and lymphatic | | | | | | * | | * | * | * | | | | | | | * |
| S2M4/M | Musculoskeletal system | * | | | | | * | | | * | * | | | | | | | |
| S2M5/ME | Medical Ethics | | | | | | | | | | | | | | | | | |
| S2M6/E1IC | Elective (I) | | | | | | | | | | | | | | | | | |
| S2M6/E1CPR | | | | | | | | | | | | | | | | | * | |
| S3M1/NM | Nutrition and metabolism | * | * | | * | | * | | * | * | * | * | | | | | | * |
| S3M2/E | Endocrine system | | | | | | * | | | * | * | | | | | | | * |
| S3M3/R | Reproductive | | | | | | * | | | * | * | | | | | | | * |
| S3M4/RU | Renal and urinary system | * | | | | | * | | * | * | * | | | | | | | |
| S3M5/E2HM | Elective (II) | | | | | | | | | | | | | | | | | |
| S3M5/E2PM | | | | | | | * | | * | * | | | | | | | | |
| S4M1/C | Central nervous system | | | | * | | * | | * | | | | | | | | | |
| S4M2/S | Special senses | * | | | | | * | | | * | * | * | | | | | | |

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| Code | Module | ILOS | | | | | | | | | | | | | | | | |
|-----------|---|------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| S4M3/G | Gastro-intestinal system | | | | * | | * | | * | | | | | | | | | |
| S4M4/REB | Research, evidence-based and biostatistics | | | | | | | | | * | | | | | | | | |
| S4M5/E3AP | Elective (III) | | | | | | * | | | * | * | | | | | | | |
| S4M5/E3AN | | * | | | | | * | | * | * | * | * | | | | | | |
| S5M1/CP | Community medicine and public health | | | | | | * | | | | | | | | | | | |
| S5M2/FT | Forensic & toxicology | | | * | | | * | | | | * | | | | | | | |
| S5M3/CCP | Early clinical experience, communication skills and professionalism | * | * | | * | * | | | | | | * | | | | | | |
| S5M4/P | Psychiatry | | * | * | * | | * | * | | | * | | | | | | * | * |
| S5M5/E4SI | Elective (IV) | * | | | | | | | | * | * | | | | | | | |
| S5M5/E4MM | | | | | | | * | | * | * | | | | | | | | |
| S6M1/O | Ophthalmology | * | | | * | | * | | | | * | | | * | | | | |

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| Code | Module | ILOS | | | | | | | | | | | | | | | | |
|-------------|---|------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| S6M2/S1 | Surgery (I) | * | | | | | * | | | | * | | | | | | | |
| S6M3/M1 | Medicine (I) | * | | | | | * | | | | * | | | | | | | |
| S6M4/E5ME | Elective (V) | | | | | | | | | | | | | | | | | |
| S6M4/E5ER | | | | | | | | | | * | | | | | | | | |
| S7M1/S2M2 | Surgery (II) Medicine (II) | * | | * | * | | * | | * | * | * | * | * | * | | * | * | |
| S7M2/P1 | Pediatrics (I) | * | | * | * | | * | | * | * | * | * | * | * | | | * | |
| S7M3/OG1 | OGYN (I) | * | * | | | | * | | * | * | * | | | | | | | |
| S8M1/S3aM3a | Surgery (IIIa), Medicine(III a) | * | | | | | * | | | | * | | | | | | | |
| S8M2/S3bM3b | Surgery (IIIb), Medicine(IIIb) | * | | * | * | | * | | | | * | * | | | | * | * | |
| S8M3/P2 | Pediatrics (II) | * | | | * | | * | | * | * | * | | | * | * | | | |
| S8M4/OG2 | OGYN (II) | * | * | | * | | * | | * | * | * | * | * | * | * | * | * | * |
| S9M1/ENT | Ear, Nose and throat | * | | | * | | * | | | | * | | | * | | | | |
| S9M2/RL | Radiology and laboratory medicine | | | | | | * | | | * | * | | | | | | | |
| S9M3/D | Dermatology | * | | | * | | * | | | | * | | * | | * | * | * | * |

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| Code | Module | ILOS | | | | | | | | | | | | | | | | |
|------------|--|------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| S9M4/FM | Family medicine and integrated management of common illness | | | | | | | | | | | | | | | | | |
| S9M5/E6CS | Elective (VI) Elective | * | * | | | * | | | | * | | | | | | | | |
| S9M5/E6SP | | * | | | | | * | | * | * | * | * | | | | | | |
| S10M1/CCS | Chest, Cardiovascular diseases, Cardiovascular surgery, anesthesia Pediatric, vascular, plastic surgeries | * | | | | | | | * | | * | | | | | | | |
| S10M2/IIE | Immunology, Intensive care, Medical, surgical emergency, critical care and patient safety | * | | * | * | | * | | | | * | * | | | | | | |
| S10M3/E7MS | Elective (VII) | | | | | | | | | * | | | | | | | | |

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| Code | Module | ILOS | | | | | | | | | | | | | | | | |
|-----------|--------|------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| S10M3/E7S | | * | | * | * | | * | | | | * | * | | | | * | * | |

Competency Area II: The graduate as a health promoter.

| Code | Module | ILOS | | | | | | | | | | | | | | | | |
|---------|--|------|---|---|---|---|---|---|---|---|----|---|--|---|--|--|--|--|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | | | | | | | |
| S1M1/AH | Principles of anatomy, Embryology, general histology, and cell biology | | | | | | | | | | | | | | | | | |
| S1M2/PP | Principles of physiology and pharmacology | | | | | | | | | | | | | | | | | |
| S1M3/B | Principles of biochemistry and basics of science | | | * | | | | | | | | | | | | | | |
| S1M4/MP | Principles of pathology, microbiology, immunology, and parasitology | | | | | | | | | | | * | | * | | | | |
| S1M5/QM | Principles of Quality and Medical Education | | | | | | | | | | | | | | | | | |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| Code | Module | ILOS | | | | | | | | | |
|------------|---|------|---|---|---|---|---|---|---|---|----|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| S1M6/HR | Human rights and anti-corruption practice | | | | | | | | | | |
| S2M1/C | Cardiovascular system | | | | * | | | | | * | |
| S2M2/R | Respiratory system | | | | * | | | | | | |
| S2M3/IBL | Immune, blood, and lymphatic | | | | | | | | | | |
| S2M4/M | Musculoskeletal system | | | | * | | | | | | |
| S2M5/ME | Medical Ethics | | | | | | | | | | |
| S2M6/E1IC | Elective (I) | | | | | | | | | * | |
| S2M6/E1CPR | | | | | | | | | | | |
| S3M1/NM | Nutrition and metabolism | * | | * | | | | | * | | |
| S3M2/E | Endocrine system | | | | | | | | | | |
| S3M3/R | Reproductive | | | | | | | | | | |
| S3M4/RU | Renal and urinary system | | | | * | | | | | * | |
| S3M5/E2 | Elective (II) | | | | | | | | | | |
| S4M1/C | Central nervous system | | | | | | | | | | |
| S4M2/S | Special senses | | | | * | | | | | * | |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| Code | Module | ILOS | | | | | | | | | |
|-----------|---|------|---|---|---|---|---|---|---|---|----|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| S4M3/G | Gastro-intestinal system | | | | | | | | | * | |
| S4M4/REB | Research, evidence-based and biostatistics | | | | * | | | | | | |
| S4M5/E3AP | Elective (III) | | | | | | | | | | |
| S4M5/E3AN | | * | | | | | | | | | |
| S5M1/CP | Community medicine and public health | | | | * | | * | | | | |
| S5M2/FT | Forensic & toxicology | | | | | | | | | | |
| S5M3/CCP | Early clinical experience, communication skills and professionalism | | | | | | | | | | |
| S5M4/P | Psychiatry | * | * | * | | | | | * | | |
| S5M5/E4SI | Elective (IV) | | | | | | | | | | |
| S5M5/E4MM | | * | | | | | | | | | |
| S6M1/O | Ophthalmology | * | | | | | | | | | |
| S6M2/S1 | Surgery (I) | | | | * | | * | | | | |
| S6M3/M1 | Medicine (I) | | | | * | | * | | | | |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| Code | Module | ILOS | | | | | | | | | |
|-------------|--|------|---|---|---|---|---|---|---|---|----|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| S6M4/E5ME | Elective (V) | | | | | | | | | | |
| S6M4/E5ER | | | | | | | | | | | |
| S7M1/S2M2 | Surgery (II) Medicine (II) | | | * | * | * | * | | | | |
| S7M2/P1 | Pediatrics (I) | | | * | * | * | | | | | |
| S7M3/OG1 | OGYN (I) | | | | * | | | | | | |
| S8M1/S3aM3a | Surgery (IIIa), Medicine(III a) | | | | * | * | * | | | | |
| S8M2/S3bM3b | Surgery (IIIb), Medicine(IIIb) | * | * | | | | | | | | |
| S8M3/P2 | Pediatrics (II) | | | | * | * | | | * | | |
| S8M4/OG2 | OGYN (II) | * | | | * | * | | * | | * | |
| S9M1/ENT | Ear, Nose and throat | | * | | | * | * | * | | | |
| S9M2/RL | Radiology and laboratory medicine | | | | | | | | | | |
| S9M3/D | Dermatology | | * | | * | * | * | | | | |
| S9M4/FM | Family medicine and integrated management of common illness | | | | * | | * | | | | |
| S9M5/E6CS | Elective (VI) | | | | | | | | | | |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| Code | Module | ILOS | | | | | | | | | |
|------------|---|------|---|---|---|---|---|---|---|---|----|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| S9M5/E6SP | Elective | * | | | | | | | | | |
| S10M1/CCS | Chest, Cardiovascular diseases, Cardiovascular surgery, anesthesia Pediatric, vascular, plastic surgeries | | | | * | | * | | | | |
| S10M2/IIE | Immunology, Intensive care, Medical surgical emergency, critical care and patient safety | * | | * | * | | | * | | * | |
| S10M3/E7MS | Elective (VII) | | | | * | | | | | | |
| S10M3/E7S | | * | * | | | | | | | | |

Competency Area III: The graduate as a professional.

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
العنوان: شارع الجيش، كفر الشيخ، جمهورية مصر العربية

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| Code | Module | ILOS | | | | | | | | |
|----------|--|------|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| S1M1/AH | Principles of anatomy, Embryology, general histology, and cell biology | * | | | | | | | | |
| S1M2/PP | Principles of physiology and pharmacology | | | | | | | | | |
| S1M3/B | Principles of biochemistry and basics of science | * | | | | | | | | |
| S1M4/MP | Principles of pathology, microbiology, immunology, and parasitology | * | | | | | | | | |
| S1M5/QM | Principles of Quality and Medical Education | | | | | | | | | |
| S1M6/HR | Human rights and anti-corruption practice | | | | | | | | | |
| S2M1/C | Cardiovascular system | | | | | * | | | | |
| S2M2/R | Respiratory system | | | | | | | | | |
| S2M3/IBL | Immune, blood, and lymphatic | | | | | | | | | |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| Code | Module | ILOS | | | | | | | | |
|------------|--|------|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| S2M4/M | Musculoskeletal system | | | | | * | | | | |
| S2M5/ME | Medical Ethics | | | | | | | | | |
| S2M6/E1IC | Elective (I) | | | | | | | | | |
| S2M6/E1CPR | | | | | | | | | | |
| S3M1/NM | Nutrition and metabolism | * | | | | | | | | |
| S3M2/E | Endocrine system | * | | | | * | | | | |
| S3M3/R | Reproductive | * | | | | * | | | | |
| S3M4/RU | Renal and urinary system | | | | * | | | | | * |
| S3M5/E2HM | Elective (II) | | | | | | | | | |
| S3M5/E2PM | | | | | | | | | | |
| S4M1/C | Central nervous system | | | | | | | | | |
| S4M2/S | Special senses | | | | | * | | | | |
| S4M3/G | Gastro-intestinal system | | | | | | | | | |
| S4M4/REB | Research, evidence-based and biostatistics | * | | | | | | | | |
| S4M5/E3AP | Elective (III) | | | | | | | | | |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| Code | Module | ILOS | | | | | | | | |
|-----------|---|------|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| S4M5/E3AN | | * | | | | | * | | | |
| S5M1/CP | Community medicine and public health | | | | | * | | | * | |
| S5M2/FT | Forensic & toxicology | | | | | * | | | | |
| S5M3/CCP | Early clinical experience, communication skills and professionalism | * | | * | * | * | * | * | * | |
| S5M4/P | Psychiatry | * | * | * | * | * | * | | | |
| S5M5/E4SI | Elective (IV) | * | | | | * | | | | |
| S5M5/E4MM | | | | | | | | | | |
| S6M1/O | Ophthalmology | * | | | | * | * | | | |
| S6M2/S1 | Surgery (I) | | | | | * | | | * | |
| S6M3/M1 | Medicine (I) | | | | | * | | | | |
| S6M4/E5ME | Elective (V) | | | | | | | | | |
| S6M4/E5ER | | | | | | | | | | * |
| S7M1/S2M2 | Surgery (II) Medicine (II) | * | | | * | * | | | * | |
| S7M2/P1 | Pediatrics (I) | * | | | * | * | | | * | |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| Code | Module | ILOS | | | | | | | | |
|-------------|--|------|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| S7M3/OG1 | OGYN (I) | * | | | | | | | | |
| S8M1/S3aM3a | Surgery (IIIa), Medicine(III a) | * | | | | * | | | * | |
| S8M2/S3bM3b | Surgery (IIIb), Medicine(IIIb) | * | * | * | * | * | * | | | |
| S8M3/P2 | Pediatrics (II) | * | | | * | * | * | | * | * |
| S8M4/OG2 | OGYN (II) | * | | | * | * | | | * | |
| S9M1/ENT | Ear, Nose and throat | | * | | * | * | * | | | |
| S9M2/RL | Radiology and laboratory medicine | | | | | | | | | |
| S9M3/D | Dermatology | * | | * | * | * | | | | |
| S9M4/FM | Family medicine and integrated management of common illness | | | | | * | | | * | |
| S9M5/E6CS | Elective (VI) | | | | | * | * | * | | |
| S9M5/E6SP | Elective | | | | | | | | | |
| S9M5/E6 | Elective (sportphysiology) (VI) | * | | | | * | | | | |
| S10M1/CCS | Chest, Cardiovascular diseases, | | | | | * | | | | |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| Code | Module | ILOS | | | | | | | | |
|------------|--|------|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | Cardiovascular surgery, anesthesia Pediatric, vascular, plastic surgeries | | | | | | | | | |
| S10M2/IIE | Immunology, Intensive care, Medical surgical emergency, critical care and patient safety | * | | * | | * | | | * | |
| S10M3/E7MS | Elective (VII) | * | | | | | | | | |
| S10M3/E7S | | | | | * | * | | | | |

Competency Area IV: The graduate as a scholar and scientist.

| Code | Module | ILOS | | | | | | | | | | |
|---------|--|------|---|---|---|---|---|---|---|---|----|----|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| S1M1/AH | Principles of anatomy, Embryology, general histology, and cell biology | * | | * | | | | | * | | | |
| S1M2/PP | Principles of physiology and pharmacology | * | * | | | | | * | * | | | |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| Code | Module | ILOS | | | | | | | | | | |
|------------|---|------|---|---|---|---|---|---|---|---|----|----|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| S1M3/B | Principles of biochemistry and basics of science | | * | | | * | | | * | | | |
| S1M4/MP | Principles of pathology, microbiology, immunology, and parasitology | | | | | * | * | | | | | |
| S1M5/QM | Principles of Quality and Medical Education | | | | | | | | | | | |
| S1M6/HR | Human rights and anti-corruption practice | | | | | | | | | | | |
| S2M1/C | Cardiovascular system | * | | | | * | * | * | | | | |
| S2M2/R | Respiratory system | * | * | | | * | * | * | | | | |
| S2M3/IBL | Immune, blood, and lymphatic | * | * | | | * | * | * | | | | |
| S2M4/M | Musculoskeletal system | * | | | | * | | | | | | |
| S2M5/ME | Medical Ethics | | | | | | | | | | | |
| S2M6/E1IC | Elective (I) | | | | | | | | | | | |
| S2M6/E1CPR | | | | | | | | | | | | |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| Code | Module | ILOS | | | | | | | | | | |
|-----------|--|------|---|---|---|---|---|---|---|---|----|----|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| S3M1/NM | Nutrition and metabolism | * | * | | | * | * | * | * | | | |
| S3M2/E | Endocrine system | * | | | | * | | * | | | | |
| S3M3/R | Reproductive | * | | | | * | | * | | | | |
| S3M4/RU | Renal and urinary system | * | * | | | * | * | * | * | | | |
| S3M5/E2HM | Elective (II) | | | | | * | | | * | * | | * |
| S3M5/E2PM | | | * | | | * | | | * | | | |
| S4M1/C | Central nervous system | | | | | | | * | | | | |
| S4M2/S | Special senses | * | | | | * | * | * | | | | |
| S4M3/G | Gastro-intestinal system | * | | | | * | * | * | | | | |
| S4M4/REB | Research, evidence-based and biostatistics | | | | | | | | | | | |
| S4M5/E3AP | Elective (III) | | | | | | | | | | | |
| S4M5/E3AN | | | | | | | | | | | | |
| S5M1/CP | Community medicine and public health | | | | | * | | | * | | | |
| S5M2/FT | Forensic & toxicology | | | | | | | | | | | |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| Code | Module | ILOS | | | | | | | | | | | |
|-------------|---|------|---|---|---|---|---|---|---|---|----|----|--|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | |
| S5M3/CCP | Early clinical experience, communication skills and professionalism | | | | | | | | | | | | |
| S5M4/P | Psychiatry | | | * | * | | | * | | | | | |
| S5M5/E4SI | Elective (IV) | | | | | | | | | | * | | |
| S5M5/E4MM | | | * | | | * | | | | | | | |
| S6M1/O | Ophthalmology | | * | | | * | * | | | | | | |
| S6M2/S1 | Surgery (I) | | | | | * | | | * | | | | |
| S6M3/M1 | Medicine (I) | | | | | * | | | * | | | | |
| S6M4/E5ME | Elective (V) | | | | | | | | | | | | |
| S6M4/E5ER | | | | | | | | | | | | | |
| S7M1/S2M2 | Surgery (II) Medicine (II) | * | | | | * | * | | * | | | | |
| S7M2/P1 | Pediatrics (I) | | | | | * | * | | | | | | |
| S7M3/OG1 | OGYN (I) | * | * | | | | | * | | | | | |
| S8M1/S3aM3a | Surgery (IIIa), Medicine(III a) | | | | | * | | | | | | | |
| S8M2/S3bM3b | Surgery (IIIb), Medicine(IIIb) | * | | * | | * | | | | | | | |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| Code | Module | ILOS | | | | | | | | | | |
|-----------|---|------|---|---|---|---|---|---|---|---|----|----|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| S8M3/P2 | Pediatrics (II) | * | | | | | * | | * | | | |
| S8M4/OG2 | OGYN (II) | * | | * | | * | * | * | * | | | |
| S9M1/ENT | Ear, Nose and throat | * | | | | * | * | | | | | |
| S9M2/RL | Radiology and laboratory medicine | | | | | | | | * | | | |
| S9M3/D | Dermatology | * | | | | * | * | * | * | | | |
| S9M4/FM | Family medicine and integrated management of common illness | | | * | | | | | * | | | |
| S9M5/E6CS | Elective (VI) Elective | | | | * | | | | | | | |
| S9M5/E6SP | | | | | | | | | | | | |
| S10M1/CCS | Chest, Cardiovascular diseases, Cardiovascular surgery, anesthesia Pediatric, vascular, plastic surgeries | * | | | | * | | | * | | | |
| S10M2/IE | Immunology, Intensive care, Medical | * | | * | | * | | | | | | |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| Code | Module | ILOS | | | | | | | | | | | |
|------------|--|------|---|---|---|---|---|---|---|---|----|----|--|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | |
| | surgical emergency, critical care and patient safety | | | | | | | | | | | | |
| S10M3/E7MS | Elective (VII) | | | | | | | | | | | | |
| S10M3/E7S | | * | | | | * | | | | | | | |

Competency Area V: The graduate as a member of the health team and the health care system.

| Code | Module | ILOS | | | | | | | | | | | |
|---------|--|------|---|---|---|---|---|---|---|---|----|----|----|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| S1M1/AH | Principles of anatomy, Embryology, general histology, and cell biology | | | * | | | | | | | | | |
| S1M2/PP | Principles of physiology and pharmacology | | | * | | | * | | | | | | |
| S1M3/B | Principles of biochemistry and basics of science | | | * | | | | | | | | | |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| Code | Module | ILOS | | | | | | | | | | | |
|------------|---|------|---|---|---|---|---|---|---|---|----|----|----|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| S1M4/MP | Principles of pathology, microbiology, immunology, and parasitology | | | * | | | | | | | | | |
| S1M5/QM | Principles of Quality and Medical Education | | | | | | | | | | | * | |
| S1M6/HR | Human rights and anti-corruption Practice | | | | | | | | | | | | |
| S2M1/C | Cardiovascular system | | * | * | | | * | | | | | | |
| S2M2/R | Respiratory system | | * | * | | | * | | | | | | |
| S2M3/IBL | Immune, blood, and lymphatic | | | * | | | | | | | | | |
| S2M4/M | Musculoskeletal system | | * | * | | | * | | | | | | |
| S2M5/ME | Medical Ethics | | | | | | | | | | | | |
| S2M6/E1IC | Elective (I) | | | | | | | | | | | | |
| S2M6/E1CPR | | | | | | | | | | | | | |
| S3M1/NM | Nutrition and metabolism | | * | | * | * | * | | | | | | |
| S3M2/E | Endocrine system | | * | * | | | | | | | | | |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| Code | Module | ILOS | | | | | | | | | | | |
|-----------|---|------|---|---|---|---|---|---|---|---|----|----|----|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| S3M3/R | Reproductive | | * | * | | | | | | | | | |
| S3M4/RU | Renal and urinary system | | | | | * | | * | | | | | |
| S3M5/E2HM | Elective (II) | | | | | | | | | | | | |
| S3M5/E2PM | | | | * | | | | | | | | | |
| S4M1/C | Central nervous system | | * | * | | | | * | | | | | |
| S4M2/S | Special senses | | * | * | | | | * | | | | | |
| S4M3/G | Gastro-intestinal system | | * | * | | | | * | | | | | |
| S4M4/REB | Research, evidence-based and biostatistics | | | * | | | | | * | | | | |
| S4M5/E3AP | Elective (III) | | * | * | | | | * | | | | | |
| S4M5/E3AN | | | * | | * | | | | | | | | |
| S5M1/CP | Community medicine and public health | | * | | | | | | | | | | |
| S5M2/FT | Forensic & toxicology | | * | * | | | | | | | | | |
| S5M3/CCP | Early clinical experience, communication skills and professionalism | | * | * | * | * | * | * | * | * | * | * | * |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| Code | Module | ILOS | | | | | | | | | | | |
|-------------|------------------------------------|------|---|---|---|---|---|---|---|---|----|----|----|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| S5M4/P | Psychiatry | | * | | | | | | | | | | |
| S5M5/E4SI | Elective (IV) | | * | | * | | | | | | | | |
| S5M5/E4MM | | | | * | | | | | | | | | |
| S6M1/O | Ophthalmology | | | * | | | | | | | | | |
| S6M2/S1 | Surgery (I) | | * | | | | | | | | | | |
| S6M3/M1 | Medicine (I) | | * | | | | | | | | | | |
| S6M4/E5ME | Elective (V) | | | | | | | | | | | | |
| S6M4/E5ER | | | | | | | | | | | | | |
| S7M1/S2M2 | Surgery (II) Medicine (II) | | * | * | | | | | | | | | |
| S7M2/P1 | Pediatrics (I) | | | * | | | | | | | | | |
| S7M3/OG1 | OGYN (I) | * | | * | | | * | | | | | | |
| S8M1/S3aM3a | Surgery (IIIa), Medicine(III a) | | * | | | | | | | | | | |
| S8M2/S3bM3b | Surgery (IIIb), Medicine(IIIb) | | * | | | | | | | * | | | |
| S8M3/P2 | Pediatrics (II) | * | * | * | | | | | | | | | |
| S8M4/OG2 | OGYN (II) | * | * | * | | * | | | | | | | |
| S9M1/ENT | Ear, Nose and throat | | * | * | | | | | | | | | |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| Code | Module | ILOS | | | | | | | | | | | |
|------------|---|------|---|---|---|---|---|---|---|---|----|----|----|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| S9M2/RL | Radiology and laboratory medicine | | * | | | | | | | | | | |
| S9M3/D | Dermatology | | | * | | | | | | | | | |
| S9M4/FM | Family medicine and integrated management of common illness | | * | | | | | | | | | | |
| S9M5/E6CS | Elective (VI) Elective | | * | * | * | * | * | * | | * | * | | |
| S9M5/E6SP | | | * | | | | | | | | | | |
| S10M1/CCS | Chest, Cardiovascular diseases, Cardiovascular surgery, anesthesia Pediatric, vascular, plastic surgeries | | * | | | | | | | | | | |
| S10M2/IIE | Immunology, Intensive care, Medical surgical emergency, critical care and patient safety | | * | | | | | | | | | | |
| S10M3/E7MS | Elective (VII) | | | * | | | | * | | | | | |
| S10M3/E7S | | | | | | | | | | | | | |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

Competency Area VI: The graduate as a lifelong learner and researcher.

| Code | Module | ILOS | | | | | | | | | | |
|---------|--|------|---|---|---|---|---|---|---|---|----|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| S1M1/AH | Principles of anatomy, Embryology, general histology, and cell biology | | | * | | | * | | | | | |
| S1M2/PP | Principles of physiology and pharmacology | | | | * | | * | | * | | | * |
| S1M3/B | Principles of biochemistry and basics of science | | | * | | | * | | | | | |
| S1M4/MP | Principles of pathology, microbiology, immunology, and parasitology | | | * | | | * | | | | | |

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رسالة الكلية: تلنزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
العنوان: شارع الجيش، كفر الشيخ، جمهورية مصر العربية

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| Code | Module | ILOS | | | | | | | | | |
|------------|---|------|---|---|---|---|---|---|---|---|----|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| S1M5/QM | Principles of Quality and Medical Education | | * | * | | * | * | | | | |
| S1M6/HR | Human rights and anti-corruption practice | | | | | | | | | | |
| S2M1/C | Cardiovascular system | | * | | * | * | | | | | |
| S2M2/R | Respiratory system | | * | | * | * | | | | | |
| S2M3/IBL | Immune, blood, and lymphatic | | * | * | | | | | | | |
| S2M4/M | Musculoskeletal system | | * | | * | * | | | | | |
| S2M5/ME | Medical Ethics | | | | | | | | | | |
| S2M6/E1IC | Elective (I) | | | | | | | | | | |
| S2M6/E1CPR | | | | | | | | | | | |
| S3M1/NM | Nutrition and metabolism | | * | * | | | * | | | | |
| S3M2/E | Endocrine system | | * | * | | | | | | | |
| S3M3/R | Reproductive | | * | * | | | | | | | |
| S3M4/RU | Renal and urinary system | | * | * | * | * | | | | | |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| Code | Module | ILOS | | | | | | | | | |
|-----------|---|------|---|---|---|---|---|---|---|---|----|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| S3M5/E2HM | Elective (II) | | | | | | | | | | |
| S3M5/E2PM | | | | * | | | * | | | | |
| S4M1/C | Central nervous system | | | * | | | * | | | | |
| S4M2/S | Special senses | | * | | * | * | | | | | |
| S4M3/G | Gastro-intestinal system | | * | * | | | * | | | | |
| S4M4/REB | Research, evidence-based and biostatistics | | | * | | | * | | | | |
| S4M5/E3AP | Elective (III) | | * | | * | * | | | | | |
| S4M5/E3AN | | | * | * | | | | | | | |
| S5M1/CP | Community medicine and public health | | | * | | | | | | | |
| S5M2/FT | Forensic & toxicology | | | * | | | | | | | |
| S5M3/CCP | Early clinical experience, communication skills and professionalism | * | | | | | | | * | | |
| S5M4/P | Psychiatry | | * | * | | | | | | | |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| Code | Module | ILOS | | | | | | | | | |
|-------------|------------------------------------|------|---|---|---|---|---|---|---|---|----|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| S5M5/E4SI | Elective (IV) | | | | | | | | | | |
| S5M5/E4MM | | | | * | | | * | | | | |
| S6M1/O | Ophthalmology | | | * | | | * | | | | |
| S6M2/S1 | Surgery (I) | | | * | | | * | | | | |
| S6M3/M1 | Medicine (I) | | | * | | | * | | | | |
| S6M4/E5ME | Elective (V) | | | * | | * | * | | | | |
| S6M4/E5ER | | | | | | | | * | * | * | |
| S7M1/S2M2 | Surgery (II) Medicine (II) | | | * | | | * | | | | |
| S7M2/P1 | Pediatrics (I) | | | * | | | * | | | | |
| S7M3/OG1 | OGYN (I) | | | | | | * | | | | |
| S8M1/S3aM3a | Surgery (IIIa), Medicine(III a) | | | * | | | | | | | |
| S8M2/S3bM3b | Surgery (IIIb), Medicine(IIIb) | | * | * | | | | | | | |
| S8M3/P2 | Pediatrics (II) | | | * | | | * | | | | |
| S8M4/OG2 | OGYN (II) | | | * | | | | * | | | |
| S9M1/ENT | Ear, Nose and throat | | | * | | | * | | | | |

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| Code | Module | ILOS | | | | | | | | | | | |
|-----------|---|------|---|---|---|---|---|---|---|---|----|--|--|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | | |
| S9M2/RL | Radiology and laboratory medicine | | | | | | | | | | | | |
| S9M3/D | Dermatology | | | * | | | * | | | | | | |
| S9M4/FM | Family medicine and Integrated management of common illness | | | * | | | | | | | | | |
| S9M5/E6CS | Elective (VI) Elective | * | | | | | | | | | | | |
| S9M5/E6SP | | | * | | | | | | | | | | |
| S10M1/CCS | Chest, Cardiovascular diseases, Cardiovascular surgery, anesthesia Pediatric, vascular, plastic surgeries | | | * | | | * | | | | | | |
| S10M2/IIE | Immunology, Intensive care, Medical, surgical emergency, critical | | | * | | | * | | | | | | |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| Code | Module | ILOS | | | | | | | | | |
|------------|-------------------------|------|---|---|---|---|---|---|---|---|----|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | care and patient safety | | | | | | | | | | |
| S10M3/E7MS | Elective (VII) | | | | | | * | | | | |
| S10M3/E7S | | | | | | | | | | | |



جامعة كفر الشيخ - كلية الطب البشري
وحدة ضمان الجودة



توصيف مقررات البرنامج التكاملي (لائحة ٢٠٢٠)

عميد الكلية
أ.د/ طه أحمد اسماعيل

الإعتمادات:

مدير وحدة ضمان الجودة
أ.د/ هاني حسين محمد

YEAR 1- 1ST SEMESTER

| النهاية العظمى | الدرجات | | | الحزم الدراسية (Modules) | | | |
|-------------------|------------------|--------------------------|---------------------------|---|----------------|-----------------|-----------------------------|
| | التحريري % 40 | العملي (OSPE % 30 | اعمال السنة 30 % | Name | Weeks | Credit hours | |
| | | | | Preparatory week | 1 | | المستوى الأول – الفصل الأول |
| 100 | 40 | 30 | 30 | Principles of anatomy, embryology, general histology, and cell biology | 4 | 4 | |
| 100 | 40 | 30 | 30 | Principles of physiology and pharmacology | 4 | 4 | |
| 100 | 40 | 30 | 30 | Principles of biochemistry and basics of science | 4 | 4 | |
| 100 | 40 | 30 | 30 | Principles of pathology, microbiology, immunology, and parasitology | 4 | 4 | |
| 25 | 25 | - | - | Principles of Quality and Medical Education | دراسه طويله | 1 | |
| متطلب جامعه | 100 | - | - | حقوق الإنسان ومكافحه الفساد | دراسه طويله | 1 | |
| 400 | | | | | 17 | 18 | |

YEAR 1- 1ST SEMESTER MODULE (1)

PRINCIPLE OF ANATOMY, EMBRYOLOGY, GENERAL HISTOLOGY, AND CELL BIOLOGY

1- Basic information:

Course specifications of:

- **Program on which the Module is given** Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- **Module title:** Principle of anatomy, embryology and histology.
- **Percent of participation:** (50% anatomy and 50% histology).
- **Academic year/level:** 1st level /1st semester.
- **Code:** S1M1/AH
- **Credit hours for the module:** 4
- **Study weeks:** (4)
- **Departments offering the Module:** anatomy and histology departments.

Teaching Departments

| | lectures | Practical | CBL | SDL |
|------------------|-----------------|------------------|------------|------------|
| Anatomy | 20 | 8 | 1 | 1 |
| Histology | 20 | 8 | 1 | 1 |
| Total | 40 | 16 | 2 | 2 |

2. Overall aim:

At the end of the Module the students will be able to:

- Acquire basic scientific knowledge concerning the normal gross structure of the different human body parts and organs and the normal growth and development of the human embryo.

- Develop appropriate ethical and professional behavior necessary for dealing with cadavers.
- Help students to correlate anatomical facts with their clinical applications (Applied anatomy & Problem Solving)
- Inform students the different histological tools and techniques.
- Teach the students the basic histological structures of different cells and tissues of human body, preparing them for studying organs and systems.
- Make correlation between function and structure of various tissues and their clinical significance.

3. Learning outcomes (LOs)

By the end of this module the student will be able to:

Competency Area I: The graduate as a health care provider

1.8 Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand.

1.8.1 Explain the common clinical problems based on relevant anatomical data (Applied anatomy).

1.8.2 Explain the common clinical problems on the basis of relevant histological data (Applied histology).

1.9 Retrieve, analyze, and evaluate relevant and current data from literature, using information technologies and library resources, in order to help solve a clinical problem based on evidence (EBM).

1.9.1 Analyze and compare anatomical data and current data from literature.

1.9.2 Analyze and compare histological data and current data from literature.

1.9.3 Search for relevant information which helps him in solving clinical problems (Web-based learning, Self-learning and PBL).

Competency Area III: The graduated as a professional

3.1 Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.

3.1.1 Show respect and behave professionally with cadavers in the dissecting room.

3.1.2 Show respect and behave professionally in the Practical histology classes.

Competency Area IV: The graduate as a scholar and scientist

4.1 Describe the normal structure of the body and its major organ systems and explain their functions.

4.1.1 Identify and demonstrate the different body parts and organs (OSPE).

4.1.2 Describe the normal structure of the body and its major organs.

4.1.3 Simulate and recognize normal anatomical position and terms (directions and movements).

4.1.4 Define and describe the histological characteristics of normal cells.

4.1.5 Differentiate between normal and abnormal karyotyping.

4.1.6 Define and discuss the basic histological tissues of the body (General histology)

4.3 Recognize and describe main developmental changes in humans and the effect of growth, development and aging on the individual and his family.

4.3.1 Recognize the normal growth and development of the human embryo (general embryology).

4.3.2 Recognize the normal development and origin of human cells (general histology).

4.8 Demonstrate basic sciences specific practical skills and procedures relevant to future practice, recognizing their scientific basis, and interpret common diagnostic modalities, including: imaging, electrocardiograms, laboratory assays, pathologic studies, and functional assessment tests.

4.8.1 Label diagrams of different parts and organs in the body.

4.8.2 Draw diagrams of different tissues in the body.

Competency Area V: The graduate as a member of the health team and system

5.3 Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports collaborative work.

5.3.1 Implement collaborative teamwork during small group teaching (SDL).

Competency Area VI: The graduate as a lifelong learner and researcher

6.3 Identify opportunities and use various resources for learning.

6.3.1 Interacts positively with colleagues, peers and professors on web pages.

6.3.2 Use various resources in collecting information (Web-based learning, SDL).

6.6 Effectively manage learning time and resources and set priorities (PBL and Assignment)

6.6.1 Achieve and perform the required duties from him on time (assignments).

4 - Module Contents

| Topics | Lectures | Lab. |
|--|----------|------|
| General anatomy (bone) | 2h | 6h |
| Fascia &Cartilage | 2h | - |
| Joint | 1h | 2h |
| Anatomy of the blood vessels and lymphatic | 1h | - |
| Boundaries and contents of the triangles of the neck | 1h | 2h |
| Muscular system | 2h | - |
| Nervous system | 2h | - |
| Skull, scalp and face | 1h | 2h |
| General embryology (spermatogenesis and oogenesis) | 1 h | 1 h |
| General embryology (ovarian and menstrual cycle) | 1 h | 1h |
| General embryology (chromosomal abnormalities) | 1 h | 1h |
| General embryology (development in the first week) | 1h | 1h |
| General embryology (development in the second week) | 1h | - |
| General embryology (development in the third week) | 1h | - |
| General embryology (development in the fourth week) | 1h | - |
| Fetal membranes | 1h | - |
| Introduction and micro techniques | 2h | 2h |

| | | |
|---|-----------|-----------|
| <p>Cytology</p> <p>Describe the L.M & E.M. structure of the cytoplasm including:</p> <ul style="list-style-type: none"> · Organelles (Cell coat, cell membrane, mitochondria, Golgi complex, RER& SER, lysosomes, centriole, cilium). · Inclusions (lipid droplets, glycogen granules ...) · Cytosol <p>Describe the L.M & E.M. structure of the nucleus including:</p> <ul style="list-style-type: none"> · Nuclear membrane, · chromatin, · nucleolus · Nuclear matrix. | 8h | 4h |
| <p>Cytogenetics</p> <p>a) classification of chromosomes Structure of chromosomes b) Sex chromatin c) Abnormalities of cell division</p> <p>Causes of chromosomal aberrations</p> | 2h | 1h |
| <p>General characteristics of epithelium & its types</p> <p>Types of simple epithelium (structure & sites)</p> | 2h | 2h |
| <p>Types of stratified epithelium (structure & sites)</p> <p>Glandular epithelium with reference to sites</p> | 1h | 1h |
| <p>Connective Tissue</p> <p>General characteristics & Types of C.T. Cells of C.T. proper (LM, EM & function)</p> <p>a. Cells of C.T. proper (continuation) Fibers of C.T. b. Ground substance c. Types of C.T. proper with reference to sites General functions of C.T. proper d. Relate the structure of each connective tissue to its function. e. Draw sections for different types of connective tissue.</p> | 5h | 4h |

5- Teaching and learning methods

| | | | | | |
|--------|---------|-----------|----------|----------|----------------------|
| Course | Lecture | Web based | Tutorial | Workshop | Small group teaching |
|--------|---------|-----------|----------|----------|----------------------|

| | | L | | Media | Lab | Computer | CBL | SDL |
|------------------------|---|---|---|-------|-----|----------|-----|-----|
| Principle of anatomy | √ | √ | √ | | √ | | | √ |
| Principle of histology | √ | √ | √ | √ | √ | | | √ |

6 - Student evaluation

6-1 COURSE POLICIES

6.1.1. Attendance:

Attendance is mandatory at all sessions. Due to the course emphasis in developing skills and not only knowledge, but the students' participation in all course activities is also critical. Students who expect to be late for a mandatory class, lab, or small group session for any reason must contact the course director before the start of class. Unexcused absences demonstrate unprofessional behavior by the student.

6-1-2 Remediation of Unsatisfactory Performance in Course

A student who performs below the satisfactory level will be notified to Course Director for the purpose of developing a formal remediation plan which will be established by the course director and the student.

6-2 Course assessment:

Formative and summative assessment: they include:

1. Assignments, Quizzes, logbook.
2. Written exams: MCQs, ultra-short essay and case studies
3. Practical skills assessment: Objective Structured Practical Exam (OSPE).

6-3 course assessment schedule and grading:

Grades are obtained based on the following complementary assessments:

| Assessment Method | Date | Description | ILOs/Competencies assessed | % of Total |
|--|----------------|--|--|------------|
| 1. Continuous assessments (Portfolio) | Through module | <ul style="list-style-type: none"> • Quizzes • Log book • Assignments | 1.8.1, 1.9.2, 3.1.1,3.1.2,5.3.1,6.3.1, 6.3.2 , 6.6.1 | |
| 2. end module | End module | MCQ | 1.9.1,4.1.2,4.8.1 | 30% |

| | | | | |
|------------------------------|--------------|-------------------|-----------------------------------|------|
| written exam | | | | |
| 3- Final written exam | End semester | MCQ & ultra-short | 1.8.1,1.9.1,4.1.2,4.8.1 | 40% |
| 4- Practical exam | End module | OSPE | 1.8.1,1.9.1,4.1.1,4.8.1, 4.8.2 | 30% |
| Total | | | | 100% |

7. Facilities required

- Lecture rooms with data show and computer facilities
- Anatomy practical rooms & Anatomy Museum
- Computer lab equipped with internet connection.
- A wall board.
- Library Facilities
- Histology practical rooms and microscope labs

8- List of references

Mandatory Textbook

- Textbook principles of Anatomy, of Anatomy department-Kafrelsheikh University
- Practical book of Anatomy department- Kafrelsheikh University
- Logbook of Anatomy department- Kafrelsheikh University
- Textbook of of Histology department-Kafr Elsheikh University
- Practical book of Histology department-Kafr Elsheikh University

Recommended reference textbooks:

- Clinical Anatomy for Medical students, Richard S. Snell, 2010.
- Gray's Anatomy for Students: With Student Consult Online Access, 2010.
- Grant's Atlas of Anatomy, Anne M.R. Agur, and Arthur F. Dalley, 2005
- Wheater's functional histology: A Text and Colour Atlas (FUNCTIONAL HISTOLOGY (WHEATER'S)) 6th Edition, 2013.

2. Electronic Materials, Web Sites etc.

- <http://sprojects.mmi.mcgill.ca/embryology/>
- http://www.indiana.edu/~anat550/embryo_main/index.html

- <http://www.rsrevision.com/Alevel/ethics/embryology/index.htm>
- <http://www.med.upenn.edu/meded/public/berp/>
- <http://www.histologyguide.com>
- <http://www.histology-world.com>

A) Summary of topics matched with competencies' domains ILOs in the course

| Topics of the course | Health care provider | Professionalism | Scholar and scientist | Health team & system | LLL & researcher |
|--|----------------------|-----------------|-----------------------|----------------------|------------------|
| Lectures | | | | | |
| General anatomy (bone) | √ | √ | √ | | √ |
| Fascia & Cartilage | √ | √ | √ | | √ |
| Joint | √ | √ | √ | | √ |
| Anatomy of the blood vessels and lymphatic | | | | | |
| Skin, superficial and deep fasciae of the neck | √ | | √ | | √ |
| Boundaries and contents of the triangles of the neck | √ | | √ | | √ |
| Muscular system | √ | | √ | | √ |
| Nervous system | √ | | √ | | √ |
| Skull, scalp and face | √ | | √ | | √ |
| General embryology (spermatogenesis and oogenesis) | √ | | √ | | √ |
| General embryology (ovarian and menstrual cycle) | √ | | √ | | √ |
| General embryology (chromosomal abnormalities) | √ | | √ | | √ |
| General embryology (development in the first week) | √ | | √ | | √ |
| General embryology | √ | | √ | | √ |

| | | | | | |
|--|---|--|---|--|---|
| (development in the second week | | | | | |
| General embryology | √ | | √ | | √ |
| (development in the third week) | | | | | |
| General embryology | √ | | √ | | √ |
| (development in the fourth week | | | | | |
| General embryology (fetal membranes) | √ | | √ | | √ |
| Cytology | √ | | √ | | √ |
| Cytogenetics | √ | | √ | | √ |
| <ul style="list-style-type: none"> a) classification of chromosomes Structure of chromosomes b) Sex chromatin c) Abnormalities of cell division Causes of chromosomal aberrations | | | | | |
| General characteristics of epithelium & its types Types of simple epithelium (structure & sites) | √ | | √ | | √ |
| Types of stratified epithelium (structure & sites) Glandular epithelium with reference to sites | √ | | √ | | √ |
| Connective Tissue General characteristics & Types of C.T. Cells of C.T. proper (LM, EM & function) <ul style="list-style-type: none"> f. Cells of C.T. proper (continuation) Fibers of C.T. g. Ground substance Types of C.T. proper with reference to sites General functions of C.T. proper | √ | | √ | | √ |
| | | | | | |
| Practical | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| bone and joints | √ | √ | √ | √ | √ |
| External features of the different views of the skull | √ | √ | √ | √ | √ |
| External and internal features of the mandible | √ | √ | √ | √ | √ |
| Scalp and face | √ | √ | √ | √ | √ |
| Cervical vertebrae | √ | √ | √ | √ | √ |
| posterior and anterior triangles of the neck | √ | √ | √ | √ | √ |
| Anatomy of the upper limb | √ | √ | √ | √ | √ |
| Anatomy of the lower limb | √ | √ | √ | √ | √ |
| micro techniques, Cytology and Cytogenetics. (projector slides) | √ | √ | √ | √ | √ |
| Epithelial tissue. (projector slides and glass slides) | √ | √ | √ | √ | √ |
| Connective Tissue. (projector slides and glass slides) | √ | √ | √ | √ | √ |
| Self-directed learning | | | | | |
| Groups of the students | | √ | | √ | √ |

B) Course – program ILOs Matrix

| Course ILOs | | Health care provider | | professionalism | Scholar and scientist | | | Health team & system | LLL & researcher | |
|--------------|-----|----------------------|-----|-----------------|-----------------------|-----|-----|----------------------|------------------|-----|
| | | 1.8 | 1.9 | 3.1 | 4.1 | 4.3 | 4.8 | 5.3 | 6.3 | 6.6 |
| Program ILOs | | | | | | | | | | |
| Competency 1 | 1.1 | | | | | | | | | |
| | 1.2 | | | | | | | | | |
| | 1.3 | | | | | | | | | |
| | 1.4 | | | | | | | | | |
| | 1.5 | | | | | | | | | |
| | 1.6 | | | | | | | | | |
| | 1.7 | | | | | | | | | |
| | 1.8 | * | | | | | | | | |
| | 1.9 | | * | | | | | | | |

| Course ILOs | | Health care provider | | professionalism | Scholar and scientist | | | Health team & system | LLL & researcher | |
|--------------|------|----------------------|-----|-----------------|-----------------------|-----|-----|----------------------|------------------|-----|
| | | 1.8 | 1.9 | 3.1 | 4.1 | 4.3 | 4.8 | 5.3 | 6.3 | 6.6 |
| Program ILOs | | | | | | | | | | |
| | 5.10 | | | | | | | | | |
| | 5.11 | | | | | | | | | |
| | 5.12 | | | | | | | | | |
| Competency 6 | 6.1 | | | | | | | | | |
| | 6.2 | | | | | | | | | |
| | 6.3 | | | | | | | | * | |
| | 6.4 | | | | | | | | | |
| | 6.5 | | | | | | | | | |
| | 6.6 | | | | | | | | | * |
| | 6.7 | | | | | | | | | |
| | 6.8 | | | | | | | | | |
| | 6.9 | | | | | | | | | |
| | 6.10 | | | | | | | | | |
| | | | | | | | | | | |

YEAR 1, 1ST SEMESTER MODULE (2) PRINCIPLES OF PHYSIOLOGY AND PHARMACOLOGY MODULE

1- Basic information:

- **Program on which the Module is given:** Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- **Module title:** Principles of Physiology and Pharmacology
- **Percent participation:** (50% Physiology and 50% Pharmacology).
- **Academic year/level:** 1 st level /1st semester.
- **Code:** S1M2/ PP

- **Credit hours for the Module:** 4
- **Study weeks:** 4
- **Departments offering the Module:** Physiology and Clinical Pharmacology departments.

2- Overall aim:

At the end of the course the students will be able to:

- Acquire basic scientific knowledge concerning the pharmacological basis of therapy.
- Acquire an appropriate functional background of cells, tissues & systems.
- Explore in detail the functions of the autonomic, the neuromuscular, as well as their integration to achieve homeostasis.
- Develop the basic scientific research skills as well as effective communication and teamwork attitude.

3- Learning outcomes (LOs)

By the end of this course the student will be able to:

Competency Area I: The graduate as a health care provider

1.8 Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand.

1.8.1. Choose the proper drug/s for the proper clinical situation in proper dosage.

1.9 Retrieve, analyze, and evaluate relevant and current data from literature, using information technologies and library resources, in order to help solve a clinical problem based on evidence (EBM).

1.9.1 Analyze and compare treatment guidelines from literature.

1.9.2 Search for relevant information which helps him in solving clinical problems (Web-based learning, Self-learning and CBL).

1.16. Apply the appropriate pharmacological & nonpharmacological approaches to alleviate pain and provide palliative care for seriously ill people, aiming to relieve their suffering and improve their quality of life.

1.16.1. List drugs used in managing patients in life threatening situations and the drugs used in pre- and post-operative care in general & special situations.

Competency Area IV: The graduate as a scholar and scientist

4.1 Describe the normal structure of the body and its major organ systems and explain their functions.

4.1.1 Classify autonomic nervous system according to its origin, relay and function.

4.1.2 Discuss the function of sympathetic and parasympathetic nervous systems to different body systems

4.1.3 Point out the basis of excitability (membrane potentials) in all living cells especially in nerve and muscle cells.

4.1.4 Define Action potential.

4.1.5 Understand the mechanism, ionic bases and methods of conduction of action potential.

4.1.6 Summarize factors affecting nerve excitability and how to produce nerve block.

4.1.7 Know the physiological anatomy, mechanism and factor affecting neuromuscular transmission.

4.1.8 Differentiate types of reflex action, reflex arc and autonomic ganglia.

4.2 Explain the molecular, biochemical, and cellular mechanisms Important in maintaining the body's homeostasis.

4.2.1 Discuss homeostasis, positive and negative feedback mechanism.

4.2.2 Understand body fluids and different methods of transport.

4.7. Describe drug actions: therapeutics and pharmacokinetics; side effects and interactions, including multiple treatments, long term conditions and non-prescribed medication; and effects on the population.

4.7.1 Define basic terms in pharmacology and recall their clinical significance.

4.7.2 Describe the different signaling mechanisms for drug receptor interaction.

4.7.3 Discuss prototypes drugs that act to stimulate or block synthesis, storage, release and receptor binding of norepinephrine and acetylcholine.

4.7.4 Discuss autacoids and drugs affecting their action.

4.7.5 Classify antimicrobial according to their mechanism of action.

4.7.6 Discuss choice of antimicrobial for gram positive, gram negative and anaerobes.

4.7.7 Define the pharmacokinetic, pharmacodynamic and pharmacotherapeutic properties of different groups of drugs affecting body systems.

4.7.8 Record the adverse effects of commonly used drug groups, and their management.

4.7.9 Describe drug interactions and contraindications of drugs in order to avoid harm to the patients.

4.7.10 List clinically relevant age, sex and genetic related variations that affect response to drugs.

4.7.11 Describe the mechanisms of action of drugs with regard pathophysiology of common diseases and recognize the rational for proper choice of drugs in treating them.

4.8 Demonstrate basic sciences specific practical skills and procedures relevant to future practice, recognizing their scientific basis, and interpret common diagnostic modalities, including: imaging, electrocardiograms, laboratory assays, pathologic studies, and functional assessment tests.

4.8.1 Calculate accurately drug's dosage, bioavailability, plasma half -life and volume of distribution in different patient populations.

4.8.2 Distinguish different routes of administrations of drugs (intramuscular, intravenous, intradermal, subcutaneous and others).

4.8.3 Observe, record and analyze the effect of drugs on biological tissues.

Competency Area V: The graduate as a member of the health team and system

5.3 Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports collaborative work.

5.3.1 Implement collaborative teamwork during small group teaching (SDL).

5.6. Evaluate his/her work and that of others using constructive feedback.

5.6.1 Monitor the effectiveness and side effects of therapy.

5.6.2 Report adverse drug effects and decrease drug-drug interactions.

Competency Area VI: The graduate as a lifelong learner and researcher

6.2. Develop, implement, monitor, and revise a personal learning plan to enhance professional practice.

6.2.1 Utilize information technology to improve his/her professional practice.

6.2.2 Perform self-appraisal & seek continuous learning.

6.2.3 Continue self-learning.

6.3. Engage in inter-professional activities and collaborative learning to continuously improve personal practice and contribute to collective improvements in practice.

6.3.1 Work as team leader as well as a member in larger teams.

6.3.2 Manage scientific meetings and appropriately utilize time.

6.6 Effectively manage learning time and resources and set priorities. Demonstrate an understanding of the scientific principles of research including its ethical aspects and scholarly inquiry and Contribute to the work of a research study. SDL

6.8 Critically appraise research studies and scientific papers in terms of integrity, reliability, and applicability. SDL

6.10 Summarize and present to professional and lay audiences the findings of relevant research and scholarly inquiry SDL.

4- Module Contents

| Topics | Hours |
|---|-------|
| Targets for drug actions and signaling mechanisms | 1 |
| Graded dose response curve | 1 |

| | |
|--|-----------|
| Quantal dose response curve | 1 |
| Factors affecting dose response | 1 |
| Drug absorption and distribution | 1 |
| Drug Biotransformation | 1 |
| Drug elimination and steady state | 1 |
| Principals of antimicrobial chemotherapy | 1 |
| Antibiotics (Inhibition of cell wall synthesis) | 1 |
| Antibiotics (Inhibition of bacterial protein synthesis) | 1 |
| Unclassified antibiotics | 1 |
| Histamine- Antihistamines- Eicosanoids | 1h |
| Opioid Analgesics | 2h |
| Adrenergic agonists and antagonists | 1h |
| Cholinergic agonists and antagonists | 1h |
| Resting membrane potential | 1h |
| Action potential (definition / ionic bases) | 1h |
| Propagation of action potential | 1h |
| Factors affecting nerve excitability, nerve block | 1h |
| Methods of transport | 1h |
| Body fluids | 1h |
| Homeostasis | 1h |
| Motor end plate | 1h |
| Reflex action, reflex arc | 1h |
| Autonomic ganglia | 1h |
| Sympathetic nervous system (functions) | 2h |
| Parasympathetic nervous system | 2h |
| Mode of autonomic action | 1h |

| Practical Topics | Hours |
|--|--------------|
| Routes of drug administration | 2h |
| Dosage forms | 2h |
| Adverse drug events & drug interaction | 2h |
| Practical problem (Applied Pharmacology) | 2h |
| Principles of prescription writing | 2h |
| Refractory period | 2 h |
| Effect of fatigue on simple muscle twitch | 2h |
| Effect of temperature on simple muscle twitch | 2h |

| | |
|-------------------|-----|
| Autonomic ganglia | 2h |
| Ion channel | 2 h |

5- Teaching and learning methods

| Course | Lecture | Web based L | Tutorial | Workshop | | | Small group teaching | |
|---|---------|-------------|----------|----------|-----------|----------|----------------------|------|
| | | | | Media | practical | Computer | CB L | SD L |
| Principles of Physiology and Pharmacology | √ | √ | | | √ | | √ | √ |

6 - Student evaluation

6-1 COURSE POLICIES

6.1.1. Attendance:

Attendance is mandatory to all sessions. Due to the course emphasis in developing skills and not only knowledge, the students' participation in all course activities is critical. Students who expect to be late for a mandatory class, lab, or small group session for any reason must contact the course director before the start of class. Unexcused absences demonstrate unprofessional behavior by the student.

6-1-2 Remediation of Unsatisfactory Performance in Course

A student who performs below the satisfactory level will be notified to Course Director for the purpose of developing a formal remediation plan which will be established by the course director and the student.

6-2 Course assessment:

Formative and summative assessment: they include:

1. Assignments, Quizzes
2. Written exams: MCQs, ultra-short essay
3. Practical skills assessment: Clinical Cases Approach

6-3 course assessment schedule and grading:

Grades are obtained based on the following complementary assessments:

| Assessment Method | Date | % of Total |
|-----------------------|----------------|------------|
| 1.Student activities | Through module | 10% |
| 2. End module exam | End module | 20% |
| 3- Final written exam | End semester | 40% |
| 4- Practical exam | End module | 30% |
| Total | | 100% |

7. Facilities required

- Lecture rooms with data show and computer facilities
 - Practical rooms
 - Computer lab equipped with internet connection
 - A wall board
 - Library Facilities

8- List of references

Course notes: Staff Members of Clinical Pharmacology and Physiology Department.

Recommended reference textbooks:

Basic and clinical pharmacology "last Edition, edited by Katzung, lang Medical Books.

Clinical Pharmacology " Laurence: D.R. last edition, Edited by Bennet, P.N. and MI Brown

Goodman, Louis D., and Gilman, Alfred, eds 2015. "The pharmacological basis of therapeutics".

Textbook of Medical Physiology (A.C. Guyton and J.E. Hall), W.B. Saunders Company, Philadelphia, London, New York, St. Louis, Sydney and Toronto, 2015.

Review of Medical Physiology (W.F. Ganong), Lange Medical Books/Mc Graw Hill, San Francisco 2018.

Principles of Human Physiology (Cindy L. Stanfield), Benjamin Cummings, 2009.

Electronic Materials, Web Sites etc.

Journal of Exp. Pharmacology and Therapeutics

Journal of pharmacological Review.
British Journal of pharmacology.
European Journal of pharmacology.
<https://www.edx.org/learn/physiology>

YEAR 1- 1ST SEMESTER MODULE (3) PRINCIPLES OF BIOCHEMISTRY AND BASICS OF SCIENCE

1- Basic information:

- **Program on which the Module is given** Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- **Module title:** Biochemistry and basics of genetics.
- **Percent of participation:** (100%).
- **Academic year/level:** 1st level /1st semester.
- **Code:** SIM3/B
- **Credit hours for the Module:** 4
- **Study weeks:** (4)
- **Departments offering the module:** Medical biochemistry department.

2- Overall aim:

By the end of this module the student will be able to:

- Gain an overview of Medical Biochemistry specialty e.g., its philosophy, features and methods.
- Provide the students with an appropriate exposure to the medical biochemistry discipline which will assist students in understanding biochemical alteration in health and disease.

- Enable the students to be oriented with concepts of molecular biology and how this field gave us a new perspective and new technology used in the diagnosis, treatment and new drugs design.
- Acquire essential scientific knowledge, practical and communication skills in a professional way through the different practical and research activities.

3- Learning outcomes (LOs)

By the end of this course the student will be able to:

Competency Area I: The graduate as a health care provider

1.6. Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.

1.6.1. Describe proper laboratory investigation based on given clinical data to approach proper case diagnosis.

1.8 Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand.

1.8.1 Explain the common clinical problems based on relevant biochemical data (clinical biochemistry).

1.9 Retrieve, analyze, and evaluate relevant and current data from literature, using information technologies and library resources, in order to help solve a clinical problem based on evidence (EBM).

1.9.1 Analyze biochemical, genetic data and current data from literature.

1.9.2 Search for relevant information which helps him in solving clinical problems (Web-based learning, Self-learning and CBL).

Competency Area II: The graduate as a health care promoter

2.3. Discuss the role of nutrition and physical activity in health

2.3.1 Identify the physical structure of macronutrients and their role in body welfare and structure.

Competency Area III: The graduate as a professional

3.1 Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.

3.1.1 Show respect and behave professionally and safely with different types of chemicals within the lab.

Competency Area IV: The graduate as a scholar and scientist

4.2 Explain the molecular, biochemical and cellular mechanisms important in maintaining the body's homeostasis:

- 4.2.1 Define the structure of carbohydrates, lipids, proteins, nucleotides, enzymes and immunoglobulins and their normal functions in human body.
- 4.2.2 Identify the mode of action and kinetics of enzymes and their role in the diagnosis of diseases for better management.
- 4.2.3 Discuss DNA structure, replication, mutation, and repair.
- 4.2.4 Summarize the structure of RNA, transcription, and protein biosynthesis.
- 4.2.5 Discuss the mechanisms of ATP production & electron transport chain.
- 4.2.6 Discuss the general structure of biological membrane and ion channel system.

4.5. Identify various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of illness/disease and explain the ways in which they operate on the body (pathogenesis).

- 4.5.1. Recognize different defects in DNA repair systems and their role in induction of various types of cancer and gene mutations.
- 4.5.2. Identify the possibility of incidence of hereditary disease according to their mode of inheritance.

4.8. Demonstrate basic sciences specific practical skills and procedures relevant to future practice, recognizing their scientific basis, and interpret common diagnostic modalities, including: imaging, electrocardiograms, laboratory assays, pathologic studies, and functional assessment tests.

- 4.8.1. Interpret the significance of high levels of different isoenzymes.
- 4.8.2. Evaluate causes of abnormal levels of both functional and non-functional plasma enzymes.

Competency Area V: The graduate as a member of the health team and system

5.3. Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports collaborative work.

- 5.3.1. Implement collaborative teamwork during small group teaching (SDL).

Competency Area VI: The graduate as a lifelong learner and researcher

6.3. Identify opportunities and use various resources for learning.

- 6.3.1. Interacts positively with colleagues, peers and professors on web pages.

6.3.2. Use various resources in collecting information (Web-based learning, SDL).

6.6. Effectively manage learning time and resources and set priorities (PBL and Assignment)

6.6.1. Achieve and perform the required duties from him on time (assignments).

| 4 – Module Contents | | |
|--|-----------------|-------------|
| Topics | Lectures | Lab. |
| Carbohydrates chemistry | 6h | 6h |
| Lipid chemistry | 5 h | - |
| Protein chemistry | 4h | 4h |
| Enzymes | 3 h | - |
| Nucleotide structure | 1h | - |
| DNA structure | 2 h | - |
| DNA replication | 2 h | - |
| DNA repair | 1h | - |
| Transcription | 1 h | - |
| Translation and mutation | 2 h | - |
| Regulation of gene expression | 2 h | - |
| Recombinant DNA technology | - | 4 h |
| Modes of inheritance | 2 h | 2h |
| Cell membrane and bioenergetics | 2 h | - |

6- Teaching and learning methods

Lectures:

Conducted by a Professor/assistant Professor and introduce the essential concepts and knowledge, the identification of scientific backgrounds, the explanation of complicated issues and topics and the potential for clinical application.

- **Tutorial classes**

Conducted by an assistant Professor and lecturer in small teaching groups to emphasize complicated medical topics and clinical cases. They are held in the corresponding department and are included in the teaching plan. Division of students into groups alternating between direct contact and online lectures.

| Course | Lecture | Web based L | Tutorial | Workshop | | | Small group teaching | | Portfolio |
|-------------------------------------|---------|-------------|----------|----------|-----|----------|----------------------|-----|-----------|
| | | | | Media | Lab | Computer | CBL | SDL | |
| Biochemistry and basics of genetics | √ | √ | √ | | √ | | | √ | √ |

7 - Student evaluation

7-1 COURSE POLICIES

7.1.1. Attendance:

Attendance is mandatory to all sessions. Due to the course emphasis in developing skills and not only knowledge, the students' participation in all course activities is critical. Students who expect to be late for a mandatory class, lab, or small group session for any reason must contact the course director before the start of class. Unexcused absences demonstrate unprofessional behavior by the student.

7-1-2 Remediation of Unsatisfactory Performance in Course

A student who performs below the satisfactory level will be notified to Course Director for the purpose of developing a formal remediation plan which will be established by the course director and the student.

7-2 COURSE ASSESSMENT:

Formative and summative assessment: they include:

1. Assignments, Quizzes, logbook.
2. Written exams: MCQs, ultra-short essay and case studies
3. Practical skills assessment: Objective Structured Practical Exam (OSPE).

7-3 course assessment schedule and grading:

Grades are obtained based on the following complementary assessments:

| Assessment Method | Date | Description | ILOs/Competencies assessed | % of Total |
|--|----------------|---|---|------------|
| 1. Continuous assessments (Portfolio) | Through module | 7. Quizzes 8. Log book 9. Assignments | 1.8.1,1.9.2,3.1.1,3.1.2,5.3.1,6.3.1, (4.1.1-6),4.5.1, 4.5.2, 4.8.1,4.8.2, 5.3.1, 6.3.1, 6.3.2 , 6.6.1 | 10% |
| 2. end module written exam | End module | MCQ | 1.9.1,4.1.2,4.8.1, 4.8.2, (4.1.1-6), 4.5.1, 4.5.2, | 20% |

| | | | | |
|------------------------------|--------------|-------------------|---|------|
| 3. Final written exam | End semester | MCQ & ultra-short | 1.8.1,1.9.1,4.1.2,4.8.1, (4.1.1-6), 4.5.1, 4.5.2, | 40% |
| 4. Practical exam | End module | OSPE | 1.8.1,1.9.1,4.1.1,4.8.1, 4.8.2 | 30% |
| Total | | | | 100% |

8. Facilities required

0. Lectures halls: one big class hall inside the faculty.
1. 1 Room for small group teaching.
2. White boards.
3. Audiovisual aid (data shows, overhead, and slide projectors).
4. 4 student laboratories.
5. Faculty library with Computer labs connected to the internet

9- List of references

● Course notes

Lectures notes on medical biochemistry for first year medical students by staff members of Department of Medical Biochemistry, Faculty of Medicine, Kafr El-Sheikh University 2018-2019

● Text book

1. Harper's Illustrated Biochemistry: 28th Ed by Murray RK, Granner DK, Mayes PA, Rodwell VW, McGraw-Hill companies New York, 2014.
2. Lippincott William & Wilkins London, 2014
3. Lippincott's Reviews of Biochemistry, 5th edition by Champe PC, Harvey RA, Ferrier DR,
4. Text book of Biochemistry with Clinical Correlations 5th Ed, Devlin TM Ed.Wiley -Liss New York 2002
5. Textbook of Molecular biology of the Cell 6th edition (2013), Garland.

Summary of topics matched with competencies' domains ILOs in the course

| Topics of the course | Health care provider | Health care promoter | Professionalism | Scholar and scientist | Health team & system | LLL & researcher |
|--------------------------------|----------------------|----------------------|-----------------|-----------------------|----------------------|------------------|
| Lectures | | | | | | |
| Carbohydrates chemistry | √ | √ | √ | √ | √ | √ |
| Lipid chemistry | √ | √ | √ | √ | √ | √ |
| Protein chemistry | √ | √ | √ | √ | √ | √ |
| Enzymes | √ | √ | √ | √ | √ | √ |

| | | | | | | |
|--|---|---|---|---|---|---|
| Nucleotide structure | √ | √ | | √ | | √ |
| DNA structure | √ | √ | | √ | √ | √ |
| DNA replication | √ | √ | √ | √ | √ | √ |
| DNA repair | √ | | | √ | √ | √ |
| Transcription | √ | | | √ | √ | √ |
| Translation and mutation | √ | | | √ | √ | √ |
| Regulation of gene expression | √ | | | √ | √ | √ |
| Recombinant DNA technology | √ | √ | √ | √ | √ | √ |
| Modes of inheritance | √ | | | √ | √ | √ |
| Cell membrane and bioenergetics | √ | | | √ | | √ |
| Practical | | | | | | |
| Carbohydrate chemistry | √ | √ | √ | √ | √ | √ |
| Protein biochemistry | √ | √ | √ | √ | √ | √ |
| Protein electrophoresis | √ | √ | √ | √ | √ | √ |
| Recombinant DNA technology | √ | √ | √ | √ | √ | √ |
| Self-directed learning | | | | | | |
| Groups of the students | √ | √ | | √ | √ | √ |

YEAR 1- 1ST SEMESTER
MODULE (4)
PRINCIPLES OF PATHOLOGY, MICROBIOLOGY,
IMMUNOLOGY, AND PARASITOLOGY

1- Basic information:

- **Program on which the Module is given:** Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- **Module title:** Principle of Pathology, microbiology, and medical parasitology
- **Percent of participation:** Pathology (50%), microbiology (25%) and medical parasitology (25%).
- **Academic year/level:** 1st level /1st semester.
- **Code:** S1M4/PMP
- **Credit hours for the module:** 4
- **Study weeks:** (4)
- **Departments offering the module:** Pathology, microbiology, and medical parasitology.

Teaching Departments

| | lectures | Practical | CBL | SDL |
|--------------|-----------|-----------|----------|----------|
| Pathology | 20 | 8 | 1 | 1 |
| Microbiology | 10 | 4 | - | 1 |
| Parasitology | 10 | 4 | 1 | - |
| Total | 40 | 16 | 2 | 2 |

2- Overall course aim:

This module aims at:

- This course aims to provide students with basic information about Pathology, Microbiology, Immunology and Medical Parasitology.
- Prepare students to apply medical information and use it to solve clinical problems of patients.

- Integrate different branches of medicine to prepare an efficient graduate.
- Urge students to be lifelong learners.

3- Learning outcomes (LOs)

By the end of this course the student will be able to:

Competency Area I: The graduate as a health care provider

1.8 Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand.

1.8.1 Define the different terms of Pathology, Microbiology and Medical Parasitology.

1.8.2 Demonstrate different types of Microorganisms and their relationship with their hosts.

1.8.3 Summarize the medically important Microorganisms as regards their morphology, and growth requirement and growth cycle, virulence factors, clinical diseases, direct & indirect laboratory diagnosis, treatment, prevention and control of infectious diseases.

1.8.4 Analyze given parasitological information even in absence of adequate data to reach a suitable diagnosis.

1.9 Retrieve, analyze, and evaluate relevant and current data from literature, using information technologies and library resources, in order to help solve a clinical problem based on evidence (EBM).

1.9.1 Perfectly arrange the efforts required to complete the tasks in specified time and identify opportunities and use various resources for learning.

1.9.2 Practice effectively using a written health record, electronic medical record, and other digital technology.

Competency Area II: The graduate as a health care promotor

2.4 Identify the major health risks in his/her community, including demographic, occupational and environmental risks; endemic diseases, and prevalent chronic diseases.

2.4.1 Identify the sources and epidemiology of parasitic infections.

2.5 Describe the principles of disease prevention, and empower communities, specific groups or individuals by raising their awareness and building their capacity.

2.5.1 Outline different methods of sterilization and disinfection; their role in controlling and prevention of infections.

2.5.2 Distinguish the danger of handling and use of infectious agents on community and environment as a part of their ethical heritage.

2.5.3 Plan for progress in the diagnosis, treatment and prevention of infectious disease and its application for community development.

2.6. Recognize the epidemiology of common diseases within his/her community and apply the systematic approaches useful in reducing the incidence and prevalence of those diseases.

2.6.1 Document the epidemiology of infectious diseases and how to reduce the prevalence of these diseases.

Competency Area III: The graduate as a professional

3.1 Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.

3.1.1 Present regular reflection on and assess his/her performance using various performance indicators and information sources.

3.1.2 Acquire the skills of good listening and self-learning.

3.1.3 Practice the value of teamwork by acting in small groups with adequate cooperation with his/her colleagues.

3.1.4 Integrate in inter-professional activities and collaborative learning to continuously improve personal practice and contribute to collective improvements in practice.

Competency Area IV: The graduate as a scholar and scientist

4.5 Identify various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of illness/disease and explain the ways in which they operate on the body (pathogenesis).

4.5.1 Discuss causes of cell injury and the different cellular responses to injury.

4.5.2 Identify causes and different types of inflammation and inflammatory cells with signs and symptoms of acute inflammation.

4.5.3 Describe the different types of hemodynamic disorders and types of gangrene.

4.5.4 List the cellular criteria of malignant tumors, methods of their spread, the basic principles of their grading and staging and the etiological factors involved in carcinogenesis.

4.5.5 Identify the routine steps of preparing histopathological slides and jars containing gross specimens.

4.6 Describe altered structure and function of the body and its major organ systems that are seen in various diseases and conditions.

4.6.1 Interpret the pathogenesis of different infectious diseases.

4.6.2 Explain the vascular and cellular events occurring in acute inflammation.

Competency Area V: The graduate as a member of the health team and system

5.3 Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports collaborative work.

5.3.1 Implement collaborative teamwork during small group teaching (SDL).

Competency Area VI: The graduate as a lifelong learner and researcher

6.3 Identify opportunities and use various resources for learning.

6.3.1 Interacts positively with colleagues, peers, and professors on web pages.

6.3.2 Use various resources in collecting information (Web-based learning, SDL).

6.6 Effectively manage learning time and resources and set priorities (PBL and Assignment)

6.6.1 Achieve and perform the required duties from him on time (assignments).

4 – Module Contents

1. Theoretical lectures

| NO | TITLE | HOURS |
|-----------|---------------------------|--------------|
| 1 | Introduction to Pathology | 1 h |

| | | |
|----|--|-----|
| 2 | Cellular responses to injury, cellular adaptations | 1 h |
| 3 | Reversible cell injury and cellular accumulations | 1 h |
| 4 | Irreversible cell injury and cell death (necrosis and apoptosis) | 1 h |
| 5 | Acute inflammation: Definition, causes, types, inflammatory cells | 1 h |
| 6 | Acute inflammation: Signs and symptoms, vascular and cellular changes, fate, complications | 1 h |
| 7 | Chronic inflammation | 1 h |
| 8 | Tissue repair (Regeneration, healing by connective tissue, wound healing) | 1 h |
| 9 | Types of hemodynamic disorders: Thrombosis and embolism | 1 h |
| 10 | Ischemia, Infarction & gangrene | 1 h |
| 11 | Hyperemia, hemorrhage, | 1 h |
| 12 | shock, oedema | 1 h |
| 13 | General characters and classification of neoplasms | 1 h |
| 14 | Methods of spread, grading and staging of malignant tumors | 1 h |
| 15 | Preneoplastic conditions, carcinogenesis and carcinogenic agents | 1 h |
| 16 | Pathological features neoplasms | 1 h |
| 17 | Pathological features of bacterial infections | 1 h |
| 18 | Pathological features of mycotic infections | 1 h |
| 19 | Pathological features of viral infections | 1 h |
| 20 | Pathological features of parasitic infections | 1 h |
| 21 | Introduction to parasitology I (definitions and terminology) – part I | 1 h |
| 22 | Introduction to Platyhelminthes; Trematodes (e.g., <i>Heterophys heterophys</i> (intestinal fluke) | 1 h |
| 23 | Introduction to Platyhelminthes; Cestodes (e.g., <i>Diphylobothrium latum</i>) | 1 h |
| 24 | Introduction to Nematelminths (e.g., <i>Entrobilus vermicularis</i>) | 1 h |

| | | |
|----|--|-----|
| 25 | Introduction to Protozoa (e.g., <i>Balantidium coli</i>) | 1 h |
| 26 | Introduction to medically important arthropods (mosquito control) | 1 h |
| 27 | Introduction to medically important arthropods (flies and miyasis) | 1 h |
| 28 | Introduction to medically important arthropods (fleas, lice) | 1 h |
| 29 | Introduction to medically important arthropods (tick, bugs) | 1 h |
| 30 | Introduction to medically important arthropods (mites) | 1 h |
| 31 | Introduction to Microbiology Prokaryotic Cell Structure | 1 h |
| 32 | Bacterial Growth and Metabolism | 1 h |
| 33 | Bacterial Genetics & Genetic Variation | 1 h |
| 34 | General Virology | 1 h |
| 35 | General Mycology | 1 h |
| 36 | Anti-microbial Agents | 1 h |
| 37 | Immunity (Immune response) | 1 h |
| 38 | Immunity (Immune response) (2 nd part) | 1 h |
| 39 | Organs and cells of immune system | 1 h |
| 40 | Antigens and antibodies | 1 h |

2. Practical:

| NO | TITLE | DEPARTMENT | HOURS |
|----|---|-------------------------|-------|
| 1 | Cellular adaptation | Pathology | 2h |
| 2 | Inflammation-tissue repair | Pathology | 2h |
| 3 | Haemodynamic disorders | Pathology | 2h |
| 4 | Neoplasia and infection | Pathology | 2h |
| 5 | Introduction to Platyhelminthes (Trematodes and Cestodes) | MEDICAL PARASITOLOGY | 1 h |
| 6 | Introduction to Nematodes, Protozoa | MEDICAL PARASITOLOGY | 1 h |

| | | | |
|----|--------------------------------|-------------------------|-----|
| 7 | Medically important arthropods | MEDICAL PARASITOLOGY | 1 h |
| 8 | Medically important arthropods | MEDICAL PARASITOLOGY | 1 h |
| 9 | Virology | Microbiology | 1 h |
| 10 | Mycology | Microbiology | 1 h |
| 11 | Bacteriology | Microbiology | 1 h |
| 12 | Bacteriology 2 | Microbiology | 1h |

5- Teaching methods

1. Lectures:

Conducted by a Professor/assistant Professor and introduce the essential concepts and knowledge, the identification of scientific backgrounds, the explanation of complicated issues and topics and the potential for clinical application.

2. Tutorial classes

Conducted by an assistant Professor and lecturer in small teaching groups to emphasize complicated medical topics and clinical cases. They are held in the corresponding department and are included in the teaching plan. Division of students into groups alternating between direct contact and online lectures.

3. **Practical classes:** Division of students into groups in the labs and then each group is divided into 4 smaller sub- groups in 2 labs simultaneously. These Subgroups of students allow interaction, presentations and feedback. The plan for practical training is attached in instructional units section. Each lab includes presentation of the scheduled topic by one of the staff. Then the students perform their recommended tasks themselves helped by joiner staff aided with microscopes, projector slides, data show photos.

4. **Students' activities:** Students will be divided into small groups. Each formed of 10 students. Each group is assigned for oral presentation on a specific topic. Topics are determined by staff member committee. Students will cooperate, prepare and present their projects in front of evaluation committee.

6- Assessment

➤ **Formative:** This form of assessment is designed to give you feedback to help you to identify areas for improvement. It includes a mixture of MCQs, short answer-questions (SAQs), extended matching questions (EMQs), case-solving exercises and independent learning activities in all subjects. These will be given during tutorial sessions and practical. The answers are presented and discussed immediately with you after the assessment. The results will be made available to you.

➤ **Summative:** This type of assessment is used for judgment or decisions to be made about your performance. It serves as:

- Verification of achievement for the student satisfying requirement
- Motivation of the student to maintain or improve performance
- Certification of performance
- Grades

| Assessment Method | Date | Marks | % of Total |
|------------------------------|--------------|-------|------------|
| 1. end module | | | 30% |
| Continuous assessment | End module | 30 | |
| 2. End semester | End semester | 40 | 40% |
| 3. Practical exam | End module | 30 | 30% |
| Total | | | 100% |

- **Written Exams** will include multiple choice questions (MCQs) at the end of the module while at the end of the semester, short essays will be added too.
- **Practical examination:** Will be arranged by the departments.
- **SDL presentation:** Evaluation is done by a staff members committee that represents all the teaching departments according to the following rubric criteria.
- **Weight of Assessment:**

| | End Module | Practical | End semester | Activities |
|---------------------|------------|------------|--------------|------------|
| Pathology | 10 | 15 | 20 | 4 |
| Parasitology | 5 | 7.5 | 10 | 3 |
| Microbiology | 5 | 7.5 | 10 | 3 |
| Total | 20 | 30 | 40 | 10 |

STUDENT'S RESPONSIBILITY

Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.

If there is anything that the module coordinator can do to assist you during the course, please feel free to contact him.

7- List of references

Textbooks and References for System Modules:

Kumar, Cotran & Robbins, Basic Pathology, 10th edition, 2017.

Topley & Wilson tropical diseases, 2010.

[Patrick R. Murray](#), [Ken S. Rosenthal](#), [Michael A. Pfaller](#), Elsevier Health Sciences, Oct 29, 2012

**YEAR1 – 1ST SEMESTER
MODULE (5)
PRINCIPLE OF QUALITY AND MEDICAL
EDUCATION**

1- Basic information:

Course specifications of:

- 1. Program on which the course is given:** Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- 2. Module title:** Principle of Quality and medical Education
- 3. Academic year/level:** 1st level /1st semester.

5. Code: S1M5/QM

6. Credit hours for the block: 1

| Course code | Course Title | Marks | | | Total Marks | Credit hours |
|-------------|--|------------|-----------|--------------|-------------|--------------|
| | | End module | Practical | End semester | | |
| S1M5 | Principle of Quality and medical Education | - | - | 25 | 25 | 1 |

Teaching Departments

| | lectures | Practical | CBL | SDL |
|-------------------|----------|-----------|-----|-----|
| Medical Education | 12 | - | - | - |
| Quality | 13 | - | - | - |
| Total | 25 | - | - | - |

2- Overall course aim:

This module aims at:

- Raise the competency of our graduates for the needs and expectations of society.
- Make the students able to cope and adjust with the explosion in medical scientific knowledge and technology besides the changing conditions in the health care delivery system.
- Promote physicians' ability for lifelong learning.
- Ensure training in the new information technologies.

3- Intended learning outcomes (ILOs)

By the end of this module the student will be able to:

Competency Area V: The graduate as a member of health team and the health care system

5.11 Improve the health service provision by applying a process of continuous quality improvement.

5.11.1 Describe of the importance of Total quality management (TQM)

5.11.2 List 7 Quality Management Principles (QMP)

5.11.3 Analyze a range of the primary focus of quality management.

Competency Area VI: The graduate as a lifelong learner and researcher

6.2 Develop, implement, monitor, and revise a personal learning plan to enhance professional practice.

6.2.1 Plan and develop a course curriculum.

6.2.2 Critically evaluate a medical education curriculum from various perspectives and the emerging technologies in medical education.

6.3 Identify opportunities and use various resources for learning.

6.3.1 Evaluate teaching philosophy is and why and learn about key teaching skills and theories, put these into practice and reflect on the experience for the future.

6.5 Recognize practice uncertainty and knowledge gaps in clinical and other professional encounters and generate focused questions that address them

6.5.1 Discuss the importance of medical education and how to put the focus on patient care.

6.5.2 Demonstrate an in-depth knowledge and understanding of specific issues at the forefront of theory and practice in medical education.

6.5.3 Support and monitor educational progress and guide personal and professional development.

6.5.4 Apply evaluation into practice to improve education for patient care.

6.6 Effectively manage learning time and resources and set priorities (PBL and Assignment)

6.6.1 Critically analyze teaching methods, theories and assessment methodologies for the application of learning

6.6.2 apply core theoretical principles to their own educational contexts.

6.6.3 Justify and critically evaluate the role of media in medical education.

1. Theoretical lecture:

| N O | TITLE |
|--------|--|
| 1 | Introduction to Medical education. |
| 2 | Competency based education |
| 3 | Curriculum |
| 4 | Teaching in large group |
| 5 | Teaching in small group |
| 6 | E –learning |
| 7 | Assessment |
| 8 | Total quality management (TQM) definitions |
| 9 | 7 Quality Management Principles (QMP) |
| 10 | Customer focus |
| 11 | Leadership |
| 12 | Engagement of people |
| 13 | Process approach |
| 14 | Improvement |
| 15 | Evidence-based decision making and Relationship Management |

6. COURSE ASSESSMENT:

Written Exams short questions or / and multiple choice questions (MCQs).

STUDENT'S RESPONSIBILITY

- Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.
- If there is anything that the module coordinator can do to assist you during the course, please feel free to contact him.

Sites

| Activity | | Site |
|-------------------|--|------------------|
| Final module exam | | Examination Hall |

Textbooks and References for System Modules

A Practical Guide for Medical Teachers, John Dent, Ronald M. Harden, Dan Hunt. 6th edition 2021.

Total Quality Management (TQM): Principles, Methods, and Applications Luthra, S., Garg, D., Agarwal, A., & Mangla, S.K. (2020). (1st ed.). CRC Press. <https://doi.org/10.1201/9781003053156>

YEAR 1- 1ST SEMESTER
MODULE (6)
PRINCIPLE OF HUMAN RIGHTS AND
SOCIETAL ISSUES

توصيف مقرر دراسي

| | | |
|--|---|---------------|
| 1- بيانات المقرر: حقوق الانسان ومكافحة الفساد | | |
| الفرقة/ المستوى: الأول | اسم المقرر: حقوق الانسان ومكافحة الفساد (القضايا المجتمعية) | كودي: S1M6/HR |
| <input type="text"/> | عدد الوحدات الدراسية 2 | التخصص: |

| | |
|--|-------------------------------------|
| أهداف المقرر: | ب المقرر: |
| 1- تمكين الطالب من فهم ماهية حقوق الانسان وحرياته 2- تكريس اسس الممارسة الصحيحة للحقوق والحرريات. 3- نشر ثقافة حقوق الانسان. 4- تثبيت روح المواطنة ونشر ثقافة التسامح، وبث روح التسامح وتجفيف منابع الارهاب. 5- الوقوف على المعايير الدولية والتشريعات الوطنية المتعلقة بحقوق الانسان وحرياته. | |
| | 3- المستهدف من تدريس المقرر: |
| 3أ- الأهداف المعرفية 3أ1- المعرفة والفهم 3أ2- الوقوف على مجمل موثيق حقوق الانسان 3أ3- الوقوف على التشريعات الوطنية ذات الصلة 3أ4- الدفاع عن حقوق الانسان من خلال التعرف على وسائل حماية وتعزيز حقوق الانسان. | أ- المعلومات والمفاهيم: |

| | | |
|--|--|--|
| <p>3ب - الأهداف المهاراتية الخاصة بالمقرر. 3ب1 - تمكين الطالب من معرفة حقوق الانسان وتطورها ومضامينها. 3ب2 - ان يكتسب الطالب مهارة في التعامل مع الظواهر الاجتماعية وفقا لمبادئ حقوق الانسان.</p> | | <p>ب- المهارات الذهنية:</p> |
| <p>3ج1- القابلية على فهم الاتفاقيات والاعلانات الخاصة بحقوق الانسان 3ج2-اكتساب قابلية التوفيق بين الكتاب النظري والتطبيق 3ج3-نشر ثقافة حقوق الانسان. 3ج4- القابلية على الفهم الصحيح للجو الديمقراطي.</p> | | <p>ج- المهارات العامّة:</p> |
| <p>3د1- تعميق ثقافة مبادئ حقوق الانسان وحرياته. 3د2- ان يكون قادرا على الربط بين الاحداث المجتمعية والسياسية مع مواثيق حقوق الانسان.</p> | | <p>د- الأهداف الوجدانية والقيمية</p> |
| <p>4- محتوى المقرر:</p> | <p>اسم الوحدة / أو الموضوع</p> | <p>الساعات</p> |
| | لقواعد العامة لفكرة حقوق الانسان | 2 |
| | تطور فكرة حقوق الانسان في العصور الحديثة | 2 |
| | تعريف حقوق الانسان لغة واصطلاحا وفي القانون الدولي وخصائص ومبادئ حقوق الانسان | 2 |
| | بصادر حقوق الانسان | 2 |
| | انواع حقوق الانسان لحقوق الفردية للانسان | 2 |
| | لحقوق الجماعية (حقوق الشعوب) | 2 |
| | واجبات الافراد والتزاماتهم في المجتمع | 2 |
| | كافة الفساد مفهوم الفساد | 2 |
| | مظاهر الفساد | 2 |
| | سباب الفساد | 2 |
| | ثار الفساد | 2 |
| | وسائل مجابهة الفساد | 2 |

YEAR 1- 2ND SEMESTER

| النهاية العظ مى | الدرجات | | | الحزم الدراسيه (Modules) | | | المستوى الأول - الفصل الثاني |
|-----------------------|----------------------|------------------------------|---------------------------------|------------------------------------|----------------|---------------------|------------------------------|
| | التحرير ى % 40 | العملى) (OSPE % 30 | اعما ل السند ة 30 % | Name | Week s | Credi t hours | |
| 125 | 50 | 37.5 | 37.5 | Cardiovascular system | 4 | 5 | |
| 125 | 50 | 37.5 | 37.5 | Respiratory system | 4 | 5 | |
| 125 | 50 | 37.5 | 37.5 | Immune, blood, and lymphatic | 4 | 5 | |
| 125 | 50 | 37.5 | 37.5 | Musculoskelet al system | 4 | 5 | |
| متطلد ب كليه | 100 | | | اداب واخلاقيات مهنة الطب | دراسه طويله | 1 | |
| متطلد ب كليه | 50 | | | Elective (I) | | 2 | |
| 500 | | | | | 16 | 23 | المجمو ع |

1ST YEAR, 2ND SEMESTER

Module (1)

CARDIOVASCULAR SYSTEM

1- Basic information:

Course specifications of:

- **Program on which the module is given** Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- **Module title: Cardiovascular module**
- **Academic year/level:** 1st level /2nd semester.
- **Code: S2M1/CVS**
- **Credit hours for the Module: 5**
- **Study weeks: (4)**
- **Department offering the module:**
 - Department of Cardiology.
 - Department of Anatomy.
 - Department of Biochemistry.
 - Department of Physiology.
 - Department of Pharmacology.
 - Department of Pathology.
 - Department of Microbiology.
 - Department of Histology.
 - Department of parasitology.

Teaching Departments

| | Theme lectures (TL) | Practical |
|------------------|----------------------------|------------------|
| | Total= 57 | Total= 33 |
| Anatomy | 11 | 8 |
| Histology | 4 | 2 |

| | | |
|---------------------|-----------|----------|
| Physiology | 14 | 8 |
| Pathology | 9 | 4 |
| Pharmacology | 5 | 4 |
| Biochemistry | 6 | 1 |
| Cardiology | 1 | - |
| Microbiology | 5 | 4 |
| Parasitology | 2 | 2 |

2- Overall course aim:

This module aims at:

- Acquire sufficient knowledge of the macroscopic and microscopic structure of the heart and blood vessels to understand normal function and common clinical abnormalities.
- Gain skills, working knowledge and understanding of the principles and concepts applicable to the heart and blood vessels in general.
- Appreciate the role of the cardiovascular system in controlling pressure and circulation.
- Understand different causes parasitic infestation in order to appreciate the basis of relevant therapeutics.
- Outline the structure and relations of the heart, and the ways in which this structure may be imaged and examined.
- Identify and describe the normal circulation of the body.
- Describe the histological structure of the heart.
- Understand the mechanisms of controlling blood pressure.
- Identify and describe the classes of anti hypertensive drugs and their mode of action.
- Describe congenital heart diseases.
- Describe common pathological changes in the cardiovascular system.
- Describe and demonstrate the features, consequences and management of acute myocardial infarction.

- Identify the mechanism of cholesterol biosynthesis, transport and common causes of hypercholesterolemia.
- Recognize markers of myocardial damage and isoenzymes needed to track the damage.

3- Learning Outcomes (LOs)

Competency area I: The graduate as a health care provider

1.6 Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.

1.6.1 Identify diagnostic and infective stage of *microbes affecting CVS*.

1.6.2 Differentiate diagnostic tests commonly used for parasitic infections.

1.6.3 Judge results of parasitological, serological, and molecular tests and apply them.

1.9 Retrieve, analyze, and evaluate relevant and data from literature, using information technologies and library resources, in order help solve a clinical problem based on evidence (EBM).

1.9.1 Use different sources of information to obtain data.

1.10 Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.

1.10.1 Construct different knowledge and analyze given information to help in solving difficult problems.

Competency area II: The graduate as a health care promoter

2.4 Identify the major health risks in his/her community, including demographic, occupational and environmental risks; endemic diseases, and prevalent chronic diseases.

2.4.1 List different organisms affecting the cardiovascular system and microbiological features of each organism.

2.9 Adopt suitable measures for infection control.

2.9.1 Clarify clinical picture, diagnostic, therapeutic and preventive interventions against different microbes.

Competency area III: The graduate as a professional

3.5 Ensure confidentiality and privacy of patients' information.

3.5.1 Respect and follow the institutional code of conduct.

3.5.2 Maintain professional image in manner, dress speech and interpersonal relationships that is consistent with the medical profession's accepted contemporary standards in the community.

Competency area IV: The graduate as a scholar & scientist

4.1 Describe normal structure of the body and its major organ systems and explain their functions.

4.1.1 Enumerate the different types of blood vessels.

4.1.2 Describe the anatomy of the Pericardium: Exterior of the heart & its sinuses, Interior of the heart, blood supply of the heart, and blood supply of upper as well as lower limbs.

4.1.3 Summarize the phases of cardiac cycle.

4.1.4 Retell the development of the heart and blood vessels.

4.1.5 Describe the general histologic features of the blood vessels, and the heart.

4.5 Identify various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of illness/disease and explain the ways in which they operate on the body (pathogenesis).

4.5.1 Report Pathology of ischemic heart diseases and hypertension.

4.5.2 Analyze the congenital anomalies on embryological basis.

4.5.3 Demonstrate different types of infective endocarditis.

4.6 Describe altered structure and function of the body and its major organ systems that are seen in various diseases and conditions.

4.6.1 Define the congenital anomalies of the heart.

4.7 Describe drug actions: therapeutics and pharmacokinetics; side effects and interactions, including multiple treatments, long term conditions and non-prescribed medication; and effects on the population.

4.7.1 Outline Principles of antihypertensive drugs.

Competency Area V: The graduate as a member of the health team and system

5.2 Respect colleagues and other health care professionals and work cooperatively with them, negotiating overlapping and shared responsibilities, and engaging in shared decision-making for effective patient management.

5.2.1 Honor and respect, superiors, colleagues and any other member of the health profession.

5.3 Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports collaborative work.

5.3.1 Communicate effectively using all methods.

5.6 Evaluate his/her work and that of others using constructive feedback.

5.6.1 Express themselves freely and adequately by improving their descriptive capabilities and enhancing their communication skills.

Competency area VI: The graduate as a lifelong learner and researcher

6.2. Develop, implement, monitor, and revise a personal learning plan to enhance professional practice.

6.2.1 Utilize information technology to improve his/her professional practice.

6.2.2 Perform self-appraisal & seek continuous learning.

6.2.3 Continue self-learning.

6.4 Engage in inter-professional activities and collaborative learning to continuously improve personal practice and contribute to collective improvements in practice.

6.4.1 Work as team leader as well as a member in larger teams.

6.5 Recognize practice uncertainty and knowledge gaps in clinical and other professional encounters and generate focused questions that address them.

6.5.1 Manage scientific meetings and appropriately utilize time.

4 –Module Contents

1. Theoretical lectures

| NO | TITLE | DEPARTMENT |
|-----|---|--------------|
| L1 | Pericardium: Exterior of the heart & its sinuses | Anatomy |
| L2 | Interior of the heart | Anatomy |
| L3 | Blood supply of the heart | Anatomy |
| L4 | Development of the heart | Anatomy |
| L5 | Development of the blood vessels | Anatomy |
| L6 | Congenital anomalies of the heart | Anatomy |
| L7 | Histology of the heart and blood vessels | Histology |
| L8 | Cardiac cycle-1 (phases) | Physiology |
| L9 | Cardiac cycle-2 (HS, pressure volume loop & concepts of SV, EDV, ESV,EF & work output of the heart) | Physiology |
| L10 | A case of atherosclerosis, coronary heart disease & hypertension | Physiology |
| L11 | Anatomy of major blood vessels of upper limb | Anatomy |
| L12 | Anatomy of major blood vessels of lower limb | Anatomy |
| L13 | Structures of blood vessels | Anatomy |
| L14 | Structures & types of capillaries | Histology |
| L15 | Cholesterol biosynthesis and mechanism of regulation | Biochemistry |
| L16 | Types and structure of lipoproteins and mechanisms of cholesterol transport | biochemistry |
| L17 | Cholesterol transport and causes of | biochemistry |

| NO | TITLE | DEPARTMENT |
|-----|---|--------------|
| | hypercholesterolemia | |
| L18 | Regulation of diameter of arterioles, (short term, intermediate term & long-term control) | Physiology |
| L19 | Local & humoral control of tissue blood flow & regulation of coronary circulation | Physiology |
| L20 | Physiology of ABP | Physiology |
| L21 | Pathology of IHDs & hypertension | Pathology |
| L22 | Antihypertensive drugs 1 | Pharmacology |
| L23 | A case of infective endocarditis | Cardiology |
| L24 | Infections of pericardium, myocardium, and endocardium. | Microbiology |
| L25 | Blood borne infections | Microbiology |
| L26 | Rheumatic heart disease | Pathology |
| L27 | Endocarditis | Pathology |
| L28 | Valvular lesions | Pathology |
| L29 | Myocarditis, pericarditis, and cardiomyopathy | Pathology |
| L30 | Parasitic diseases of the heart | Parasitology |
| L31 | Vasculitis & vascular tumours | Pathology |
| L32 | Electrical properties of the heart | Physiology |

2. Practical: Time Table

| No | Titel | Department |
|----|---|--------------|
| P1 | Anatomy of cardiovascular system | Anatomy |
| P2 | Histology of heart and blood vessels | Histology |
| P3 | Anatomy of blood vessels of upper limbs | Anatomy |
| P4 | Anatomy of blood vessels of lower limbs | Anatomy |
| P5 | Measurement of arterial blood pressure | Physiology |
| P6 | Pathology of cardiovascular diseases | Pathology |
| P7 | Electrocardiogram | Physiology |
| P8 | ECG leads & determination of cardiac axis. | Physiology |
| P9 | Colorimetric methods for assessment of blood lipid profiles & cases | Biochemistry |

| | | |
|-----|--|--------------|
| P10 | Cardiac enzymes and markers of myocardial infarction | Biochemistry |
| P11 | | Pharmacology |
| P12 | Antihypertensives | Pharmacology |
| P13 | Anti-anginal drugs | Microbiology |
| P14 | Tuberculous pericarditis | Microbiology |
| | Immune-mediated mechanisms of rheumatic fever | |

5. Teaching methods:

1. Lectures:

Conducted by a Professor/assistant Professor and introduce the essential concepts and knowledge, the identification of scientific backgrounds, the explanation of complicated issues and topics and the potential for clinical application.

2. Tutorial classes

Conducted by an assistant Professor and lecturer in small teaching groups to emphasize complicated medical topics and clinical cases. They are held in the corresponding department and are included in the teaching plan. Division of students into groups alternating between direct contact and online lectures.

3. Practical classes: Division of students into groups in the labs and then each group is divided into 4 smaller sub-groups in 2 labs simultaneously. These Subgroups of students allow interaction, presentations and feedback. The plan for practical training is attached in instructional units section. Each lab includes presentation of the scheduled topic by one of the staff. Then the students perform their recommended tasks themselves helped by joiner staff aided with microscopes, projector slides, data show photos.

4. Students' activities: Students will be divided into small groups. Each formed of 10 students. Each group is assigned for oral presentation on a specific topic. Topics are determined by staff member committee. Students will

cooperate, prepare and present their projects in front of evaluation committee.

Assessment

1. Formative:

This form of assessment is designed to give you feedback to help you to identify areas for improvement. It includes MCQs and independent learning activities in all subjects. These will be given during tutorial sessions and practical. The answers are presented and discussed immediately with you after the assessment. The results will be made available to you.

2. Summative

This type of assessment is used for judgment or decisions to be made about your performance. It serves as:

- a. Verification of achievement for the student satisfying requirement
- b. Motivation of the student to maintain or improve performance
- c. Certification of performance
- d. Grades

Written Exams will include multiple choice questions (MCQs). These will cover material presented during the lectures, tutorials, CBL presentations, and SDL. Final examination will be held 10-12 AM first Saturday of fourth module at the main exam. Hall.

Practical examination: Will be arranged by the departments

STUDENT'S RESPONSIBILITY

- Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.
- If there is anything that the module coordinator can do to assist you during the course, please feel free to contact him.

Sites

| Activity | Site |
|---|--------------------------|
| 1-Theme Lectures | Main lecture Hall |
| 2- Case based learning & Tutorial sessions | Lecture hall |
| 3- Practical sessions & exam. | |
| Anatomy | Anatomy dissection Hall |
| Histology | Histology department |
| Physiology | Physiology department |
| Biochemistry | Biochemistry Department |
| Pathology | Pathology department |
| Microbiology | Microbiology department |
| Pharmacology | Pharmacology department. |
| 4- Written Assessment | |
| Final module exam. & quizzes | Examination Hall |

Textbooks and References for System Modules

Anatomy: Drake, R., Vogl, A.W. and Mitchell, A.W., 2009. Gray's anatomy for students E-book. Elsevier Health Sciences

Histology: Gartner, L.P. and Hiatt, J.L., 2006. Color textbook of histology ebook. Elsevier Health Sciences.

Physiology: Hall, J.E., 2020. Guyton & hall physiology review e-book. Elsevier Health Sciences.

Biochemistry: Satyanaryana, U. and Chakrapani, U., 2021. Essentials of biochemistry. Elsevier India
Microbiology Cornelissen, C.N., Harvey, R.A. and Fisher, B.D., 2012. Microbiology (Vol. 3). Lippincott Williams & Wilkins

Parasitology: Garcia, L.S., 2006. Diagnostic medical parasitology. American Society for Microbiology Press

Pathology: Klatt, E.C. and Kumar, V., 2014. Robbins and Cotran review of pathology. Elsevier Health Sciences

Pharmacology: Whalen, K., 2018. Lippincott® Illustrated Reviews: Pharmacology. Wolters kluwer india Pvt Lt

YEAR 1- 2ND SEMESTER

Module (2)

RESPIRATORY SYSTEM

1- Basic information:

Course specifications of:

- **Program on which the Module is given** Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- **Module title: Respiratory module**
- **Academic year/level:** 1st level /2nd semester.
- **Code: S2M2/R**
- **Credit hours for the Module: 5**
- **Study weeks: (4)**
- **Department offering the module:**
 - Department of Chest.
 - Department of Anatomy.
 - Department of Biochemistry.
 - Department of Physiology.
 - Department of Pharmacology.
 - Department of Pathology.
 - Department of Microbiology.
 - Department of Histology.
 - Department of parasitology.

1. Teaching Departments

| | Theme lectures (TL) Total= 42 | Practical Total= 19 | Tutorial Total= 7 | CBL 4 | SDL 3 |
|---------|----------------------------------|------------------------|----------------------|----------|----------|
| Anatomy | 8 | 4 | 1 | - | - |

| | | | | | |
|---------------------|----------|----------|----------|----------|----------|
| Histology | 3 | 2 | 1 | - | - |
| Physiology | 8 | 2 | 1 | - | - |
| Pathology | 6 | 3 | 1 | - | - |
| Pharmacology | 5 | 2 | 1 | - | 2 |
| Biochemistry | 3 | 2 | 1 | - | - |
| Chest | 4 | - | - | 4 | - |
| Microbiology | 3 | 3 | 1 | = | 1 |
| Parasitology | 2 | 1 | = | - | = |

2- Overall aim:

The aim of this module is to:

- Acquire sufficient knowledge of the macroscopic and microscopic structure of the respiratory system to understand normal function and common clinical abnormalities.
- Gain skills, working knowledge and understanding of the principles and concepts applicable to the Respiratory System, in general.
- Understand respiratory cellular function to appreciate the basis of relevant therapeutics.
- Describe normal respiration, the reasons of dyspnea, and such common conditions as chronic obstructive lung disease, bronchial asthma, and bronchogenic carcinoma.
- Outline the development of respiratory system.
- Outline the structure and relations of the nose, paranasal sinuses and pharynx.
- Outline the structure and relations of the larynx, trachea, bronchial tree and lung and the ways in which these structures may be imaged and examined.
- Describe the histological structure of the nose, paranasal sinuses, larynx, trachea and lung.

- Recognize the mechanics of breathing.
- Recognize pressure volume relationship in respiratory system.
- Recognize the control of breathing.
- Outline the metabolic function of respiratory system.
- Outline physiological response to hypoxia and hypercapnia.
- Describe the respiratory regulation of acid base balance.
- Describe gas diffusion and blood flow to the lung and regional differences.
- Recognize organisms causing respiratory tract infection.
- Identify parasites causing cystic lesions in the lung.
- Identify pathology of pulmonary microbial infection.
- Describe pathological changes in the respiratory tract as TB.
- Identify principles of treatment of pulmonary infections.

3. Learning outcomes (LOs)

Competency area I: The graduate as a health care provider

1.6 Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.

1.6.1 Identify diagnostic and infective stages of microorganisms affecting respiratory system.

1.6.2 Differentiate diagnostic tests commonly used for microorganisms' infections.

1.6.3 Judge results of parasitological, serological, molecular, immunological tests and radiological finding and apply them.

1.9.Retrieve, analyze, and evaluate relevant and data from literature, using information technologies and library resources, in order help solve a clinical problem based on evidence (EBM).

1.9.1. Use different sources of information to obtain data.

1.10. Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.

1.10.1. Construct different knowledge and analyze given information to help in solving difficult problems.

Competency area II: The graduate as a health care promoter

2.4 Identify the major health risks in his/her community, including demographic, occupational and environmental risks, endemic diseases, and prevalent chronic diseases.

2.4.1 List different organisms of RTI and microbiological features of each organism.

2.4.2 Describe parasitologic features and life cycle of parasites affecting respiratory system.

2.4.3 Clarify the clinical perspectives of these parasites.

2.4.4 Report clinical picture, diagnostic, therapeutic and preventive interventions against different microbes affecting the respiratory system.

Competency area IV: The graduate as a scholar & scientist

4.1 Describe normal structure of the body and its major organ systems and explain their functions.

4.1.1 Enumerate the different parts of the Respiratory system.

4.1.2 Describe the anatomy of the nose, pharynx, larynx, trachea, bronchi and lung.

4.1.3 Retell the development of the respiratory system.

4.1.4 Describe the general histologic features of nose, pharynx, larynx, trachea, bronchi and lung.

4.2 Explain the molecular, biochemical, and cellular mechanisms important in maintaining the body's homeostasis.

- 4.2.1 Discuss the physiology of respiration.
- 4.2.2 Review Pressure volume relationship in respiratory system
- 4.2.3 Review Control of breathing
- 4.2.4 Explain respiratory function.
- 4.2.5 Explain the biochemical changes in the respiratory mechanism.
- 4.2.6 Explain acid base balance and its abnormalities.
- 4.5 Identify various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of illness/disease and explain the ways in which they operate on the body (pathogenesis).
- 4.5.1 Report Pathology of tumors of respiratory system.
- 4.5.2 Analyze the congenital anomalies on embryological basis.
- 4.5.3 Identify surgical aspects of pneumothorax and haemothorax.
- 4.5.4 Different pathological diseases of the lung
- 4.6 Describe altered structure and function of the body and its major organ systems that are seen in various diseases and conditions.
- 4.6.1 Define the congenital anomalies of the respiratory system.
- 4.7 Describe drug actions: therapeutics and pharmacokinetics; side effects and interactions, including multiple treatments, long term conditions and non-prescribed medication; and effects on the population.
- 4.7.1 Recognize Principles of bronchodilator therapy.
- 4.7.2 Recognize Principles of antiviral therapy
- 4.7.3 Recognize Principles of antituberculous drugs and antibiotic.

Competency area V: The graduate as a member of the health team and a part of the health care system

5.2 Respect colleagues and other health care professionals and work cooperatively with them, negotiating overlapping and shared responsibilities, and engaging in shared decision-making for effective patient management.

5.2.1 Honor and respect, superiors, colleagues and any other member of the health profession.

5.3 Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports collaborative work.

5.3.1 Communicate effectively using all methods.

5.6 Evaluate his/her work and that of others using constructive feedback.

5.6.1 Express themselves freely and adequately by improving their descriptive capabilities and enhancing their communication skills.

Competency area VI: The graduate as a lifelong learner and researcher

6.2. Develop, implement, monitor, and revise a personal learning plan to enhance professional practice.

6.2.1. Utilize information technology to improve his/her professional practice.

6.2.2. Perform self-appraisal & seek continuous learning.

6.2.3. Continue self-learning.

6.4 Engage in inter-professional activities and collaborative learning to continuously improve personal practice and contribute to collective improvements in practice.

6.4.1 Work as team leader as well as a member in larger teams.

6.5 Recognize practice uncertainty and knowledge gaps in clinical and other professional encounters and generate focused questions that address them.

6.5.1 Manage scientific meetings and appropriately utilize time.

1-Lectures: Timetable

| NO | TITLE | DEPARTMENT |
|-----|--|--------------|
| L1 | Anatomy of nose, paranasal sinuses and Pharynx | Anatomy |
| L2 | Histology of nose, paranasal sinuses | Histology |
| L3 | Anatomy of Anatomy of larynx, trachea and bronchial tree | Anatomy |
| L4 | Mechanics of breathing | Physiology |
| L5 | Development of respiratory system | Embryology |
| L6 | Histology of larynx, trachea | Histology |
| L7 | Pressure volume relationship in respiratory system | Physiology |
| L8 | Mediastinum and its divisions and Diaphragm | Anatomy |
| L9 | Pressure volume relationship in respiratory system | Physiology |
| L10 | Clinical features of asthma | Chest |
| L11 | Exercise & high altitude, physiological responses to hypoxia & hypercapnia | Physiology |
| L12 | Metabolic function in respiratory system | BIOCHEMISTRY |
| L13 | Control of breathing | Physiology |
| L14 | Pathology of pulmonary microbial infection and T. B | Pathology |
| L15 | Gas diffusion | Physiology |
| L16 | Upper respiratory tract infections | MICROBIOLOGY |
| L17 | Anatomy of lung | Anatomy |
| L18 | Histology of lower respiratory tract | Histology |
| L19 | Chronic obstructive pulmonary diseases 1 | PATHOLOGY |
| L20 | Respiratory acidosis and alkalosis | Biochemistry |
| L21 | Anatomy of chest wall & intercostal muscles | Anatomy |
| L22 | A case of pneumonia | CHEST |
| L23 | Anatomy of intercostal vessels and nerves | Anatomy |
| L24 | Transport of oxygen and co2 in the blood | Physiology |
| L25 | Transport of oxygen and co2 in the blood | Physiology |

| NO | TITLE | DEPARTMENT |
|-----|---|--------------|
| L26 | Chronic obstructive pulmonary diseases 2 | PATHOLOGY |
| L27 | Respiratory acid base balance | biochemistry |
| L28 | Lower respiratory tract infection | microbiology |
| L29 | Bronchial asthma | pharmacology |
| L30 | Restrictive & interstitial lung diseases | PATHOLOGY |
| L31 | Parasites causing cystic lesions of lung | PARASITOLOGY |
| L32 | Drugs used in treatment of bronchial Asthma part 1 | pharmacology |
| L33 | Anatomy of pleura and its surface anatomy | Anatomy |
| L34 | Immunology of bronchial asthma | microbiology |
| L35 | Drugs used in treatment of bronchial Asthma part 2 | pharmacology |
| L36 | A case of COPD | Chest |
| L37 | Parasites causing cystic lesions of lung | PARASITOLOGY |
| L38 | Treatment of pulmonary embolism | pharmacology |
| L39 | Pulmonary neoplasia | Pathology |
| L40 | A case of bronchogenic carcinoma with hemoptysis and malignant pleural effusion | Chest |
| | cough management | pharmacology |
| L42 | Diseases of pulmonary vasculature | Pathology |

3-Practical: Timetable

| No | Title | Department |
|----|---|--------------|
| P1 | The anatomy of the nose, pharynx, larynx, and trachea | Anatomy |
| P2 | The histology of respiratory system part 1 | Histology |
| P3 | Bone of the thorax, Mediastinum, and diaphragm | Anatomy |
| P4 | Special lung functions tests (MVV, FEV1,) | Physiology |
| P5 | Pulmonary function tests | Physiology |
| P6 | Upper respiratory tract infection part 1 | Microbiology |

| | | |
|-----|--|--------------|
| P7 | Anatomy of the lung | Anatomy |
| P8 | Parasites causing lung diseases | Parasitology |
| P9 | Pathology of respiratory system1 | Pathology |
| P10 | Upper respiratory tract infection part 2 | Microbiology |
| P11 | Acid base balance part 1 | Biochemistry |
| P12 | Acid base balance part 2 | Biochemistry |
| P13 | Intercostal muscles, vessels and nerves | Anatomy |
| P14 | The histology of respiratory system part 2 | Histology |
| P15 | Pathology of respiratory system disease 2 | Pathology |
| P16 | Tumors of the respiratory system | Pathology |
| P17 | Treatment of bronchial asthma part 1 | Pharmacology |
| P18 | Treatment of bronchial asthma part 2 | Pharmacology |
| P19 | Tuberculin test | Microbiology |

5. Teaching methods:

1. Lectures:

Conducted by a Professor/assistant Professor and introduce the essential concepts and knowledge, the identification of scientific backgrounds, the explanation of complicated issues and topics and the potential for clinical application.

2. Tutorial classes

Conducted by an assistant Professor and lecturer in small teaching groups to emphasize complicated medical topics and clinical cases. They are held in the corresponding department and are included in the teaching plan. Division of students into groups alternating between direct contact and online lectures.

2. Practical classes: Division of students into groups in the labs and then each group is divided into 4 smaller sub-groups in 2 labs simultaneously. These Subgroups of students allow interaction, presentations and feedback. The plan for practical training is attached in instructional units section. Each lab includes presentation of the scheduled topic by one of the staff. Then the students perform their

recommended tasks themselves helped by joiner staff aided with microscopes, projector slides, data show photos.

3. **Students' activities:** Students will be divided into small groups. Each formed of 10 students. Each group is assigned for oral presentation on a specific topic. Topics are determined by staff member committee. Students will cooperate, prepare and present their projects in front of evaluation committee.

Assessment

Formative:

This form of assessment is designed to give you feedback to help you to identify areas for improvement. It includes MCQs and independent learning activities in all subjects. These will be given during tutorial sessions and practical. The answers are presented and discussed immediately with you after the assessment. The results will be made available to you.

Summative

This type of assessment is used for judgment or decisions to be made about your performance. It serves as:

- e. Verification of achievement for the student satisfying requirement
- f. Motivation of the student to maintain or improve performance
- g. Certification of performance
- h. Grades

Written Exams will include multiple choice questions (MCQs). These will cover material presented during the lectures, tutorials, CBL presentations, and SDL. Final examination will be held 10-12 AM first Saturday of fourth module at the main exam. Hall.

Practical examination: Will be arranged by the departments

STUDENT'S RESPONSIBILITY

- Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.
- If there is anything that the module coordinator can do to assist you during the course, please feel free to contact him.

Sites

| Activity | Site |
|---|--------------------------|
| 1-Theme Lectures | Main lecture Hall |
| 2- Case based learning & Tutorial sessions | Lecture hall |
| 3- Practical sessions & exam. | |
| Anatomy | Anatomy dissection Hall |
| Histology | Histology department |
| Physiology | Physiology department |
| Biochemistry | Biochemistry Department |
| Pathology | Pathology department |
| Microbiology | Microbiology department |
| Pharmacology | Pharmacology department. |
| 4- Written Assessment | |
| Final module exam. & quizzes | Examination Hall |

Textbooks and References for System Modules

Anatomy: Drake, R., Vogl, A.W. and Mitchell, A.W., 2009. Gray's anatomy for students E-book. Elsevier Health Sciences

Histology: Gartner, L.P. and Hiatt, J.L., 2006. Color textbook of histology ebook. Elsevier Health Sciences.

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Parasitology: Garcia, L.S., 2006. Diagnostic medical parasitology. American Society for Microbiology Press

Pathology: Klatt, E.C. and Kumar, V., 2014. Robbins and Cotran review of pathology. Elsevier Health Sciences

Pharmacology: Whalen, K., 2018. Lippincott® Illustrated Reviews: Pharmacology. Wolters kluwer india Pvt L

YEAR1- 2ND SEMESTER

MODULE (3)

IMMUNE, BLOOD, AND LYMPHATIC

1- Basic information:

Course specifications of:

- **Program on which the course is given** Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- **Module title: Blood, lymphatics, and immune system module**
- **Academic year/level:** 1 st level /2nd semester.
- **Code: S2M3/IBL**
- **Credit hours for the Module: 5**
- **Study weeks: (4)**

2. Departments offering the module:

- Department of Internal medicine.
- Department of Anatomy.
- Department of Biochemistry.
- Department of Physiology.
- Department of Pharmacology.
- Department of Pathology.
- Department of Microbiology.
- Department of Histology.
- Department of Parasitology.

Teaching Departments

| | lectures | Practical | CBL | SDL |
|----------------|-----------------|------------------|------------|------------|
| Anatomy | 2 | 2 | - | - |

| | | | | |
|--------------------------|-----------|-----------|----------|----------|
| Histology | 5 | 4 | - | - |
| Physiology | 10 | 4 | - | 2 |
| Pathology | 6 | 6 | - | - |
| Pharmacology | 5 | 2 | - | 2 |
| Biochemistry | 6 | 4 | - | - |
| Parasitology | 7 | 6 | - | - |
| Microbiology | 6 | 4 | - | 2 |
| Internal medicine | 2 | - | 2 | - |
| Surgery | 1 | - | 1 | - |
| Total | 50 | 16 | 3 | 6 |

2- Overall course aim:

This module aims at:

- Outline the structure of the spleen, different groups of lymph nodes in the body and thoracic duct and the ways in which these structures may be imaged and examined.
- Identify and describe the clotting factors and their roles in homeostasis.
- Describe the histological structure of the blood cells and identify the component parts of the lymphatic system.
- Identify and describe the structure of the lymph nodes and their role in immunity.
- Describe the thoracic duct and its clinical importance.
- Identify and describe the classes of anticoagulants.
- Describe different types of anemia, clinical features, and investigations.
- Describe common classifications, pathogenesis, and treatment of anemia.
- Describe and demonstrate the features, consequences, and management of autoimmune diseases.

- Identify the common parasitic infestation affecting the immune system and how to investigate and treat them.
- Describe the role of iron, vitamin B12 and folic acid in the process of RBCs synthesis.
- Demonstrate the structure of hemoglobin and identify diseases caused by hemoglobin abnormal structure.
- Recognize the metabolism of hemoglobin and the diseases related to its defective degradation.

3. Learning outcomes (LOs)

Competency area I: The graduate as a health care provider

1.6. Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.

1.6.1. Identify diagnostic and infective stages of microbes inhabiting blood, immune & lymphatic system.

1.6.2. Differentiate diagnostic tests commonly used for microbial infections.

1.6.3. Judge results of parasitological & microbial, serological, molecular tests and apply them.

1.6.4. Recognize different bleeding profile tests.

1.6.5. Specify and prioritize specific bleeding tests for different bleeding disorders.

1.8 Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand.

1.8.1. Illustrate plasma protein's function.

1.8.2. Clarify steps of Hematopoiesis

1.8.3. Recognize bases of Homeostasis

1.8.4. Recognize different types of cells of immune system.

1.8.5. Clarify factors affecting antigenicity.

1.8.6. Differentiate between class I MHC and class II MHC.

1.8.7. Summarize General functions of immunoglobulin.

1.8.8. Recognize types of immunity & their mechanisms.

1.9. Retrieve, analyze, and evaluate relevant and current data from literature, using information technologies and library resources, in order to help solve a clinical problem based on evidence (EBM)

1.9.1. Analyze and compare treatment guidelines from literature.

1.9.2. Search for relevant information which helps him in solving clinical problems (Web-based learning, Self-learning and PBL).

1.9.3. Evaluate data about abnormal types of hemoglobin resulting from inherited genetic disorders and their implications on health.

1.10. Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.

1.10.1. Interpret the results of hemoglobin electrophoresis into meaningful diagnosis that helps in proper intervention of patient treatment.

1.16. Apply the appropriate pharmacological & nonpharmacological approaches to alleviate pain and provide palliative care for seriously ill people, aiming to relieve their suffering and improve their quality of life.

1.16.1. Identify different treatment strategies in different anemia cases and bases of choice of drugs in different clinical situations.

1.16.2. Match proper drugs for selected important diseases based on patient's age, weight and health condition.

1.16.3. Identify different treatment strategies in different cases as regard bleeding, immune, lymphatic disorders and bases of choice of drugs in different clinical situations.

1.16.4. Describe parasitological features and life cycle of microbes inhabiting blood, immune & lymphatic systems.

1.16.5. Clarify the clinical perspectives of microbes affecting blood, immune & lymphatic systems.

1.16.6. List important cytokines and their main activities and role in causing disease.

Competency Area IV: The graduate as a scholar and scientist

4.1. Describe normal structure of the body and its major organ systems and explain their functions.

4.1.1. Clarify method of preparation of blood film.

4.1.2. Identify lymph nodes all over the body both superficial and deep including head and neck, chest, upper limb, lower limb and trunk.

4.1.3. Identify the thoracic duct on the cadaver and on the model regarding its beginning, course and end.

4.1.4. Identify development, functions, normal anatomical position of the spleen, its normal measurements, its relations, blood supply on the cadaver and on the model.

4.2. Explain the molecular, biochemical, and cellular mechanisms Important in maintaining the body's homeostasis.

4.2.1. Recognize the molecular base underlying different clinical disorders resulting from abnormal hemoglobin structure and abnormal hemoglobin degradation.

4.2.2. Describe the mechanism of iron metabolism and absorption and its importance for RBCs homeostasis and function.

4.2.3. Explain the role of vitamin B12 and folic acid in haemopoiesis.

4.5. Identify various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of illness/disease and explain the ways in which they operate on the body (pathogenesis).

4.5.1. Identify the genetic defect causing formation of dysfunctional hemoglobin e.g. sickle cell anemia, thalassemia and met Hb.

4.5.2. Report Pathology of different types of lymphomas.

4.6. Describe altered structure and function of the body and its major organ systems that are seen in various diseases and conditions.

4.6.1. Clarify abnormalities in number and structure of blood cells & and their implication in the coagulation process, immune & lymphatic systems.

4.7. Describe drug actions: therapeutics and pharmacokinetics; side effects and interactions, including multiple treatments, long term conditions and non-prescribed medication; and effects on the population.

4.7.1. Differentiate between oral and parenteral iron therapy.

4.7.2. Identify three drugs in management of excessive bleeding & major drug groups (antiplatelet, anticoagulants and fibrinolytics) involved in management of thrombotic diseases.

4.7.3. Describe therapeutic uses & adverse reactions of each immunosuppressive drug.

4.7.4. List the most commonly used monoclonal antibodies.

4.7.5. Outline treatment and lifesaving measures of type 1 hypersensitivity reactions.

Competency Area V: The graduate as a member of the health

5.3. Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports collaborative work.

5.3.1 Implement collaborative teamwork during small group teaching (SDL).

Competency Area VI: The graduate as a lifelong learner and researcher

6.2. Develop, implement, monitor, and revise a personal learning plan to enhance professional practice

6.2.1. Utilize information technology to improve his/her professional practice.

6.2.2. Perform self-appraisal & seek continuous learning.

6.2.3. Continue self-learning

6.3. Identify opportunities and use various resources for learning.

6.3.1. Employ information technology effectively in the field of clinical pharmacology and search the internet for newly discovered drugs.

6.3.2. Recognize the importance of life-long self-learning and give a strong commitment to it.

6 – Module Contents

1. Theoretical lectures

| NO | TITLE | DEPARTMENT |
|----|--|--------------|
| 1 | Anatomy of the spleen. | Anatomy |
| 2 | Anatomy of the thoracic duct and lymph nodes | Anatomy |
| 3 | Histology of blood and myeloid tissue | Histology |
| 4 | Histological structure of platelets and types of bone marrow | HISTOLOGY |
| 5 | Erythropoiesis | PHYSIOLOGY |
| 6 | Histological structure of spleen and lymph nodes | Histology |
| 7 | Histology of the thymus and macrophage system | Histology |
| 8 | Plasma proteins | Physiology |
| 9 | Haemostasis | Physiology |
| 10 | Blood coagulation | Physiology |
| 12 | Erythropoiesis | PHYSIOLOGY |
| 13 | RBCs function, site of formation and fate | Physiology |
| 14 | Natural intravascular anticoagulant. | Physiology |
| 15 | Hypersensitivity reactions | Microbiology |
| 16 | Complement system | Microbiology |
| 17 | Cell mediated immune response | MICROBIOLOGY |
| 18 | A case of anemia, clinical features and investigations. | Medicine |
| 19 | A case of lymphadenopathy | Surgery |
| 20 | Pathology of lymphadenopathy | Pathology |
| 21 | A case of AIDS and white blood cell disorders | Medicine |
| 22 | Hematology | Medicine |

| NO | TITLE | DEPARTMENT |
|----|---|---------------|
| 23 | Cases of anemia | Pathology |
| 24 | Other blood malignancies | Pathology |
| 25 | Blood transfusion | Medicine |
| 26 | Immunosuppressive drugs | Pharmacology |
| 27 | Type 1 hypersensitivity | Pharmacology |
| 28 | A case of SLE | Rheumatology |
| 29 | Folic acid and vitamin B12 | Biochemistry |
| 30 | Hemoglobin structure and genetic disorders | Biochemistry |
| 31 | Iron metabolism | Biochemistry |
| 32 | Heme synthesis and degradation | Biochemistry |
| 33 | Parasites infecting RBCs(Malaria) | Parasitology |
| 34 | African trypanosomes | Parasitology |
| 35 | Toxoplasma Parasitic infections of lymphatic system | Parasitology |
| 36 | Cutaneous and visceral leishmania | Parasitology |
| 37 | Blood volume | PHYSIOLOGY |
| 38 | Hematopoiesis | PHYSIOLOGY |
| 39 | Collagen disease | PATHOLOGY |
| 40 | Autoantibodies | MICROBIOLOGY |
| 41 | Anticoagulants | PHARAMACOLOGY |

7 Practical:

| No. | Title | Department |
|-----|---|--------------|
| 1 | Blood groups | Physiology |
| 2 | Histology of blood cells | Histology |
| 3 | Hemoglobin and hematocrite estimation . | Physiology |
| 4 | Malaria and other protozoa | Parasitology |
| 5 | Determination of C3 and C4 | Microbiology |
| 6 | Toxoplasma, leishmania and toxoplasma | Parasitology |

| | | |
|----|---|--------------|
| 7 | Anatomy of spleen and thoracic duct | Anatomy |
| 8 | Histology of spleen and lymph nodes | Histology |
| 9 | Bleeding and clotting time | Physiology |
| 10 | Parasitic infections of lymphatic system | Parasitology |
| 11 | Diseases of the lymphatic system | Pathology |
| 12 | Tumours affecting blood and lymphatics | Pathology |
| 13 | Principles of HB electrophoresis | Biochemistry |
| 14 | Estimation of serum ferritin and laboratory diagnosis of anemia and abnormal hemoglobin | Biochemistry |
| 15 | Applied Clinical Pharmacology in different anemic cases | Pharmacology |

5. Teaching methods:

1. Lectures:

Conducted by a Professor/assistant Professor and introduce the essential concepts and knowledge, the identification of scientific backgrounds, the explanation of complicated issues and topics and the potential for clinical application.

2. Tutorial classes

Conducted by an assistant Professor and lecturer in small teaching groups to emphasize complicated medical topics and clinical cases. They are held in the corresponding department and are included in the teaching plan. Division of students into groups alternating between direct contact and online lectures.

5. Practical classes: Division of students into groups in the labs and then each group is divided into 4 smaller sub-groups in 2 labs simultaneously. These Subgroups of students allow interaction, presentations and feedback. The plan for practical training is attached in instructional units section. Each lab includes presentation of the scheduled topic by one of the staff. Then the students perform their recommended tasks themselves helped by joiner staff aided with microscopes, projector slides, data show photos.

6. Students' activities: Students will be divided into small groups. Each formed of 10 students. Each group is assigned for oral presentation on a specific topic. Topics are determined by staff member committee. Students will cooperate, prepare and present their projects in front of evaluation committee.

Assessment

3. Formative:

This form of assessment is designed to give you feedback to help you to identify areas for improvement. It includes MCQs and independent learning activities in all subjects. These will be given during tutorial sessions and practical. The answers are presented and discussed immediately with you after the assessment. The results will be made available to you.

4. Summative

This type of assessment is used for judgment or decisions to be made about your performance. It serves as:

- a. Verification of achievement for the student satisfying requirement
- b. Motivation of the student to maintain or improve performance
- c. Certification of performance
- d. Grades

Written Exams will include multiple choice questions (MCQs). These will cover material presented during the lectures, tutorials, CBL presentations, and SDL. Final examination will be held 10-12 AM first Saturday of fourth module at the main exam. Hall.

Practical examination: Will be arranged by the departments

STUDENT'S RESPONSIBILITY

- Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.
- If there is anything that the module coordinator can do to assist you during the course, please feel free to contact him.

Sites

| Activity | Site |
|---|--------------------------|
| 1-Theme Lectures | Main lecture Hall |
| 2- Case based learning & Tutorial sessions | Lecture hall |
| 3- Practical sessions & exam. | |
| Anatomy | Anatomy dissection Hall |
| Histology | Histology department |
| Physiology | Physiology department |
| Biochemistry | Biochemistry Department |
| Pathology | Pathology department |
| Microbiology | Microbiology department |
| Pharmacology | Pharmacology department. |
| 4- Written Assessment | |
| Final module exam. & quizzes | Examination Hall |

Textbooks and References for System Modules

Anatomy: Drake, R., Vogl, A.W. and Mitchell, A.W., 2009. Gray's anatomy for students E-book. Elsevier Health Sciences

Histology: Gartner, L.P. and Hiatt, J.L., 2006. Color textbook of histology ebook. Elsevier Health Sciences.

Physiology: Hall, J.E., 2020. Guyton & hall physiology review e-book. Elsevier Health Sciences.

Biochemistry: Satyanaryana, U. and Chakrapani, U., 2021. Essentials of biochemistry. Elsevier India
Microbiology: Cornelissen, C.N., Harvey, R.A. and Fisher, B.D., 2012. Microbiology (Vol. 3). Lippincott Williams & Wilkins

Parasitology: Garcia, L.S., 2006. Diagnostic medical parasitology. American Society for Microbiology Press

Pathology: Klatt, E.C. and Kumar, V., 2014. Robbins and Cotran review of pathology. Elsevier Health Sciences

Pharmacology: Whalen, K., 2018. Lippincott® Illustrated Reviews: Pharmacology. Wolters kluwer india Pvt Lt

YEAR1- 2ND SEMESTER
Module (4)
MUSCULOSKELETAL SYSTEM

1- Basic information:

Course specifications of:

- Program on which the course is given Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- Module title: Musculoskeletal.
- Academic year/level: 2nd level /4th semester.
- Code: S2M4/MS
- Credit hours for the module: 5
- Study weeks: (4)
 - Departments offering the course:
 - Department of Orthopedics.
 - Department of Anatomy.
 - Department of Biochemistry.
 - Department of Physiology.
 - Department of Pharmacology.
 - Department of Pathology.
 - Department of Microbiology.
 - Department of Histology.
 - Department of parasitology.
 - Department of Rheumatology.

| Course Title | Contact Hours | | | | Credit hours |
|-----------------|---------------|-----------|-----|-----|--------------|
| | Lectures | Practical | CBL | SDL | |
| Musculoskeletal | 49 | 20 | 6 | 0 | 5 |

Teaching Departments

| | Lectures Total= 49 | Practical Total= 20 | CBL 6 | SDL 0 |
|-----------|-----------------------|------------------------|----------|----------|
| Anatomy | 20 | 8 | - | - |
| Histology | 6 | 3 | - | - |

| | | | | |
|---------------------|---|---|---|---|
| Physiology | 5 | 3 | - | - |
| Pathology | 5 | 2 | - | - |
| Pharmacology | 3 | 1 | - | - |
| Biochemistry | 4 | 0 | - | - |
| Microbiology | 4 | 2 | - | - |
| Parasitology | 2 | 1 | - | - |
| Rheumatology | 0 | 0 | 2 | - |
| Orthopedics | 0 | 0 | 4 | - |

2. Overall aim:

At the end of the Module the students will be able to:

- Acquire sufficient knowledge of the macroscopic and microscopic structure of skeletal muscles and bones in human body in order to understand normal function and common clinical abnormalities.
- Gain skills, working knowledge and understanding of the principles and concepts applicable to the musculoskeletal system in general.
 - Appreciate the biomolecular structure and function of extracellular matrix and different types of fibrous proteins and observe their and metabolism while highlighting their relation to pathological conditions or congenital anomalies.
 - Understand different causes of muscular parasitic infestation in order to appreciate the basis of relevant therapeutics.
 - Outline the histological structure of skeletal muscle tissue, histological structure of motor end plate, muscle spindle, ultra structure of skeletal muscle and histological structure of bone.
 - Identify types of bone according to the structure and growth of bone.
 - Demonstrate biochemical bases of different types of Elastin related diseases (Emphysema, Williams syndrome & MARFAN SYNDROME).
 - Demonstrate biochemical bases of different types of Collagen related diseases (Ehlers-Danlos syndrome & Osteogenesis imperfect).
 - Describe drug therapy for rheumatoid arthritis that potentially slows disease progression and avoids side effects of NSAIDs.

- Understanding of prophylaxis of chronic gout and treatment of acute inflammatory episodes
- Describe characteristic features of inflammatory arthritis.
- Differentiate between joint problems and soft tissue rheumatic disorders.
- Differentiate between case presentation of inflammatory and non-inflammatory arthritis.
- Know the causes of mono, oligo and polyarthritis.

3. Learning outcomes (LOs)

By the end of this module the student will be able to:

Competency Area I: The graduate as a health care provider

1.1 Take and record a structured, patient centered history.

1.1.1 Communicate effectively with individuals regardless of their social, cultural, ethnic backgrounds, or their disabilities.

1.6. Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.

1.6.1. Identify diagnostic and infective stage of *T. spiralis*.

1.6.2. Differentiate diagnostic tests commonly used for parasitic infections.

1.6.3. Judge results of parasitological, serological, molecular tests and radiological findings and apply them.

1.6.4. Clarify method of collection of muscle biopsy.

1.9. Retrieve, analyze, and evaluate relevant and data from literature, using information technologies and library resources, in order help solve a clinical problem based on evidence (EBM).

1.9.1. Use different sources of information to obtain data.

1.10. Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.

1.10.1. Construct different knowledge and analyze given information to help in solving difficult problems.

1.10.2. Perform appropriately timed full physical examination of patients appropriate to the age, gender, and clinical presentation of the patient while being culturally sensitive.

1.10.3. Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand).

1.10.4. Retrieve, analyze, and evaluate relevant and current data from literature, using information technologies and library resources, in order to help solve a clinical problem based on evidence (EBM).

1.10.5. Demonstrate basic sciences practical skills relevant to future practice through:

1.10.6. Identify different types of muscles on the models and know how to differentiate between them.

1.10.7. Identify the origin, insertion, nerve supply of each group of the muscles of both upper and lower on the model, bones and soft tissues which help students to know the action of each muscle and effects of nerve injury.

Competency Area II: The graduate as a health care promoter

2.4 Identify the major health risks in his/her community, including demographic, occupational and environmental risks; endemic diseases, and prevalent chronic diseases.

1.4.1 List different organisms affecting the musculoskeletal system and microbiological features of each organism.

1.4.2 Describe parasitologic features and life cycle of *Trichinella spiralis*.

1.4.3 Clarify the clinical perspectives of *Trichinella spiralis*.

1.4.4 Clarify clinical picture, diagnostic, therapeutic and preventive interventions against different microbes and Parasites affecting the musculoskeletal.

Competency Area III: The graduated as a professional

3.5. Ensure confidentiality and privacy of patients' information.

3.5.1. Respect and follow the institutional code of conduct.

3.5.2. Maintain professional image in manner, dress speech and interpersonal relationships that is consistent with the medical profession's accepted contemporary standards in the community.

Competency Area IV: The graduate as a scholar and scientist

4.1. Describe the normal structure of the body and its major organ systems and explain their functions.

4.1.1. Identify the types of muscles in the body in general and the skeletal muscles in particular and examples of each type.

4.1.2. Recognize the different groups of muscles in the back region, upper and lower limb regions.

4.1.3. Classify the branches of brachial plexus and branches emerging from the plexus and their course and distribution in the axilla, arm, forearm and hand and the effect of their lesions.

4.1.4. List the plexuses of the lower limb, their branches and distribution in the thigh region, leg and the foot and effect of their lesions.

4.1.5. Recognize the joints present in the upper limb (shoulder girdle, shoulder joint, elbow joint and the wrist joint), their articulating bones, capsule of the joint, ligaments, stabilizing factors of the joint, muscles acting on the joint and blood&nerve supply of the joint.

4.1.6. Describe the joints present in the lower limb (hip joint, knee joint and the ankle joint), their articulating bones, capsule of the joint, ligaments, stabilizing factors of the joint, muscles acting on the joint and blood&nerve supply of the joint.

4.5. Identify various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of illness/disease of bone, joints, muscles, and neuromuscular junction, and explain the ways in which they operate on the body (pathogenesis).

4.5.1. Recognize the etiology, pathogenesis, and complications of common and life-threatening illnesses and diseases affecting bone,

joints, muscles, and neuromuscular junction, with special emphasis on environmental and traumatic causes.

4.5.2. Classify types of osteomyelitis, osteodystrophies, bone cysts and bone tumours, and recognize the pathological gross and microscopic features of each category.

4.5.3. List the different causes of pathological fracture and recognize the steps of healing bone fracture.

4.5.4. Recognize the pathological gross and microscopic features of different diseases of joints.

4.5.5. Describe the pathological features of the different diseases of muscles and neuromuscular junction.

4.5.6. Identify role Collagen, Elastin and their integration in normal physiological functions and metabolic disturbances in pathological conditions.

4.5.7. Recall and understand difference between Proteoglycans & Glycosaminoglycans, in relation to their structure, types and pathological conditions.

4.5.8. Understanding of prophylaxis of chronic gout and treatment of acute inflammatory episodes.

4.5.9. Differentiate between joint problems and soft tissue rheumatic disorders.

4.5.10. Differentiate between case presentation of inflammatory and non-inflammatory arthritis.

4.5.11. List the causes of mono, oligo and polyarthritis and the unique diagnostic criteria of each cause of arthritis.

Competency Area V: The graduate as a member of the health team and system

5.1. Respect colleagues and other health care professionals and work cooperatively with them, negotiating overlapping and shared responsibilities, and engaging in shared decision-making for effective patient management.

5.1.1. Honor and respect, superiors, colleagues and any other member of the health profession.

5.2. Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports collaborative work.

5.2.1. Communicate effectively using all methods.

5.6 Evaluate his/her work and that of others using constructive feedback.

5.6.1 Express themselves freely and adequately by improving their descriptive capabilities and enhancing their communication skills.

Competency Area VI: The graduate as a lifelong learner and researcher

6.2. Develop, implement, monitor, and revise a personal learning plan to enhance professional practice.

6.2.1. Utilize information technology to improve his/her professional practice.

6.2.2. Perform self-appraisal & seek continuous learning.

6.2.3. Continue self-learning.

6.4. Engage in inter-professional activities and collaborative learning to continuously improve personal practice and contribute to collective improvements in practice.

6.4.1. Work as team leader as well as a member in larger teams.

6.5. Recognize practice uncertainty and knowledge gaps in clinical and other professional encounters and generate focused questions that address them.

6.5.1. Manage scientific meetings and appropriately utilize time.

3– Module Contents

1. Theoretical lectures

| NO | TITLE | DEPARTMENT | HOURS |
|----|--|------------|-------|
| L1 | Development of limbs Clavicle, scapula, humerus (Bony features and muscle attachments). | Anatomy | 2h |
| L2 | Pectoral region Axilla and axillary nerve Muscles of the front and the back of the arm Brachial plexus | Anatomy | 2h |
| L3 | Radius and ulna and bones of the hand Cubital fossa | Anatomy | 2h |

| | | | |
|-----|---|------------|----|
| | Muscles of the front and back of the forearm | | |
| L4 | Muscles of the hand median nerve, ulnar nerve and radial nerves Sterno clavicular joint, shoulder girdle, shoulder joint. Elbow joint and wrist joint and the retinacula | Anatomy | 2h |
| L5 | Hip bone, femur (features and muscle attachment). Deep fascia of the lower limb | Anatomy | 2h |
| L6 | Muscles of gluteal region Muscles of the front of thigh and femoral Triangle Muscles of medial side of the thigh and adductor canal | Anatomy | 2h |
| L7 | Muscles of the back of the thigh and popliteal fossa Tibia and fibula and bones of foot | Anatomy | 1h |
| L8 | Sacral plexus and sciatic nerve | Anatomy | 1h |
| L9 | Muscles of the front of the leg and dorsum of the foot | Anatomy | 1h |
| L10 | Muscles of the lateral side of the leg and common peroneal nerve | Anatomy | 1h |
| L11 | Muscles of the back of the leg and posterior tibial nerve | Anatomy | 1h |
| L12 | Knee joint and ankle joint Arches of the foot | Anatomy | 2h |
| L13 | Histological structure of skeletal muscle tissue Histological structure of motor end plate & muscle spindle | Histology | 1h |
| L14 | ultra-structure of skeletal muscle | Histology | 1h |
| L15 | Histological structure of Compact bone | Histology | 1h |
| L16 | Histological structure of Cancellous bone | Histology | 1h |
| L17 | Growth of bone Ossification of bone Bone remodeling | Histology | 2h |
| L18 | Neuromuscular transmission | Physiology | 1h |

| | | | |
|-----|--|--------------|----|
| L19 | Molecular mechanism of muscular contraction | Physiology | 1h |
| L20 | Grading of muscle contraction | Physiology | 1h |
| L21 | Bone physiology | Physiology | 1h |
| L22 | Calcium homeostasis | Physiology | 1h |
| L23 | Micro-organisms causing skin, soft tissue and muscles& infections Infectious gangrene | Microbiology | 2h |
| L24 | Septic arthritis & Osteomyelitis | Microbiology | 2h |
| L25 | Inflammatory bone diseases and healing of bone fracture | Pathology | 2h |
| L26 | Osteodystrophic bone diseases Diseases of joints | Pathology | 1h |
| L27 | Bone tumours, bone cysts and pathological Fracture | Pathology | 1h |
| L28 | Diseases of muscles and neuromuscular junction. | Pathology | 1h |
| L29 | Drugs used to treat neurologic and neuromuscular disorders | Pharmacology | 2h |
| L30 | Drugs used to treat rheumatoid arthritis (disease modifying antirheumatic drugs; DMARDs) | Pharmacology | 1h |
| L31 | Inflammatory arthritis Soft tissue rheumatic disorders | Rheumatology | 1h |
| L32 | Rheumatoid arthritis | Rheumatology | 1h |
| L33 | ECM: Fibrous protein Collagen | Biochemistry | 2h |
| L34 | ECM: ELASTIN | Biochemistry | 1h |
| L35 | PROTEOGLYCANS & GLYCOSAMINOGLYCANS | Biochemistry | 1h |
| L36 | Trichinella spiralis | Parasitology | 2h |
| L37 | Bone fractures and complications of fractures | Orthopedics | 1h |
| L38 | Acute osteomyelitis & bone tumors | Orthopedics | 1h |
| L39 | Congenital anomalies (Talpeis equino varus) | Orthopedics | 1h |
| L40 | Osteoarthritis and degenerative diseases | Orthopedics | 1h |

2. Practical:

| No | Title | Department | Hours |
|-----|--|--------------|-------|
| P1 | Cases of gout | Pharmacology | 1h |
| P2 | Histological structure of skeletal muscle tissue (microscopic lab& slide data show) | Histology | 2h |
| P3 | Histological structure of compact and cancellous bone (microscopic lab& slide data show) | Histology | 1h |
| P4 | practical physiology | Physiology | 2h |
| P5 | practical physiology | Physiology | 1h |
| P6 | practical pathology | Pathology | 2h |
| P7 | Trichinella spiralis | Parasitology | 1h |
| P8 | practical microbiology | Microbiology | 2h |
| P9 | practical anatomy | Anatomy | 2h |
| P10 | practical anatomy | Anatomy | 2h |
| P11 | practical anatomy | Anatomy | 2h |
| P12 | practical anatomy | Anatomy | 2h |

5. Teaching methods:

1. Lectures:

Conducted by a Professor/assistant Professor and introduce the essential concepts and knowledge, the identification of scientific backgrounds, the explanation of complicated issues and topics and the potential for clinical application.

2. Tutorial classes

Conducted by an assistant Professor and lecturer in small teaching groups to emphasize complicated medical topics and clinical cases. They are held in the corresponding department and are included in the teaching plan. Division of students into groups alternating between direct contact and online lectures.

7. **Practical classes:** Division of students into groups in the labs and then each group is divided into 4 smaller sub-groups in 2 labs simultaneously. These Subgroups of students allow interaction, presentations and feedback. The plan for practical training is attached in instructional units section. Each lab includes presentation of the scheduled topic by one of the staff. Then the students perform their

recommended tasks themselves helped by joiner staff aided with microscopes, projector slides, data show photos.

8. Students' activities: Students will be divided into small groups. Each formed of 10 students. Each group is assigned for oral presentation on a specific topic. Topics are determined by staff member committee. Students will cooperate, prepare and present their projects in front of evaluation committee.

Assessment

5. Formative:

This form of assessment is designed to give you feedback to help you to identify areas for improvement. It includes MCQs and independent learning activities in all subjects. These will be given during tutorial sessions and practical. The answers are presented and discussed immediately with you after the assessment. The results will be made available to you.

6. Summative

This type of assessment is used for judgment or decisions to be made about your performance. It serves as:

- a. Verification of achievement for the student satisfying requirement
- b. Motivation of the student to maintain or improve performance
- c. Certification of performance
- d. Grades

Written Exams will include multiple choice questions (MCQs). These will cover material presented during the lectures, tutorials, CBL presentations, and SDL. Final examination will be held 10-12 AM first Saturday of fourth module at the main exam. Hall.

Practical examination: Will be arranged by the departments

STUDENT'S RESPONSIBILITY

- Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.
- If there is anything that the module coordinator can do to assist you during the course, please feel free to contact him.

Sites

| Activity | Site |
|---|--------------------------|
| 1-Theme Lectures | Main lecture Hall |
| 2- Case based learning & Tutorial sessions | Lecture hall |
| 3- Practical sessions & exam. | |
| Anatomy | Anatomy dissection Hall |
| Histology | Histology department |
| Physiology | Physiology department |
| Biochemistry | Biochemistry Department |
| Pathology | Pathology department |
| Microbiology | Microbiology department |
| Pharmacology | Pharmacology department. |
| 4- Written Assessment | |
| Final module exam. & quizzes | Examination Hall |

Textbooks and References for System Modules

Anatomy: Drake, R., Vogl, A.W. and Mitchell, A.W., 2009. Gray's anatomy for students E-book. Elsevier Health Sciences

Histology: Gartner, L.P. and Hiatt, J.L., 2006. Color textbook of histology ebook. Elsevier Health Sciences.

Physiology: Hall, J.E., 2020. Guyton & hall physiology review e-book. Elsevier Health Sciences.

Biochemistry: Satyanaryana, U. and Chakrapani, U., 2021. Essentials of biochemistry. Elsevier India
Microbiology: Cornelissen, C.N., Harvey, R.A. and Fisher, B.D., 2012. Microbiology (Vol. 3). Lippincott Williams & Wilkins

Parasitology: Garcia, L.S., 2006. Diagnostic medical parasitology. American Society for Microbiology Press

Pathology: Klatt, E.C. and Kumar, V., 2014. Robbins and Cotran review of pathology. Elsevier Health Sciences

Pharmacology: Whalen, K., 2018. Lippincott® Illustrated Reviews: Pharmacology. Wolters kluwer india Pvt L

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشریکاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً

اداب واخلاقيات مهنة الطب

| | | |
|---|--------------------------------------|-----------------------------------|
| 5- بيانات المقرر: اداب وأخلاقيات المهن الطبية | | |
| الكودي: S2M5/ME | اسم المقرر: اداب وأخلاقيات مهنة الطب | الفرقة/ المستوى: الأول |
| التخصص: | | عدد الوحدات الدراسية: نظري 1 عملي |

| | |
|------------------------------|---|
| 6- هدف المقرر: | تنمية المعرفة بالجوانب الأخلاقية والأحكام الطبية الفقهية المتعلقة بالممارسات الطبية ومهنة الطب لدى طالب الطب. |
| 7- المستهدف من تدريس المقرر: | ت- المعلومات والمفاهيم: |
| | أولاً: الأهداف الإدراكية (المعرفية): يستطيع المتعلم أن: |
| | 1. يستكشف الممارسات غير الأخلاقية من خلال الملاحظة والنقاش والاختلاط بالمجتمع. |
| | 2. يصنف الممارسات غير الأخلاقية الخاطئة حسب أهميتها وخطورتها. |
| | 3. يحلل العضلات الطبية ويبحث عن الحلول المناسبة من خلال المراجع الموثوقة. |
| | 4. يشرح الإطار العام للأداب والسلوكيات المتعلقة بالممارسة الطبية من منظور إسلامي. |
| | 5. يلخص واجبات وحقوق الطبيب والعاملين الصحيين والمريض وأهله من وجهة نظر الإسلام. |
| | 6. يعدد أهم مبادئ وأخلاقيات البحث العلمي من منظور إسلامي. |
| | 7. يلخص إرشادات وأنظمة ممارسة مهنة الطب |
| ث- المهارات الذهنية: | يستطيع المتعلم أن: |
| | 1. يجيب على أسئلة المرضى الشائعة بخصوص الأحكام الفقهية المتعلقة بالمرض ويقوم بإرشادهم ورفع الحرج عنهم مثل صيام المريض وصلاته ... الخ. |
| | 2. يقدم شرحاً أو محاضرة قصيرة لزملائه بهدف حثهم على الالتزام بالأخلاق الإسلامية. |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً

| <p>3. يشارك في نقاش قضية أو معضلة أخلاقية بأدب وهدوء. 4. يبلغ المريض أو قريبه عن الخبر السيئ أو قرب الوفاة. 5. يشرح للمرضى أو أقاربهم الأحكام المتعلقة بالممارسات الطبية الحديثة.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---------|---|-----------------------------|---|-------------------------------|---|---|---|-------------------------------------|---|----------------------|---|--|---|---|---|------------------|---|------------------|---|------------------------|---|--|---|---|-------------------------|
| <p>1. يظهر الرغبة والحماس في تنمية الحس الأخلاقي والمعرفي والتطبيقي للمفاهيم والأخلاقيات الإنسانية العامة في بيئة العمل مثل (الإخلاص والإتقان والالتزام والنصح والرحمة والمرونة والتنافس الشريف). 2. يظهر الحماس والالتزام بمفهوم المسؤولية المهنية (الانضباط، الحماس ، التعلم ، حفظ السر</p> | <p>ج- المهارات العامة:</p> | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th>عدد الساعات</th> <th>الموضوع</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>1. مقدمة في أخلاقيات الطبيب</td> </tr> <tr> <td>2</td> <td>2. نشأة علم الأخلاقيات الطبية</td> </tr> <tr> <td>2</td> <td>3. الأسس والمبادئ الأخلاقية من منظور إسلامي</td> </tr> <tr> <td>2</td> <td>4. خلق الطبيب المسلم، خصائصه وصفاته</td> </tr> <tr> <td>2</td> <td>5. حقوق المريض وأهله</td> </tr> <tr> <td>2</td> <td>6. أخلاقيات التعامل بين أفراد الفريق الصحي</td> </tr> <tr> <td>3</td> <td>7. ضوابط المقابلة الطبية والفحص الطبي والفحوص الإضافية.</td> </tr> <tr> <td>2</td> <td>8. زراعة الأعضاء</td> </tr> <tr> <td>2</td> <td>9. جراحة التجميل</td> </tr> <tr> <td>2</td> <td>10. موت الدماغ وأحكامه</td> </tr> <tr> <td>3</td> <td>11. التعامل مع الحالات المستعصية والحالات المنتهية</td> </tr> <tr> <td>3</td> <td>12. أخلاقيات التجارب والبحوث الطبية الحيوية</td> </tr> </tbody> </table> | عدد الساعات | الموضوع | 2 | 1. مقدمة في أخلاقيات الطبيب | 2 | 2. نشأة علم الأخلاقيات الطبية | 2 | 3. الأسس والمبادئ الأخلاقية من منظور إسلامي | 2 | 4. خلق الطبيب المسلم، خصائصه وصفاته | 2 | 5. حقوق المريض وأهله | 2 | 6. أخلاقيات التعامل بين أفراد الفريق الصحي | 3 | 7. ضوابط المقابلة الطبية والفحص الطبي والفحوص الإضافية. | 2 | 8. زراعة الأعضاء | 2 | 9. جراحة التجميل | 2 | 10. موت الدماغ وأحكامه | 3 | 11. التعامل مع الحالات المستعصية والحالات المنتهية | 3 | 12. أخلاقيات التجارب والبحوث الطبية الحيوية | <p>8- محتوى المقرر:</p> |
| عدد الساعات | الموضوع | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 1. مقدمة في أخلاقيات الطبيب | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 2. نشأة علم الأخلاقيات الطبية | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 3. الأسس والمبادئ الأخلاقية من منظور إسلامي | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 4. خلق الطبيب المسلم، خصائصه وصفاته | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 5. حقوق المريض وأهله | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 6. أخلاقيات التعامل بين أفراد الفريق الصحي | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 7. ضوابط المقابلة الطبية والفحص الطبي والفحوص الإضافية. | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 8. زراعة الأعضاء | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 9. جراحة التجميل | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 10. موت الدماغ وأحكامه | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 11. التعامل مع الحالات المستعصية والحالات المنتهية | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 12. أخلاقيات التجارب والبحوث الطبية الحيوية | | | | | | | | | | | | | | | | | | | | | | | | | | |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً

YEAR 1- 2ND SEMESTER

Module (5)

ELECTIVE I (INFECTION CONTROL) MODULE

1- Basic information:

Course specifications of:

- **Program on which the module is given** Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- **Module title:** Infection control module
- **Academic year/level:** 1 st level /2nd semester.
- **Code:** S2M5/E1IC
- **Credit hours for the module:** 2
- **Study weeks:** longitudinal.
- **Department offering the module:**
 - Member or head department of Clinical Pathology Department

2. Overall aim:

The aim of this module is to:

- Recognize the infection control programs and their importance. Outline key concepts of infection control practices and recognize their role in hospitals.
- Describe different policies of infection control in hospitals and their importance.
- Use different scenarios for understanding infection control as a whole and discuss many solutions to the problems of mal use of proper strategies in hospitals.
- Committed to develop a clear understanding for sterilization and vaccinations and their role in environmental protection.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً

3. Learning outcomes (LOs)

By the end of the course the graduate should be able to:

Competency area II: The graduate as a health care promoter.

2.9 Adopt suitable measures for infection control.

- 2.9.1 Retell the meaning of infection control.
- 2.9.2 list the hospital acquired infection and the strategies of infection control programs.
- 2.9.3 Identify different methods regarding infection control policies.
- 2.9.4 Critically evaluate the use of the different infection control methods.
- 2.9.5 Evaluate and propose a strategic plan for proper health care services.
- 2.9.6 Implement infection control strategies in their daily life.
- 2.9.7 Adopt an integrative approach towards decision making.

4. Course/ Course Contents

| Topics | Theoretical | |
|--|-----------------------|------------------------------------|
| | NO. of teaching hours | % Of each lecture / total hrs (30) |
| 1. Infection control programs | 2 | 6.7% |
| 2. Infection control strategies and practices | 4 | 13.3% |
| 3. Environmental management practices | 4 | 13.3% |
| 4. Care of health care workers | 4 | 13.3% |
| 5. Hospital acquired infection | 2 | 6.7% |
| 6. Sterilization and disinfection | 2 | 6.7% |
| 7. Infection control precautions for selected situations | 4 | 13.3% |
| 8. Hazards of disuse of infection control policies | 4 | 13.3% |
| 9. Revision | 2 | 6.7% |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً

| Topics | Theoretical | |
|--------------|-----------------------|------------------------------------|
| | NO. of teaching hours | % Of each lecture / total hrs (30) |
| 10.Revision | 2 | 6.7% |
| Total | 30 | 100% |

5- Teaching and learning methods

| Course | Lecture | Web based L |
|-------------------|---------|-------------|
| Infection control | √ | √ |

6. COURSE ASSESSMENT:

Written Exams short questions or / and multiple choice questions (MCQs).

STUDENT'S RESPONSIBILITY

- Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.
- If there is anything that the module coordinator can do to assist you during the course, please feel free to contact him.

Sites

| Activity | Site |
|-------------------|------------------|
| Final module exam | Examination Hall |

Textbooks and References for System Modules

Infection Prevention and Control: Theory and Clinical Practice for Healthcare Professionals, [Debbie Weston](#), 2008.

THE ELECTIVE I (CARDIOPULMONARY RESUSCITATION) MODULE (5)

1- Basic information:

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً

Course specifications of:

- **Program on which the Module is given** Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- **Module title:** Cardiopulmonary resuscitation.
- **Academic year/level:** 3rd level /5th semester.
- **Code:** S2M5/E1CPR
- **Credit hours for the module:** 2
- **Study weeks:** longitudinal.
- **Departments offering the module:**
 - Department of Cardiology

2. Overall aim:

At the end of the Module the students will be able to:

- Recognize the cardiorespiratory Resuscitation programs and their importance. Outline key concepts of CPR practices and recognize their role in and out hospitals.
- Describe different policies of CPR in hospitals and their importance.
- Use different scenario for understanding the CPR and sudden cardiac death as a whole and discuss many solutions of the problems of maluse of proper strategies in hospitals.

3. Learning outcomes (LOs)

By the end of this module the student will be able to:

Competency Area I: The graduate as a health care provider

1.15. Provide the appropriate care in cases of emergency, including CPR, immediate life support measure and basic first aid procedures.

1.15.1 provide CPR, immediate life support in emergency cases.

1.15.2 list the causes of sudden cardiac death, diagnosis and how to deal.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً

- 1.15.3 Critically evaluate the use of CPR.
1.15.4 Perform CPR.
1.15.5 Provide CPR, immediate life support in emergency cases.

1. Theoretical lectures

| Title | Hours |
|--|-----------|
| 11. Cardiopulmonary Resuscitation programs. | 2 |
| 12. Cardiopulmonary Resuscitation strategies and practices | 4 |
| 13. Environmental management practices | 4 |
| 14. Care of health care workers | 4 |
| 15. Sudden Cardiac death. | 2 |
| 16. D.C shock | 2 |
| 17. CPR precautions for selected situations | 4 |
| 18. Hazards of delay of CPR policies | 4 |
| 19. Revision | 2 |
| 20. Revision | 2 |
| Total | 30 |

5- Teaching and learning methods

| Course | Web based | |
|--------|-----------|---|
| | Lecture | L |
| CPR | √ | √ |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً

6. COURSE ASSESSMENT:

Written Exams short questions or / and multiple choice questions (MCQs).

STUDENT'S RESPONSIBILITY

- Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.
- If there is anything that the module coordinator can do to assist you during the course, please feel free to contact him.

Sites

| Activity | Site |
|-------------------|------------------|
| Final module exam | Examination Hall |

Textbooks and References for System Modules

Clinical Cardiology, Current Practice Guidelines, UPDATED EDITION ,
Demosthenes G. Katritsis , Bernard J. Gersh , A. John Camm , V2.

2- Essential, cardiovascular medicine, Mohamed s. Elguindy , Ahmed m. Elguindy, 5th edition , volume 11.

YEAR 2- 3RD SEMESTER

| النهاية العظمى | الدرجات | | | الحزم الدراسية (Modules) | | | المستوى الثاني - الفصل |
|-------------------|----------------------|------------------------------|---------------------------|--------------------------|-------|-----------------|------------------------------|
| | التحرير ى % 40 | العملى) (OSPE % 30 | اعمال السنة 30 % | Name | Weeks | Credit hours | |
| 125 | 50 | 37.5 | 37.5 | Nutrition and | 4 | 5 | |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً

6. COURSE ASSESSMENT:

Written Exams short questions or / and multiple choice questions (MCQs).

STUDENT'S RESPONSIBILITY

- Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.
- If there is anything that the module coordinator can do to assist you during the course, please feel free to contact him.

Sites

| Activity | Site |
|-------------------|------------------|
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Clinical Cardiology, Current Practice Guidelines, UPDATED EDITION ,
Demosthenes G. Katritsis , Bernard J. Gersh , A. John Camm , V2.

2- Essential, cardiovascular medicine, Mohamed s. Elguindy , Ahmed m. Elguindy, 5th edition , volume 11.

YEAR 2- 3RD SEMESTER

| النهاية العظمى | الدرجات | | | الحزم الدراسية (Modules) | | | المستوى الثاني - الفصل |
|-------------------|----------------------|------------------------------|---------------------------|--------------------------|-------|-----------------|------------------------------|
| | التحرير ى % 40 | العملى) (OSPE % 30 | اعمال السنة 30 % | Name | Weeks | Credit hours | |
| 125 | 50 | 37.5 | 37.5 | Nutrition and | 4 | 5 | |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً

| | | | | | | | |
|---------------|----|------|------|--------------------------|------------------|----|---------|
| | | | | metabolism | | | |
| 125 | 50 | 37.5 | 37.5 | Endocrine system | 4 | 5 | |
| 125 | 50 | 37.5 | 37.5 | Reproductive | 4 | 5 | |
| 125 | 50 | 37.5 | 37.5 | Renal and urinary system | 4 | 5 | |
| متطلب كلية | 50 | - | - | Elective (II) | Longitudi nal | 2 | |
| 500 | | | | | 16 | 22 | المجموع |

YEAR 2- 3RD SEMESTER MODULE (1) NUTRITION AND METABOLISM

1- Basic information:

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً

Course specifications of:

- **Program on which the course is given** Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- **Module title: Nutrition and metabolism module**
- **Academic year/level:** 2nd level /3rd semester.
- **Code:** S3M1/NM
- **Credit hours for the module:** 5
- **Study weeks:** (4)
- **Department offering the module:**
 - Department of Physiology.
 - Department of Biochemistry.
 - Department of Public health.
 - Department of Histology.
 - Department of Pediatrics.
 - Department of Anesthesia.

| Course Title | Contact Hours | | | | Credit hours |
|-----------------------|---------------|----------------|-----|----------|--------------|
| | Lecture | Practical (X2) | CBL | SDL (X3) | |
| &Nutrition Metabolism | 52 | 18 | 3 | 2 | 5 |

Teaching Departments

| | Lectures | Practical (X2) | CBL | SDL (X3) |
|--------------|----------|----------------|-----|----------|
| Physiology | 10 | 6 | 1 | 1 |
| Biochemistry | 32 | 6 | | 1 |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً

| | | | | |
|---------------|----|----|---|---|
| public health | 6 | 4 | 1 | |
| Pediatrics | | | 1 | |
| Anesthesia | 2 | | | |
| Histology | 2 | 2 | | |
| Total | 52 | 18 | 3 | 2 |

2- Overall aim:

This module aims at:

- providing the undergraduate students with basic scientific knowledge about GIT structure (microscopic & macroscopic), physiological function of GIT, sound nutrition & metabolism and adequate diet planning.
- Master the essential practical and clinical skills necessary for proper dealing with common GIT health problems that will be met during practicing medicine.

3- Learning outcomes (LOs)

By the end of this course the student will be able to:

Competency Area I: The graduate as a health care provider

1.1 Take and record a structured, patient centered history.

1.1.1 Obtain and document a complete & a focused medical history.

1.2 Adopt an empathic and holistic approach to the patients and their problems.

1.2.1 Demonstrate respect, appropriate professional behavior and establish good relations with patients.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً

1.4 Perform appropriately timed full physical examination of patients appropriate to the age, gender, and clinical presentation of the patient while being culturally sensitive.

1.4.1 Demonstrate safely appropriate medical diagnostic procedures.

1.4.2 Perform clinical examination for detection of malnutritional disorders (skin, hair, nail, S.C tissues, face ,eyes, lip, tongue, gums, teeth, musculoskeletal system, thyroid gland, CV system ,nervous system & GIT).

1.6 Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.

1.6.1 Interpret results of Lab. Investigation for nutritional assessment.

1.8 Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand.

1.8.1 Diagnose & differentiate between types of nutritional anemias.

1.8.2 Differentiate between marasmus & Kwashiorkor as regards clinical findings & management

1.8.3 Diagnose different GIT problems by its microscopic & gross features.

1.8.4 Diagnose nutritional deficiency disorders with stress on lab investigation to reach the proper diagnosis.

1.9 Retrieve, analyze, and evaluate relevant and current data from literature, using information technologies and library resources, in order to help solve a clinical problem based on evidence (EBM).

1.9.1 Manage learning resources effectively to reach to a clinical decision based on evidence.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً

1.10 Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.

1.10.1 Relate all obtained results either from history taking, medical examination and investigations in order to diagnose the medical problems.

1.11 Perform diagnostic and intervention procedures in a skillful and safe manner, adapting to unanticipated findings or changing clinical circumstances.

1.11.1 Interpret anthropometric measurement (Weight, height, skin fold thickness).

1.11.2 Calculate BMI and classify body weight according to it.

1.11.3 Take different body circumferences (waist, hip, waist/hip ratio, wrist, mid-arm, chest, head).

1.11.4 Calculation of morbidity & mortality indicators of malnutrition.

1.11.5 Diagnose the following by its microscopic & gross features (Sialadenitis, Salivary tumors (pleomorphic adenoma, Warthin tumor, adenoid cystic carcinoma, Oesophagitis & Oesophageal squamous cell carcinoma, peptic ulcer & gastric carcinoma).

1.16. Apply the appropriate pharmacological and non pharmacological approaches to alleviate pain and provide palliative care for seriously ill people, aiming to relieve their suffering and improve their quality of life.

1.16.1 Classify drugs used in treatment of peptic ulcer and how to monitor the treatment.

1.16.2 Explain pharmacology of antacids & proton pump inhibitors.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً

1.16.3 List the steps for management of bleeding peptic ulcer.

1.16.4 Discuss dietary management of patients with (hypertension, congestive heart disease, MI, hypercholesterolemia, hypertriglyceridemia, liver failure & hepatitis, renal failure, post- transplantation, type I&II D.M , peptic ulcer, chronic cholecystitis, constipation, hemorrhoids & diverticulitis)

Competency Area II: The graduate as a health care promoter

2.1 Identify the basic determinants of health and principles of health improvement.

2.1.1 Identify the daily requirements of proteins, lipids and carbohydrates.

2.1.2 Describe rules and methods of diet planning.

2.1.3 Describe golden rules of food safety.

2.3 Discuss the role of nutrition and physical activity in health.

2.3.1 Describe the relation between food & cancer.

2.3.2 Describe rules & methods of diet planning.

2.7 Provide care for specific groups including pregnant women, newborns and infants, adolescents and the elderly.

2.7.1 Mention nutritional requirements of different age groups (Pregnant & lactating females, Infants, School children & Adolescents & Elderly).

Competency Area III: The graduate as a professional

3.1 Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً

3.1.1 Criticize his/her own personal and professional limits and consult other colleagues and supervisors when necessary.

Competency Area IV: The graduate as a scholar and scientist

4.1 Describe the normal structure of the body and its major organ systems and explain their functions.

4.1.1 Describe (position, parts, shape, relations, surface anatomy and vascular supply of oral cavity, salivary glands, pharynx , oesophagus& stomach).

4.1.2 Recall the steps of development of mouth, tongue, pharynx, oesophagus, and stomach &its anomalies.

4.1.3 Describe the histological structure (LM&EM) of lips, tongue, salivary glands, oesophagus, stomach (fundus & pylorus).

4.1.4 Describe physiological functions of upper GIT (grinding, swallowing, digestion & absorption)

4.2 Explain the molecular, biochemical, and cellular mechanisms that are important in maintaining the body's homeostasis.

4.2.1 Describe the macro-& micronutrients and their functions.

4.2.2 Identify general GIT functions, Digestion, Absorption, Secretion, Excretions, & Motility.

4.2.3 Identify the metabolism of amino acids and their functions and derivatives.

4.2.4 Discuss the dietary sources, functions and metabolism of water soluble & fat-soluble vitamins.

4.2.5 Report classification and functions of dietary fibers.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً

4.2.6 Discuss the dietary sources, functions and metabolism of major minerals & deficiency manifestations.

4.2.7 Discuss the dietary sources metabolism, functions, and deficiency manifestations of trace elements.

4.5 Identify various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of illness/disease and explain the ways in which they operate on the body (pathogenesis).

4.5.1 Describe inborn errors of metabolism (cause, clinical manifestations, complications & management).

4.5.2 Discuss PEM (types, clinical picture, causes & management and prevention).

4.5.3 Discuss the pathological features and pathogenesis of inflammatory and neoplastic disorders of salivary glands & oral cavity.

4.5.4 Discuss the pathological features and pathogenesis of inflammatory and neoplastic disorders of oesophagus.

4.5.5 Discuss the pathological features and pathogenesis of inflammatory and neoplastic disorders of the stomach.

4.5.6 Describe the pathogenesis & diagnosis of H. pylori infection.

4.6 Describe altered structure and function of the body and its major organ systems that are seen in various diseases and conditions.

4.6.1 Discuss the pathological features and pathogenesis of inflammatory and neoplastic disorders of salivary glands & oral cavity.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً

4.6.2 Discuss the pathological features and pathogenesis of inflammatory and neoplastic disorders of oesophagus.

4.6.3 Discuss the pathological features and pathogenesis of inflammatory and neoplastic disorders of the stomach.

4.7 Describe drug actions: therapeutics and pharmacokinetics; side effects and interactions, including multiple treatments, long term conditions and non-prescribed medication; and effects on the population.

4.7.1 Classify drugs used in treatment of peptic ulcer and how to monitor the treatment.

4.7.2 Explain pharmacology of antacids & proton pump inhibitors.

4.7.3 List the steps for management of bleeding peptic ulcer.

4.8 Demonstrate basic sciences specific practical skills and procedures relevant to future practice, recognizing their scientific basis, and interpret common diagnostic modalities, including: imaging, electrocardiograms, laboratory assays, pathologic studies, and functional assessment tests.

4.8.1 Diagnose cases of each amino acid deficiency with stress on lab investigation to reach the proper diagnosis.

4.8.2 Interpret results of Lab. Investigation for nutritional assessment.

4.8.3 Diagnose the following by its microscopic features (Sialadenitis, Salivary tumors (pleomorphic adenoma, Warthin tumor, adenoid cystic carcinoma, Oesophagitis & Oesophageal squamous cell carcinoma)

Competency Area V: The graduate as a member of the health team and system

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً

5.2 Respect colleagues and other health care professionals and work cooperatively with them, negotiating overlapping and shared responsibilities and engaging in shared decision-making for effective patient management.

5.2.1 Demonstrate respect, appropriate professional behavior and establish good relations in all aspects of his/her practice.

5.2.2 Criticize his/her own personal and professional limits and consult other colleagues and supervisors when necessary.

5.4 Apply leadership skills to enhance team functioning, the learning environment, and/or the health care delivery system.

5.4.1 Work effectively within team.

5.4.2 Practice leadership skills during practical and media sessions.

5.5 Communicate effectively using a written health record, electronic medical record, or other digital technology.

5.5.1 Communicate clearly, sensitively and effectively using written or electronic medical records, or other digital technology.

5.6 Evaluate his/her work and that of others using constructive feedback.

5.6.1 Appraise his/her performance and that of others through construction feedback.

Competency Area VI: The graduate as a lifelong learner and researcher

6.2 Identify opportunities and use various resources for learning.

6.2.1 Revise different learning resources take in consideration the opportunities.

6.3 Develop, implement, monitor, and revise a personal learning plan to enhance professional practice.

رؤية الكلية: أن تكون كلية الطب جامعة كفرالشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً

6.3.1 Engage and revise personal learning plan to improve professional practice.

6.6 Effectively manage learning time and resources and set priorities.

6.6.1 Manage learning time and resources effectively.

4 – Module Contents

1. Theoretical lectures

| NO | TITLE | HOURS | DEPARTMENT |
|----|---|-------|---------------|
| 1 | RQ | 3 h | Physiology |
| 2 | BMR&SDA | 4 h | |
| 3 | Temperature regulation | 3 h | |
| 4 | Adipose connective tissue | 1 h | |
| 5 | Liver and gall bladder | 1 h | |
| 6 | Principles of healthy nutrition | 2 h | Public health |
| 7 | Assessment of nutritional status | 2 h | |
| 8 | Some important nutritional disorders (iron deficiency anemia, iodine deficiency and obesity) | 2 h | |
| 9 | Bioenergetics <ul style="list-style-type: none"> • Introduction to bioenergetics of biochemical reaction and free energy changes • Synthesis of ATP • Substrate level phosphorylation. | 2 h | Biochemistry |
| 10 | Bioenergetics <ul style="list-style-type: none"> • Oxidative phosphorylation. • Abnormalities of electron transport chain | 2h | |
| 11 | CHO metabolism <ul style="list-style-type: none"> • Glucose absorption and mechanism of transport to the cells • Glycolysis and clinical correlations | 4h | Biochemistry |
| 12 | CHO metabolism <ul style="list-style-type: none"> • Oxidative decarboxylation and Krebs cycle | 3h | |

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| | | | |
|----|---|-----|----------------|
| | <ul style="list-style-type: none"> • Gluconeogenesis and its clinical correlation | | |
| 13 | CHO metabolism <ul style="list-style-type: none"> • Glycogen metabolism and its clinical correlation | 2h | |
| 14 | CHO metabolism <ul style="list-style-type: none"> • Hexose monophosphate pathway and its clinical correlation | 3h | |
| 15 | Lipid metabolism <ul style="list-style-type: none"> • Lipid digestion and transport to peripheral tissues | 1 h | Biochemistry |
| 16 | Lipid metabolism <ul style="list-style-type: none"> • Denovo synthesis of fatty acids and TAG synthesis, regulation and clinical correlation | 2h | |
| 17 | Lipid metabolism <ul style="list-style-type: none"> • Lipolysis, regulation and clinical correlation. | 2h | |
| 18 | Lipid metabolism <ul style="list-style-type: none"> • Ketogenesis and ketolysis and clinical correlations. | 1 h | |
| 19 | Protein metabolism <ul style="list-style-type: none"> • Protein digestion and nitrogen balance • Fate of amino acids • Metabolism of individual amino acids | 4 h | Biochemistry |
| 20 | Vitamins <ul style="list-style-type: none"> • Fat soluble vitamins • Water soluble vitamins and their clinical correlations | 3 h | Biochemistry |
| 21 | Nucleotide metabolism | 1 h | |
| 22 | Integration of metabolism (Fed fasting cycle and obesity) | 2 h | Biochemistry |
| 23 | Parenteral nutrition | 2 h | Anesthesiology |

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| | | |
|--------------|------|--|
| Total | 52 h | |
|--------------|------|--|

Practical

| | Title | hours | Department |
|-----------|---|-------|---------------|
| 1 | Assessment of blood glucose levels and comments on the abnormalities of its blood level | 2 h | Biochemistry |
| 2 | Assessment of blood and urine ketone bodies | 2 h | Biochemistry |
| 3 | Case studies on vitamin deficiencies | 1 h | Biochemistry |
| 5 | Assessment of amino acid inborn metabolic errors | 1 h | Biochemistry |
| 6 | Anthropometric measurement and assessment of nutritional status | 2 h | Public health |
| 7 | Pediatric growth curves | 2 h | Public health |
| 8 | Assessment of basal metabolic rate | 3 h | Physiology |
| 9 | Assessment of respiratory quotient | 3 h | Physiology |
| 10 | H and E of adipose tissue structure and special stains | 1 h | Histology |
| 11 | H and E of Liver structure and special | 1 h | Histology |

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| | | | |
|--|--------|----|--|
| | stains | | |
| | Total | 18 | |

Teaching methods

Lectures:

Conducted by a Professor/assistant Professor and introduce the essential concepts and knowledge, the identification of scientific backgrounds, the explanation of complicated issues and topics and the potential for clinical application.

Tutorial classes

Conducted by an assistant Professor and lecturer in small teaching groups to emphasize complicated medical topics and clinical cases. They are held in the corresponding department and are included in the teaching plan. Division of students into groups alternating between direct contact and online lectures.

Practical classes: Division of students into groups in the labs and then each group is divided into 4 smaller sub- groups in 2 labs simultaneously. These Subgroups of students allow interaction, presentations, and feedback. The plan for practical training is attached in the instructional units section. Each lab includes presentation of the scheduled topic by one of the staff. Then the students perform their recommended tasks themselves helped by joiner staff aided with microscopes, projector slides, data show photos.

Students' activities: Students will be divided into small groups. Each formed of 10 students. Each group is assigned for oral presentation on a specific topic. Topics are determined by the staff member committee. Students will cooperate, prepare and present their projects in front of evaluation committee.

Assessment

Formative:

This form of assessment is designed to give you feedback to help you to identify areas for improvement. It includes a mixture of MCQs, short answer-questions (SAQs), case-solving exercises and independent learning activities in all subjects. These will be given during

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً

tutorial sessions and practical. The answers are presented and discussed immediately with you after the assessment. The results will be made available to you.

Summative

This type of assessment is used for judgment or decisions to be made about your performance. It serves as:

- e. Verification of achievement for the student satisfying requirement
- f. Motivation of the student to maintain or improve performance.
- g. Certification of performance
- h. Grades

In this Course your performance will be assessed according to the following:

- | | |
|---------------------------|-------------------|
| 1. Continuous Assessment | 30 % (37.5 marks) |
| 2. Practical | 30 % (37.5 marks) |
| 3. Final Exam (Two Hours) | 40 % (50 marks) |

Total = 100 % (125 mark)

Written Exams will include multiple choice questions (MCQs). These will cover material presented during the lectures, tutorials, CBL presentations, and SDL. Final examination will be held 10-12 AM first Saturday of fourth module at the main exam. Hall.

The first quiz will be held at 10-12 AM Saturday of 2nd week of Es module.

Second quiz will be held at 10-12 AM Thursday of 4th week of ES module. In case of an emergency, the module coordinator must be notified.

Practical examination: Will be arranged by the departments.

STUDENT'S RESPONSIBILITY

- Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً

- If there is anything that the module coordinator can do to assist you during the course, please feel free to contact him.

Sites

| Activity | Site |
|--|--------------------------|
| 1-Theme Lectures | Main lecture Hall |
| 2- Case based learning | Academic departments |
| 3- Practical sessions & exam. | |
| Anatomy | Anatomy dissection Hall |
| Histology | Histology department |
| Physiology | Physiology department |
| Biochemistry | Biochemistry Department |
| Pathology | Pathology department |
| Microbiology | Microbiology department |
| Pharmacology | Pharmacology department. |
| 4- Written Assessment | |
| Final module exam. & quizzes | Examination Hall |

Text Books and References for System Modules

Textbooks and References for System Modules:

1. Champe & Harvey, Lippincott Illustrated Reviews of Biochemistry, 4th edition.
2. Robert K. Murray, Daryl K. Granner, Victor W. Rodwell, Harper's Illustrated Biochemistry, 27th Edition.
3. Thomas M. Devlin, Textbook of Biochemistry with Clinical Correlations, Jon Willey & sons, New York.
4. Michael Bishop, Edward P. Fody and Larry E. Schoeff, Clinical Chemistry: Principles, Procedures and Correlations, 5th edition.
5. W.B. Saunders, Hutchison's Clinical Methods.
6. Bernadette F. Rodak, Haematology: Clinical Principles and Applications.
7. W.E. Waters & Kenneth Stephenson Cliff, Community Medicine.
8. Champe & Harvey, Lippincott Illustrated Reviews of Pharmacology.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً

9. David M. Alpers, William F. Stenson, Beth E. Taylor & Dennis M. Bier, Manual of Nutritional Therapeutics, 5th edition.
10. Richard S. Snell. Clinical Anatomy by Systems for Medical students, Lippincott, latest edition. Williams and Wilkins.
11. Web site and its attached links: www.kauanatomy.com
12. Grant J.C.B. Grant's Atlas of Anatomy.10th edition. Lippincott, Williams and Wilkins.
13. Cell biology & Histology (2017): Gartner L.P. & Hiatt J.L. 7th ed. Wolters Kluwer, Philadelphia, New York, London.
14. Histology A text & Atlas with correlated cell and molecular biology (2016): Ross, M.H. and Pawlina, W. 7th ed. Wolters Kluwer, Philadelphia, New York, London.

YEAR2- 3RD SEMESTER

MODULE (2)

ENDOCRINE SYSTEM

1- Basic information:

Course specifications of:

- **Program on which the course is given** Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- **Module title:** Endocrine system module

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً

- **Academic year/level:** 2nd level /3rd semester.
- **Code:** S3M2/E
- **Credit hours for the module:** 5
- **Study weeks:** (4)
- **Department offering the module:**
 - Department of internal medicine.
 - Department of Anatomy.
 - Department of Biochemistry.
 - Department of Physiology.
 - Department of Pharmacology.
 - Department of Pathology.
 - Department of Histology.

| Course Title | Contact Hours | | | | Credit hours |
|------------------|---------------|-----------|-----|-----|--------------|
| | Lectures | Practical | CBL | SDL | |
| Endocrine system | 47 | 20 | 4 | 4 | 5 |

Teaching Departments

| | lectures | Practical (X2) | CBL | SDL (X3) |
|---------|----------|-------------------|-----|-------------|
| Anatomy | 11 | 4 | - | 1 |

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| | | | | |
|--------------------------|----|----|---|---|
| Histology | 5 | 2 | - | 1 |
| Physiology | 16 | 5 | - | 1 |
| Pathology | 7 | 3 | 1 | - |
| Pharmacology | 3 | 2 | 1 | - |
| Biochemistry | 5 | 3 | - | 1 |
| Internal medicine | - | - | 2 | |
| Total | 47 | 20 | 4 | 4 |

2. Overall aim:

At the end of the Module the students will be able to:

- Acquire sufficient knowledge of the macroscopic and microscopic structure of different endocrine glands to understand normal function and common clinical abnormalities.
- Gain skills, working knowledge and understanding of the principles and concepts applicable to the Endocrine System, in general.
- Understand Endocrine glands cellular function to appreciate the basis of relevant therapeutics.
- Describe the normal function of endocrine glands and different pathological conditions related to anatomical and physiological properties of each gland.
- Define the normal structure of the glands and discuss the relations of different glands and structures.
- Explain the normal growth and development of the glands including variations and congenital malformations.
- Describe the histological structure of thyroid, parathyroid glands, histological structure of pituitary gland, Histologic structure of suprarenal gland and islets of Langerhans.
- Recognize physiological control on endocrine system and the structure of different hormones.
- Identify the mechanism of action and classification of hormones.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً

- Compare different insulin preparation and Type 1 and type 2 diabetes management strategies.
- Describe mechanism of action of oral antidiabetics and the role of lifestyle modification in DM management.
- Recognize different drugs used in thyrotoxicosis and discuss the basis of choice of drugs in different cases and Explain mechanism of action and identify adverse effect of antithyroid drugs.

3. Learning outcomes (LOs)

By the end of this course the student will be able to:

Competency Area I: The graduate as a health care provider

1.6 Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.

1.6.1 Differentiate diagnostic tests commonly used for endocrine diseases.

1.6.2 Judge results of serological, molecular tests and radiological finding and apply them.

1.9 Retrieve, analyze, and evaluate relevant and data from literature, using information technologies and library resources, in order help solve a clinical problem based on evidence (EBM).

1.9.1 Use different sources of information to obtain data.

1.9.1 Analyze and compare treatment guidelines from literature.

1.9.2 Appraise relevant information which helps him in solving clinical problems (Web-based learning, Self-learning).

1.10 Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.

1.10.1 Construct different knowledge and analyze given information to help in solving difficult problems.

1.16 Apply the appropriate pharmacological & non pharmacological approaches to alleviate pain and provide palliative care for seriously ill people, aiming to relieve their suffering and improve their quality of life.

1.16.1 Identify different treatment strategies in different cases and bases of choice of drugs in different clinical situations.

1.16.2 Choose proper drugs for selected important diseases based on patient's age, weight and health condition.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً

1.16.3 Identify the role of lifestyle modification in DM management.

Competency Area III: The graduate as a professional

3.1 Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.

3.1.1 Demonstrate respect to all patients irrespective of their socioeconomic levels, culture or religious beliefs and use language appropriate to the patient's culture.

3.1.2 Describe and effectively deal with unethical behavior of other members of healthcare team.

3.5 Ensure confidentiality and privacy of patients' information.

3.5.1 Respect and follow the institutional code of conduct.

3.5.2 Maintain professional image in manner, dress speech and interpersonal relationships that is consistent with the medical profession's accepted contemporary standards in the community.

Competency Area IV: The graduate as a scholar and scientist

4.1 Describe normal structure of the body and its major organ systems and explain their functions.

4.1.1 Define the normal structure of the glands and discuss the relations of different glands and structures.

4.1.2 Explain the normal growth and development of the glands including variations and congenital malformations.

4.1.3 Describe the histological structure of thyroid parathyroid, gland's histological structure of pituitary gland Histologic structure of suprarenal gland and islets of Langerhans and their function.

4.1.4 Summarize and analyze different knowledge about endocrine glands

4.1.5. Compare different endocrine glands.

Compare the cells of pars distalis of pituitary glands and pars nervosa.

Compare between cells of islets of langerhans

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً

4.5. Identify various causes (genetic and metabolic) of illness/disease and explain the ways in which they operate on the body (pathogenesis).

4.5.1 Report Pathology of tumors of endocrine system.

4.5.2 Analyze the congenital anomalies on embryological basis.

4.7. Describe drug actions: therapeutics and pharmacokinetics; side effects and interactions, including multiple treatments, long term conditions and non-prescribed medication; and effects on the population.

4.7.1 Compare different insulin preparations.

4.7.2 Describe mechanism of action of oral antidiabetics.

4.7.3 Compare between different antidiabetic drugs as regard hypoglycemic tendency and effect on body weight.

4.7.4 Describe Type 1 and type 2 diabetes managing strategies.

4.7.5 Recognize different drugs used in thyrotoxicosis and discuss the basis of choice of drugs in different cases.

4.7.6 Identify the rationale for drugs used in thyrotoxic crisis.

4.7.7 Identify clinical uses of different hypothalamic and pituitary hormones.

Competency Area V: The graduate as a member of the health team and system

5.2. Respect colleagues and other health care professionals and work cooperatively with them, negotiating overlapping and shared responsibilities, and engaging in shared decision-making for effective patient management.

5.2.1 Honor and respect, superiors, colleagues and any other member of the health profession.

5.3 Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports collaborative work.

5.3.1 Implement collaborative teamwork during small group teaching (SDL).

5.3.2 Communicate effectively using all methods.

Competency Area VI: The graduate as a lifelong learner and researcher

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً

6.2. Develop, implement, monitor, and revise a personal learning plan to enhance professional practice.

6.2.1 Use information technology to improve his/her professional practice.

6.2.2 Perform self-appraisal & seek continuous learning.

6.3 Identify opportunities and use various resources for learning.

6.3.1 Use information technology effectively in the field of clinical pharmacology and search the internet for newly discovered drugs.

6.3.2 Appraise the importance of life-long self-learning and give a strong commitment to it.

4 – Module Contents

1-Lectures: Timetable

Teaching methods

Lectures:

Conducted by a Professor/assistant Professor and introduce the essential concepts and knowledge, the identification of scientific backgrounds, the explanation of complicated issues and topics and the potential for clinical application.

Tutorial classes

Conducted by an assistant Professor and lecturer in small teaching groups to emphasize complicated medical topics and clinical cases. They are held in the corresponding department and are included in the teaching plan. Division of students into groups alternating between direct contact and online lectures.

Practical classes: Division of students into groups in the labs and then each group is divided into 4 smaller sub- groups in 2 labs simultaneously. These Subgroups of students allow interaction, presentations and feedback. The plan for practical training is attached in the instructional units section. Each lab includes presentation of the scheduled topic by one of the staff. Then the students perform their recommended tasks themselves helped by joiner staff aided with microscopes, projector slides, data show photos.

Students' activities: Students will be divided into small groups. Each formed of 10 students. Each group is assigned for oral presentation on a specific topic. Topics are determined by the staff member committee.

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Students will cooperate, prepare and present their projects in front of evaluation committee.

Assessment

Formative:

This form of assessment is designed to give you feedback to help you to identify areas for improvement. It includes a mixture of MCQs, short answer-questions (SAQs), case-solving exercises and independent learning activities in all subjects. These will be given during tutorial sessions and practical. The answers are presented and discussed immediately with you after the assessment. The results will be made available to you.

Summative

This type of assessment is used for judgment or decisions to be made about your performance. It serves as:

- i. Verification of achievement for the student satisfying requirement
- j. Motivation of the student to maintain or improve performance.
- k. Certification of performance
- l. Grades

In this Course your performance will be assessed according to the following:

| | |
|---------------------------|-------------------|
| 4. Continuous Assessment | 30 % (37.5 marks) |
| 5. Practical | 30 % (37.5 marks) |
| 6. Final Exam (Two Hours) | 40 % (50 marks) |

Total = 100 % (125 mark)

Written Exams will include multiple choice questions (MCQs). These will cover material presented during the lectures, tutorials, CBL presentations, and SDL. Final examination will be held 10-12 AM first Saturday of fourth module at the main exam. Hall.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً

First quiz will be held at 10-12 AM Saturday of 2nd week of Es module.

Second quiz will be held at 10-12 AM Thursday of 4th week of ES module. In case of an emergency, the module coordinator must be notified.

Practical examination: Will be arranged by the departments

STUDENT'S RESPONSIBILITY

- Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.
- If there is anything that the module coordinator can do to assist you during the course, please feel free to contact him.

Sites

| Activity | Site |
|--|--------------------------|
| 1-Theme Lectures | Main lecture Hall |
| 2- Case based learning | Academic departments |
| 3- Practical sessions & exam. | |
| Anatomy | Anatomy dissection Hall |
| Histology | Histology department |
| Physiology | Physiology department |
| Biochemistry | Biochemistry Department |
| Pathology | Pathology department |
| Microbiology | Microbiology department |
| Pharmacology | Pharmacology department. |
| 4- Written Assessment | |
| Final module exam. & quizzes | Examination Hall |

Text Books and References for System Modules

Anatomy: Drake, R., Vogl, A.W. and Mitchell, A.W., 2009. Gray's anatomy for students E-book. Elsevier Health Sciences

Histology: Gartner, L.P. and Hiatt, J.L., 2006. Color textbook of histology ebook. Elsevier Health Sciences.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً

Physiology: Hall, J.E., 2020. Guyton & hall physiology review e-book. Elsevier Health Sciences.

YEAR 2- 3RD SEMESTER MODULE (3) REPRODUCTIVE SYSTEM

1- Basic information:

Course specifications of:

- **Program on which the module is given** Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- **Module title:** Reproductive system module
- **Academic year/level:** 2nd level /3rd semester.
- **Code:** S3M3/R
- **Credit hours for the module:** 5
- **Study weeks:** (4)
- **Department offering the module:**
 - **Department of Gynecology and Obstetrics.**

رؤية الكلية: أن تكون كلية الطب جامعة كفرالشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً

- Department of General Surgery.
- Department of Anatomy.
- Department of Histology.
- Department of Physiology.
- Department of Pharmacology.
- Department of Pathology.
- Department of Microbiology.
- Department of Medical Parasitology.
-

| Course Title | Contact Hours | | | | Credit hours |
|---------------------|---------------|-----------|-----|-----|--------------|
| | Lecture | Practical | CBL | SDL | |
| reproductive system | 48 | 21 | 3 | 3 | 5 |

Teaching Departments

| | lectures | Practical (X2) | CBL | SDL (X3) |
|------------|----------|-------------------|-----|----------|
| Anatomy | 12 | 4 | - | 1 |
| Histology | 9 | 4 | - | 1 |
| Physiology | 9 | 5 | - | 1 |
| Pathology | 10 | 5 | - | - |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً

| | | | | |
|------------------------------|-----------|-----------|----------|----------|
| Pharmacology | 3 | 1 | - | - |
| Microbiology | 3 | 1 | - | - |
| Parasitology | 2 | 1 | - | - |
| Gynecology and Obstetrics | - | - | 1 | - |
| Urosurgery | - | - | 1 | - |
| General Surgery | - | - | 1 | - |
| Total | 48 | 21 | 3 | 3 |

2- Overall aim:

This module aims at:

- enable students to make progress towards meeting some of the learning outcomes described in national academic reference standards (2017).
- understand the processes of human reproduction and lactation from the production of gametes to the establishment of independent life of the neonate.
- know anatomical, histological, physiological basis of common disorders and infections of the male and female reproductive systems and the breast and the application of therapeutics.
- Describe the formation of the gametes in both sexes.
- Describe the anatomical, embryological, histological, and physiological features of the male, female reproductive system and breast.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً

- Apply the anatomical, histological, and physiological bases in understanding the pathological and pathogenesis of common genital disorders and infections and their management.
- Describe the ovarian and uterine cycles, the mechanism of puberty, menopause and outline common problems.
- Describe the processes involved in coitus, fertilization, implantation, the normal pattern of fetal development and abnormalities, pregnancy and infertility and common forms of drugs indicated and contraindicated in pregnancy, contraception, tocolytic and oxytocic drugs.

3- Learning outcomes (LOs)

By the end of this course the student will be able to:

Competency Area I: The graduate as a health care provider

1.6 Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.

1.6.1 Differentiate diagnostic tests commonly used for reproductive system diseases.

1.6.2 Judge results of serological, molecular tests and radiological finding and apply them.

1.9 Retrieve, analyze, and evaluate relevant and data from literature, using information technologies and library resources, in order help solve a clinical problem based on evidence (EBM).

1.9.1 Use different sources of information to obtain data.

1.9.2 Appraise for relevant information which helps him in solving clinical problems (Web-based learning, Self-learning).

1.10 Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً

1.10.1 Construct different knowledge and analyze given information to help in solving difficult problems.

1.16 Apply the appropriate pharmacological & non pharmacological approaches to alleviate pain and provide palliative care for seriously ill people, aiming to relieve their suffering and improve their quality of life.

1.16.1 Identify different treatment strategies in different cases and bases of choice of drugs in different clinical situations.

1.16.2 Choose proper drugs for selected important diseases based on patient's age, weight and health condition.

Competency Area III: The graduate as a professional

3.1 Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.

3.1.1 Demonstrate respect to all patients irrespective to their socioeconomic levels, culture or religious beliefs and use language appropriate to the patient's culture.

3.1.2 Evaluate and effectively deal with unethical behavior of other members of healthcare team.

Ensure confidentiality and privacy of patients' information. 3.5

3.5.1 Respect and follow the institutional code of conduct.

3.5.2 Maintain professional image in manner, dress speech and interpersonal relationships that is consistent with the medical profession's accepted contemporary standards in the community.

Competency Area IV: The graduate as a scholar and scientist

4.1 Describe normal structure of the body and its major organ systems and explain their functions.

4.1.1 Define the normal structure of male and female reproductive systems.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً

4.1.2 Explain the normal pattern of growth and development of the male and female reproductive systems including variations and congenital malformations.

4.1.3 Describe the histological structure of male and female reproductive systems and histological epithelial changes of female reproductive system during cycles.

4.1.4 Summarize and analyze different knowledge about male and female reproductive systems.

4.1.5. Compare between male and female reproductive systems.

4.5. Identify various causes of illness/disease and explain the ways in which they operate on the body (pathogenesis).

4.5.1 Report Pathology of tumors of reproductive system.

4.5.2 Analyze the congenital anomalies on embryological basis.

4.7. Describe drug actions: therapeutics and pharmacokinetics; side effects and interactions, including multiple treatments, long term conditions and non-prescribed medication; and effects on the population.

4.7.1 Compare between pharmacological agents used in pregnancy, contraceptive, oxytocic and tocolytic and in menopause.

4.7.2 Describe mechanism of action of oral contraception.

4.7.3 Compare between different contraception drugs as regard mechanism of action and effect on body.

Competency Area V: The graduate as a member of the health team and system

5.2. Respect colleagues and other health care professionals and work cooperatively with them, negotiating overlapping and shared responsibilities, and engaging in shared decision-making for effective patient management.

5.2.1 Honor and respect, superiors, colleagues and any other member of the health profession.

5.3 Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports collaborative work.

5.3.1 Implement collaborative teamwork during small group teaching (SDL).

5.3.2 Communicate effectively using all methods.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً

Competency Area VI: The graduate as a lifelong learner and researcher

6.2. Develop, implement, monitor, and revise a personal learning plan to enhance professional practice.

6.2.1 Utilize information technology to improve his/her professional practice.

6.2.2 Perform self-appraisal & seek continuous learning.

6.2.3 Continue self-learning.

6.3 Identify opportunities and use various resources for learning.

6.3.1 Use information technology effectively in the field of clinical pharmacology and search the internet for newly discovered drugs.

6.3.2 Appraise the importance of life-long self-learning and give a strong commitment to it.

4 – Module Contents

1. Theoretical lectures

| NO | TITLE | DEPARTMENT | HOURS |
|-----|---|--------------|-------|
| L1 | Anterior abdominal wall and inguinal canal | Anatomy | 2 |
| L2 | Anatomy of male reproductive system | Anatomy | 2 |
| L3 | Histological structure of testis & epididymis | Histology | 3 |
| L4 | Female Reproductive Physiology | Physiology | 2 |
| L5 | Physiology of male reproductive system | Physiology | 2 |
| L6 | Anatomy of female reproductive system | Anatomy | 3 |
| L7 | Sex hormones agonists and antagonists | Pharmacology | 2 |
| L8 | Diseases of the testis, testicular adnexa, and prostate | Pathology | 3 |
| L9 | Diseases of the uterine body and Fallopian tubes | Pathology | 3 |
| L10 | Physiology of puberty | Physiology | 2 |
| L11 | Histological structure of ovary | Histology | 2 |
| L12 | Endocrine Functions of Placenta | Physiology | 1 |
| L13 | Diseases of the ovary | Pathology | 2 |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً

| | | | |
|-----|--|---------------------------|---|
| L14 | Drugs acting on uterus& Drugs in pregnancy and lactation | Pharmacology | 1 |
| L15 | Trichomonus vaginalis | Parasitology | 2 |
| L16 | Histological structure of vagina | Histology | 2 |
| L17 | Lactation &Menopause | Physiology | 1 |
| L18 | Parturition | physiology | 1 |
| L19 | Diseases of the vulva and vagina | pathology | 2 |
| L20 | Bacterial genital infection | Microbiology | 2 |
| L21 | Viral genital infection | Microbiology | 1 |
| L22 | Histological structure of placenta | Histology | 2 |
| L23 | Perineum | Anatomy | 3 |
| L24 | Vessels and nerves of pelvis | Anatomy | 2 |
| L25 | Genito reproductive surgery | Urology | 1 |
| L26 | Gynecology and Obstetrics | Gynecology and Obstetrics | 1 |
| L27 | General Surgery | General Surgery | 1 |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

2. Practical:

| NO | TITLE | DEPARTMENT | HOURS |
|-----|---|--------------|-------|
| p1 | Anatomy of male reproductive system | Anatomy | 4 |
| P2 | Anatomy of female reproductive system | Anatomy | 4 |
| P3 | Histological structure of vagina and placenta | Histology | 4 |
| P4 | Histological structure of testis & epididymis | Histology | 4 |
| P5 | Diseases of the testis, testicular adnexa, and prostate | Pathology | 4 |
| P6 | Diseases of the uterine body and Fallopian tubes | Pathology | 4 |
| P7 | Diseases of the vulva and vagina | Pathology | 2 |
| P8 | Female Reproductive Physiology | Physiology | 4 |
| P10 | Physiology of male reproductive system | Physiology | 4 |
| P11 | Lactation & Menopause | Physiology | 4 |
| P12 | Bacterial genital infection | Microbiology | 2 |
| P13 | Drugs acting on uterus & Drugs in pregnancy and lactation | Pharmacology | 2 |
| P14 | Trichomonus vaginalis | Parasitology | 2 |

Teaching methods

Lectures:

Conducted by a Professor/assistant Professor and introduce the essential concepts and knowledge, the identification of scientific backgrounds, the explanation of complicated issues and topics and the potential for clinical application.

Tutorial classes

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

Conducted by an assistant Professor and lecturer in small teaching groups to emphasize complicated medical topics and clinical cases. They are held in the corresponding department and are included in the teaching plan. Division of students into groups alternating between direct contact and online lectures.

Practical classes: Division of students into groups in the labs and then each group is divided into 4 smaller sub- groups in 2 labs simultaneously. These Subgroups of students allow interaction, presentations and feedback. The plan for practical training is attached in the instructional units section. Each lab includes a presentation of the scheduled topic by one of the staff. Then the students perform their recommended tasks themselves helped by joiner staff aided with microscopes, projector slides, data show photos.

Students' activities: Students will be divided into small groups. Each formed of 10 students. Each group is assigned for oral presentation on a specific topic. Topics are determined by staff member committee. Students will cooperate, prepare and present their projects in front of the evaluation committee.

Assessment

Formative:

This form of assessment is designed to give you feedback to help you to identify areas for improvement. It includes a mixture of MCQs, short answer-questions (SAQs), case-solving exercises and independent learning activities in all subjects. These will be given during tutorial sessions and practical. The

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزًا للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكًا فعالًا في الارتقاء بالخدمات الصحية محليًا وإقليميًا ودوليًا.

answers are presented and discussed immediately with you after the assessment.

The results will be made available to you.

Summative

This type of assessment is used for judgment or decisions to be made about your performance. It serves as:

- m. Verification of achievement for the student satisfying requirement
- n. Motivation of the student to maintain or improve performance.
- o. Certification of performance
- p. Grades

In this Course your performance will be assessed according to the following:

- | | |
|---------------------------|-------------------|
| 7. Continuous Assessment | 30 % (37.5 marks) |
| 8. Practical | 30 % (37.5 marks) |
| 9. Final Exam (Two Hours) | 40 % (50 marks) |

Total = 100 % (125 mark)

Written Exams will include multiple choice questions (MCQs). These will cover material presented during the lectures, tutorials, CBL presentations, and SDL. Final examination will be held 10-12 AM first Saturday of fourth module at the main exam. Hall.

First quiz will be held at 10-12 AM Saturday of 2nd week of Es module.

Second quiz will be held at 10-12 AM Thursday of 4th week of ES module. In case of an emergency, the module coordinator must be notified.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

Practical examination: Will be arranged by the departments.

STUDENT'S RESPONSIBILITY

- Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.
- If there is anything that the module coordinator can do to assist you during the course, please feel free to contact him.

Sites

| Activity | Site |
|-------------------------------|--------------------------|
| 1-Theme Lectures | Main lecture Hall |
| 2- Case based learning | Academic departments |
| 3- Practical sessions & exam. | |
| Anatomy | Anatomy dissection Hall |
| Histology | Histology department |
| Physiology | Physiology department |
| Biochemistry | Biochemistry Department |
| Pathology | Pathology department |
| Microbiology | Microbiology department |
| Pharmacology | Pharmacology department. |
| 4- Written Assessment | |
| Final module exam. & quizzes | Examination Hall |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

Text Books and References for System Modules

Anatomy: Drake, R., Vogl, A.W. and Mitchell, A.W., 2009. Gray's anatomy for students E-book. Elsevier Health Sciences

Histology: Gartner, L.P. and Hiatt, J.L., 2006. Color textbook of histology ebook. Elsevier Health Sciences.

Physiology: Hall, J.E., 2020. Guyton & hall physiology review e-book. Elsevier Health Sciences.

Biochemistry: Satyanaryana, U. and Chakrapani, U., 2021. Essentials of biochemistry. Elsevier India Microbiology Cornelissen, C.N., Harvey, R.A. and Fisher, B.D., 2012. Microbiology (Vol. 3). Lippincott Williams & Wilkins

Parasitology: Garcia, L.S., 2006. Diagnostic medical parasitology. American Society for Microbiology Press

Pathology: Klatt, E.C. and Kumar, V., 2014. Robbins and Cotran review of pathology. Elsevier Health Sciences

Pharmacology: Whalen, K., 2018. Lippincott® Illustrated Reviews: Pharmacology. Wolters kluwer india Pvt Ltd

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

YEAR 2- 3RD SEMESTER MODULE (4) RENAL AND URINARY SYSTEM

Course specifications of:

- Program on which the module is given Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- Module title: Renal and urinary system.
- Academic year/level: 1 st level /2nd semester.
- Code: S3M4/RU
- Credit hours for the module: 5
- Study weeks: (4)
- Departments offering the course:
 - Department of Anatomy.
 - Department of Biochemistry.
 - Department of Physiology.
 - Department of Pharmacology.
 - Department of Pathology.
 - Department of Histology.
 - Department of Microbiology.
 - Department of Parasitology
 - Department of Urology

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
العنوان: شارع الجيش، كفر الشيخ، جمهورية مصر العربية

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| Course No. | Course Title | Contact Hours | | | | Credit hours |
|------------|----------------|---------------|----|-----|-----|--------------|
| | | L | P | CBL | SDL | |
| S2M4/RU | urology system | 50 | 18 | 3 | 4 | 5 |

Teaching Departments

| | Lectures | Practical (X2) | CBL | SDL (X3) |
|-------------------|-----------|----------------|----------|----------|
| Anatomy | 11 | 4 | - | 1 |
| Histology | 5 | 4 | - | 1 |
| Physiology | 12 | - | - | 1 |
| Pathology | 9 | 2 | - | - |
| Pharmacology | 3 | 2 | - | - |
| Biochemistry | 5 | 2 | - | 1 |
| microbiology | 3 | 2 | - | - |
| parasitology | 2 | 2 | - | - |
| Urology | - | - | 1 | - |
| Internal Medicine | - | - | 2 | - |
| Total | 50 | 18 | 3 | 4 |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

1. Overall aim:

The aim of this module is to:

- Acquire sufficient knowledge of the macroscopic and microscopic structure of different urological organs in order to understand normal function and common clinical abnormalities.
- Gain skills, working knowledge and understanding of the principles and concepts applicable to the urology System, in general.
- Understand Urology cellular function in order to appreciate the basis of relevant therapeutics.
- Describe normal function of Kidney and Urology system and different pathological conditions related to anatomical and physiological properties of each part.
- Appreciate the role of the kidney in controlling the volume and composition of body fluid and the way in which they respond to departures from normal parameters of volume, electrolyte concentration and systemic haemodynamics.
- Understand renal cellular function in order to appreciate the basis of relevant therapeutics.
- Describe normal micturition, the reasons of oliguria, and such common conditions as glomerulonephritis, pyelonephritis, haematuria, proteinuria, causes of UTI and chronic renal failure.
- Outline the structure and relations of the kidney, ureters, bladder, and urethra in the male and the female, and the ways in which these structures may be imaged. and examined.
- Identify and describe the fluid compartments of the body, their electrolyte.
- Describe the histological structure of the kidney, and identify the component parts of the nephron.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

- Identify and describe the structure of the glomerulus and the process of glomerular ultrafiltration, the processes underlying the formation of dilute and concentrated urine.
- Describe renal responses to extracellular fluid volume depletion and other common alterations in systematic haemodynamics.
- Understand the mechanisms of controlling sodium and potassium balance.
- Understand the role of the kidney in maintaining acid base balance and interpret uncomplicated cases of acid base disturbances.
- Identify and describe the classes of diuretics and their mode of action
- Describe the bladder and control of micrurition.
- Describe common pathological changes in the urinary tract, including glomerulonephritis, pyelonephritis, neoplasia, and prostate enlargement.
- Describe and demonstrate the features, consequences and management of acute and chronic renal failure.
- Identify the common cause of UTI and how to investigate and treat them.

3. Intended learning outcomes (ILOs)

Competency area I: The graduate as a health care provider

1.1 Take and record a structured, patient centered history.

1.1.1 Communicate effectively with individuals regardless of their social, cultural, ethnic backgrounds, or their disabilities.

1.6 Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.

1.6.1 Identify diagnostic and infective stage of *S. haematobium*.

1.6.2 Differentiate diagnostic tests commonly used for parasitic infections.

1.6.3 Judge results of parasitological, serological, molecular tests and

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

radiological finding and apply them.

1.6.4 Clarify method of collection of urine sample.

1.8 Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand.

1.8.1 Construct different knowledge and analyze given information to help in solving difficult problems.

1.9 Retrieve, analyze, and evaluate relevant and data from literature, using information technologies and library resources, in order help solve a clinical problem based on evidence (EBM).

1.9.1 Use different sources of information to obtain data.

1.10 Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.

1.10.1 Construct different knowledge and analyze given information to help in solving difficult problem.

Competency area II: The graduate as a health care promoter.

2.4 Identify the major health risks in his/her community, including demographic, occupational and environmental risks; endemic diseases, and prevalent chronic diseases.

2.4.1 List different organisms of UTI and microbiological features of each organism.

2.4.2 Describe parasitologic features and life cycle of shistosomiasis.

2.4.3 Clarify the clinical perspectives of shistosomiasis.

2.9 Adopt suitable measures for infection control.

2.9.1 Clarify clinical picture, diagnostic, therapeutic and preventive interventions against different microbes and S. haematobium adding to this hematuria, nephrotic, nephritic syndrome, acute and chronic renal

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failure.

Competency area III: The graduate as a professional

3.4 Treat all patients equally, and avoid stigmatizing any category regardless of their social, cultural, ethnic backgrounds, or their disabilities.

3.4.1 Communicate effectively with individuals regardless of their social, cultural, ethnic backgrounds, or their disabilities.

3.4.2 Honor and respect, superiors, colleagues and any other member of the health profession.

3.9 Identify and report any unprofessional and unethical behaviors or physical or mental conditions related to himself, colleagues or any other person that might jeopardize patients' safety.

3.9.1 Respect and follow the institutional code of conduct.

3.9.2 Maintain professional image in manner, dress speech and interpersonal.

relationships that is consistent with the medical profession's accepted contemporary standards in the community.

Competency area IV: The graduate as a scholar & scientist

4.1 Describe normal structure of the body and its major organ systems and explain their functions.

4.1.1 Enumerate the different parts of the urinary system.

4.1.2 Describe the anatomy of the kidneys, ureters, urinary bladder, urethra and anatomy of retroperitoneum.

4.1.3 Summarize the mechanism and pathway of renal and ureteric pain.

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4.1.4 Retell the development of the kidney and the ureters.

4.1.5 Review the general histologic features of the kidney, ureter, urinary bladder, urethra, and juxtaglomerular apparatus.

4.1.6 Differentiate between the structure of proximal and distal convoluted tubules and empty and full urinary bladder.

4.2 Explain the molecular, biochemical, and cellular mechanisms Important in maintaining the body's homeostasis.

4.2.1 Retell introduction to renal physiology, tubular processing of the glomerular filtrate, tubular reabsorption and secretion of different substances.

4.2.2 Review renal blood flow and its control besides, Physiology of micturition and the mechanisms of formation of concentrated and diluted urine.

4.2.3 Illustrate renal balance. regulation of acid-base balance. Regulation of potassium, sodium, and water balance: Regulation of plasma volume and osmolarity.

4.2.4 Explain renal function: Glomerular filtration and its control.

4.2.5 Conclude renal function, Urea cycle, creatine, and creatine metabolism.

4.2.6 Sequence Calcium and phosphate hormonal regulation and excretion.

Uric acid regulation and excretion. Urine composition and renal stones.

4.5 Identify various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of illness/disease and explain the ways in which they operate on the body (pathogenesis).

4.5.1 Report Pathology of renal cystic, vascular, glomerular disease and tumors of urinary system.

4.5.2 Analyze the congenital anomalies on embryological basis.

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4.5.3 Demonstrate urinary stones and surgical aspects of obstructive uropathy.

4.6 Describe altered structure and function of the body and its major organ systems that are seen in various diseases and conditions.

4.6.1 Define the congenital anomalies of the kidney, renal arteries, ureter, urinary bladder, and urethra.

4.7 Describe drug actions: therapeutics and pharmacokinetics; side effects and interactions, including multiple treatments, long term conditions and non prescribed medication; and effects on the population.

4.7.1 Recognize Principles of diuretic therapy.

4.8 Demonstrate basic sciences specific practical skills and procedures relevant to future practice, recognizing their scientific basis, and interpret common diagnostic modalities, including: imaging, electrocardiograms, laboratory assays, pathologic studies, and functional assessment tests.

4.8.1 Judge results of parasitological, serological, molecular tests and radiological findings and apply them.

4.8.2 Clarify method of collection of urine sample.

Competency area V: The graduate as a member of the health team and a part of the health care system

5.5 Communicate effectively using a written health electronic medical record, or other digital technology.

5.5.1 Communicate effectively using all methods.

5.7 Recognize own personal and professional limits and seek help from colleagues.

and supervisors when necessary.

5.7.1 Express themselves freely and adequately by improving their descriptive

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capabilities and enhancing their communication skills.

Competency area VI: The graduate as a lifelong learner and researcher

6.2. Develop, implement, monitor, and revise a personal learning plan to enhance professional practice.

6.2.1. Use information technology to improve his/her professional practice.

6.2.2. Perform self-appraisal & seek continuous learning.

6.3 Identify opportunities and use various resources for learning.

6.3.1. Use different sources of information to obtain data.

6.4. Engage in inter-professional activities and collaborative learning to continuously improve personal practice and contribute to collective improvements in practice.

6.4.1. Work as team leader as well as a member in larger teams.

6.5. Recognize practice uncertainty and knowledge gaps in clinical and other professional encounters and generate focused questions that address them.

6.5.1. Manage scientific meetings and appropriately utilize time.

4 – Module Contents

1. Theoretical

| NO | TITLE | DEPARTMENT | HOURS |
|----|--|------------|-------|
| L1 | Histology1 (Histological structure of Nephron). | Histology | 1h |
| L2 | Physiology1 (General functions of kidney & renal blood flow) | Physiology | 2h |
| L3 | Physiology2 (Plasma clearance) | Physiology | 2h |
| L4 | Anatomy1 (Post. Abdominal Wall muscles & vessels) | Anatomy | 2h |

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| NO | TITLE | DEPARTMENT | HOURS |
|-----|---|--------------|-------|
| L5 | Biochemistry1 (Assessment of renal functions) | Biochemistry | 2h |
| L6 | Histology2 (Histological structure of renal tubules) | Histology | 2h |
| L7 | Physiology3 (Formation of urine) | Physiology | 2h |
| L8 | Pathology1 (Renal Glomerular diseases) | Pathology | 2h |
| L9 | Biochemistry2 (Water & electrolyte balance) | Biochemistry | 2h |
| L10 | Anatomy2 (Embryology 1) | Anatomy | 2h |
| L11 | Pharmacology1 (Kidney drugs 1) | Pharmacology | 2h |
| L12 | Physiology 4 (Mechanism of urine concentration & dilution) | Physiology | 2h |
| L13 | Histology3 (Histological structure of urinary bladder & ureter) | Histology | 2h |
| L14 | Pathology2 (renal tubular & interstitial diseases) | pathology | 2h |
| L15 | Microbiology1 (Classification of urinary tract infections, Bacterial causes of UTI) | Microbiology | |
| L16 | Anatomy3 (Kidney) | Anatomy | 2h |
| L17 | Parasitology (Schistosoma haematobium) | Parasitology | 2h |
| L18 | Anatomy4 (Embryology 2) | Anatomy | 2h |
| L19 | Anatomy5 (Pelvis). | Anatomy | 1h |
| L20 | Pathology3 (Renal cystic & renal vascular diseases) | pathology | 1h |
| L21 | Pharmacology2 (Kidney drugs 2). | Pharmacology | 1h |
| L22 | Physiology5 (Role of kidney in acid base balance) | physiology | 2h |
| L23 | Pathology4 (Renal tumors & obstructive uropathy) | pathology | 2h |
| L24 | Physiology6 (Bladder physiology) | physiology | 2h |
| L25 | Pathology5 (inflammatory diseases of lower urinary tract) | pathology | 1h |
| L26 | Microbiology2 (Cont. Bacterial causes of urinary tract infection) | Microbiology | 2h |
| L27 | Anatomy6 (Urinary bladder & urethra) | Anatomy | 1h |
| L28 | Biochemistry3 (Acid base disturbance) | Biochemistry | 1h |

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| NO | TITLE | DEPARTMENT | HOURS |
|-----|--|-----------------------|-------|
| L29 | Anatomy7 (Ureter) | Anatomy | 1h |
| L30 | Pathology6 (Tumors of lower urinary tract) | pathology | 1h |
| L31 | Urology case | Urosurgery department | 1h |
| L32 | Nephrotic syndrome case | Internal medicine | 2h |

2-Practical:

| NO | TITLE | DEPARTMENT | HOURS |
|-----|---|--------------|-------|
| p1 | Glomerular disease. | Pathology | 2h |
| P2 | anatomy of the kidneys and ureters | Anatomy | 4h |
| P3 | anatomy of the urinary bladder and urethra. | Anatomy | 2h |
| P4 | Temberiology of the genitourinary system | Anatomy | 2h |
| P5 | Histology of the kidney, ureter | Histology | 8h |
| P6 | Analysis of random and 24-hour urine sample | Biochemistry | 1h |
| P7 | Shistosomiasis | Parasitology | 4h |
| P8 | Blood gas analysis. | Biochemistry | 1h |
| P10 | Investigation of UTI. | Microbiology | 4h |
| P11 | Histology of the baldder and urethra | Biochemistry | 1h |
| P12 | Pathology of renal disease 1. Pathology | Pathology | 1h |
| P13 | Pathology of renal disease 2. Pathology | Pathology | 1h |
| P14 | Investigation of CRF / ARF Biochemistry | Biochemistry | 1h |

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Teaching methods

Lectures:

Conducted by a Professor/assistant Professor and introduce the essential concepts and knowledge, the identification of scientific backgrounds, the explanation of complicated issues and topics and the potential for clinical application.

Tutorial classes

Conducted by an assistant Professor and lecturer in small teaching groups to emphasize complicated medical topics and clinical cases. They are held in the corresponding department and are included in the teaching plan. Division of students into groups alternating between direct contact and online lectures.

Practical classes: Division of students into groups in the labs and then each group is divided into 4 smaller sub- groups in 2 labs simultaneously. These Subgroups of students allow interaction, presentations and feedback. The plan for practical training is attached in the instructional units section. Each lab includes presentation of the scheduled topic by one of the staff. Then the students perform their recommended tasks themselves helped by joiner staff aided with microscopes, projector slides, data show photos.

Students' activities: Students will be divided into small groups. Each formed of 10 students. Each group is assigned for an oral presentation on a specific topic. Topics are determined by the staff member committee. Students will cooperate, prepare and present their projects in front of evaluation committee.

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Assessment

Formative:

This form of assessment is designed to give you feedback to help you to identify areas for improvement. It includes a mixture of MCQs, short answer-questions (SAQs), case-solving exercises and independent learning activities in all subjects. These will be given during tutorial sessions and practical. The answers are presented and discussed immediately with you after the assessment. The results will be made available to you.

Summative

This type of assessment is used for judgment or decisions to be made about your performance. It serves as:

- q. Verification of achievement for the student satisfying requirement
- r. Motivation of the student to maintain or improve performance
- s. Certification of performance
- t. Grades

In this Course your performance will be assessed according to the following:

| | |
|---------------------------|-------------------|
| 10.Continuous Assessment | 30 % (37.5 marks) |
| 11.Practical | 30 % (37.5 marks) |
| 12.Final Exam (Two Hours) | 40 % (50 marks) |

Total = 100 % (125 mark)

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

Written Exams will include multiple choice questions (MCQs). These will cover material presented during the lectures, tutorials, CBL presentations, and SDL. Final examination will be held 10-12 AM first Saturday of fourth module at the main exam. Hall.

First quiz will be held at 10-12 AM Saturday of 2nd week of Es module.

Second quiz will be held at 10-12 AM Thursday of 4th week of ES module. In case of an emergency, the module coordinator must be notified.

Practical examination: Will be arranged by the departments

STUDENT'S RESPONSIBILITY

- Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.
- If there is anything that the module coordinator can do to assist you during the course, please feel free to contact him.

Sites

| Activity | Site |
|-------------------------------|-------------------------|
| 1-Theme Lectures | Main lecture Hall |
| 2- Case based learning | Academic departments |
| 3- Practical sessions & exam. | |
| Anatomy | Anatomy dissection Hall |
| Histology | Histology department |
| Physiology | Physiology department |
| Biochemistry | Biochemistry Department |
| Pathology | Pathology department |
| Microbiology | Microbiology department |

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| | |
|------------------------------|--------------------------|
| Pharmacology | Pharmacology department. |
| 4- Written Assessment | |
| Final module exam. & quizzes | Examination Hall |

Text Books and References for System Modules

Anatomy: Drake, R., Vogl, A.W. and Mitchell, A.W., 2009. Gray's anatomy for students E-book. Elsevier Health Sciences

Histology: Gartner, L.P. and Hiatt, J.L., 2006. Color textbook of histology ebook. Elsevier Health Sciences.

Physiology: Hall, J.E., 2020. Guyton & hall physiology review e-book. Elsevier Health Sciences.

Biochemistry: Satyanaryana, U. and Chakrapani, U., 2021. Essentials of biochemistry. Elsevier India Microbiology Cornelissen, C.N., Harvey, R.A. and Fisher, B.D., 2012. Microbiology (Vol. 3). Lippincott Williams & Wilkins

Parasitology: Garcia, L.S., 2006. Diagnostic medical parasitology. American Society for Microbiology Press

Pathology: Klatt, E.C. and Kumar, V., 2014. Robbins and Cotran review of pathology. Elsevier Health Sciences

Pharmacology: Whalen, K., 2018. Lippincott® Illustrated Reviews: Pharmacology. Wolters kluwer india Pvt Ltd

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

YEAR 2- 3RD SEMESTER

MODULE (5)

ELECTIVE COURSE (HOSPITAL MANAGEMENT)

1- Basic information:

Course specifications of:

- Program on which the module is given Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- Module title: Hospital management module
- Academic year/level: 2nd level /3rd semester.
- Code: S3M5/E2HM
- Credit hours for the module: 2
- Study weeks: longitudinal

2. Overall aim:

At the end of the Module the students will be able to:

- Recognize the health care system and its importance.
- Outline key concepts of health care management and recognize the role of hospitals.
- Describe different types of hospitals and their importance.
- Use different scenarios for understanding the management system as a whole and discuss many solutions of the problems.
- Committed to develop a clear understanding for health care management about the culture and context.

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
العنوان: شارع الجيش، كفر الشيخ، جمهورية مصر العربية

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

3. Learning outcomes (LOs)

By the end of this module the student will be able to:

Competency area II: The graduate as a health care promoter.

5.4 Apply leadership skills to enhance team functioning, the learning environment, and/or the health care delivery system.

5.4.1 Identify different terms regarding strategic and operational planning

5.4.2 List the roles of hospital administrator and functions of hospital management.

5.8 Apply fundamental knowledge of health economics to ensure the efficiency and effectiveness of the health care system.

5.8.1 Retell the meaning of hospital and hospital management and the evolution of hospitals.

5.8.2 Adopt an integrative approach towards decision making

5.9 Use health informatics to improve the quality of patient care.

5.9.1 Critically evaluate the use of the data in health databases for planning and decision-making purposes

5.11 Improve the health service provision by applying a process of continuous quality improvement.

5.11.1 Evaluate and propose a strategic plan for management health care services

5.11.2 implement SWOT analysis in their organization.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

4Module Contents

1. Theoretical lectures

| Topics | Theoretical | |
|---------------------------------------|-----------------------|------------------------------------|
| | NO. of teaching hours | % Of each lecture / total hrs (30) |
| 1. Introduction | 2 | 6.7% |
| 2. General principles of management | 2 | 6.7% |
| 3. Defenitions of hospital management | 2 | 6.7% |
| 4. Level of management | 2 | 6.7% |
| 5. Function of hospital management | 2 | 6.7% |
| 6. Strategic planning | 2 | 6.7% |
| 7. SWOT analysis | 4 | 13.2% |
| 8. Operational management | 2 | 6.7% |
| 9. Quality management | 4 | 13.2% |

- Teaching and learning methods

| Course | Web based | |
|---------------------|-----------|---|
| | Lecture | L |
| Hospital management | √ | √ |

6. COURSE ASSESSMENT:

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
العنوان: شارع الجيش، كفر الشيخ، جمهورية مصر العربية

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

Written Exams short questions or / and multiple choice questions (MCQs).

STUDENT'S RESPONSIBILITY

- Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.
- If there is anything that the module coordinator can do to assist you during the course, please feel free to contact him.
- Sites

| Activity | Site |
|-------------------|------------------|
| Final module exam | Examination Hall |

Textbooks and References for System Modules

Hospital Management Volume 1, Manisha Saxcena, 2017.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

MODULE (5) ELECTIVE COURSE (PERSONALIZED MEDICINE)

1- Basic information:

Course specifications of:

- **Program on which the module is given** Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- **Module title:** Personalized medicine module
- **Academic year/level:** 2nd level /3rd semester.
- **Code:** S3M5/E2PM
- **Credit hours for the module:** 2
- **Study weeks:** longitudinal

2- Overall aim:

- Gain an overview about the basic concept of tailored medicine and the benefits of targeted therapy.
- Provide the students with an appropriate exposure that can assist the students in understanding basic genetic and molecular alteration in health and disease.
- Enable the students to be oriented with concepts of genomic instability and bioinformatics and how this field gave us a new perspective and new technology used in the diagnosis, treatment and new drugs design.
- Acquire essential scientific knowledge and communication skills in a professional way through the different research activities.

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
العنوان: شارع الجيش، كفر الشيخ، جمهورية مصر العربية

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

3- Objectives:

- Provide students with basic medical information of the Personalized medicine and basics of molecular and genetic alteration.
- Prepare students to apply medical information and use it to understand and provide solutions for clinical problems of patients.
- Integrate different branches of medicine to prepare an efficient graduate.
- Urge students to be a lifelong learner.
- Provide the basic rules of ethics.

4- Learning outcomes (LOs)

By the end of this course the student will be able to:

Competency Area I: The graduate as a health care provider

1.6. Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.

1.6.1. Describe proper laboratory investigation based on given clinical data to approach proper case diagnosis.

1.8 Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand.

1.8.1 Explain the common clinical problems on the basis of relevant genetic data (clinical molecular biology).

1.9 Retrieve, analyze, and evaluate relevant and current data from literature, using information technologies and library resources, in order to help solve a clinical problem based on evidence (EBM).

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

1.9.1 Analyze biochemical, genetic data and current data from literature.

Competency Area II: The graduate as a health care promoter

2.1. Identify the basic determinants of health and principles of health improvement.

2.1.1 Identify the genetic background and induced mutation underlying cancer induction.

2.1.2. Present new molecular targets for cancer diagnosis and treatment.

Competency Area IV: The graduate as a scholar and scientist

4.2 Explain the molecular, biochemical and cellular mechanisms important in maintaining the body's homeostasis:

4.2.1 Define the normal structure of proteins, nucleotide sequences, signalling pathways and enzymes their normal functions in human body

4.2.2 Identify the mode of action isoenzymes and their role in the diagnosis of diseases for better management.

4.2.3 Discuss DNA structure, replication, mutation and repair.

4.2.4 Summarize the normal role of immune system in cancer immune surveillance.

4.5. Identify various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of illness/disease and explain the ways in which they operate on the body (pathogenesis).

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- 4.5.1. Recognize different defects in DNA repair systems and their role in induction of various types of cancer and gene mutations.
- 4.5.2. Identify the possibility of incidence of hereditary disease according to their mode of inheritance.
- 4.5.3. Demonstrate the abnormalities associated with different types of tumor markers and their implications in cancer diagnosis and prognosis.

4.8. Demonstrate basic sciences specific practical skills and procedures relevant to future practice, recognizing their scientific basis, and interpret common diagnostic modalities, including: imaging, electrocardiograms, laboratory assays, pathologic studies, and functional assessment tests.

- 4.8.1. Interpret the significance of high levels of different isoenzymes, serum tumor antigens and tumor biomarkers.
- 4.8.2. Evaluate causes of abnormal levels of different growth factors, tumor suppressors and different patterns of DNA methylations

Competency Area V: The graduate as a member of the health team and system

5.3. Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports collaborative work.

- 5.3.1. Implement collaborative teamwork during small group teaching.

Competency Area VI: The graduate as a lifelong learner and researcher

رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
العنوان: شارع الجيش، كفر الشيخ، جمهورية مصر العربية

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

6.3. Identify opportunities and use various resources for learning.

6.3.1. Interacts positively with colleagues, peers and professors on web pages.

6.3.2. Use various resources in collecting information.

6.6. Effectively manage learning time and resources and set priorities (Assignment).

6.6.1. Achieve and perform the required duties from him on time (assignments).

6 – Course/ Course Contents

| Topics | Lectures |
|--|----------|
| Introduction to personalized medicine | 2h |
| DNA repair systems and their implications in cancer initiation and treatment | 4 h |
| Protein chemistry, functional and non functional plasma enzymes | 4h |
| Tumor suppressor genes | 1 h |
| Tumor antigens and different tumor markers | 3 h |
| Genomic instability and epigenetics | 2 h |
| Introduction to cancer immunotherapy and the role of immune system in cancer immune-surveillance | 4 h |

6. COURSE ASSESSMENT:

Written Exams short questions or / and multiple choice questions (MCQs).

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STUDENT'S RESPONSIBILITY

- Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.
- If there is anything that the module coordinator can do to assist you during the course, please feel free to contact him.

Sites

| Activity | Site |
|-------------------|------------------|
| Final module exam | Examination Hall |

Text books and references

● Course notes

Lectures notes on medical biochemistry for secondyear medical students by staff members of Department of Medical Biochemistry, Faculty of Medicine, Kafr El-Sheikh University

● Text book

1. Harper's Illustrated Biochemistry: 31th Ed by Victor W. Rodwell, David A. Bender, Kathleen M. Botham, Peter J. Kennelly, P. Anthony Weil, McGraw-Hill companies New York, 2014.
2. Lippincott's Reviews of Biochemistry, 7th edition by Champe PC, Harvey RA, Ferrier DR,
3. Textbook of Molecular biology of the Cell 6th edition (2017), Garland Science.
4. Janeway imunobiology (2021) by Kenneth Murphy (Author), Casey Weaver (Author): 9th edition, Garland science
5. The biology of cancer: 2nd edition , Weinberg, 2013 Garland Science.
6. Lewin's gene XII by Jocelyn E. Krebs (Author), Elliott S. Goldstein (Author), Stephen T. Kilpatrick (Author), Jones & Bartlett Learning

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YEAR 2- 4TH SEMESTER

| النهاية العظمى | الدرجات | | | الحزم الدراسية (Modules) | | | المستوى الثاني – الفصل الرابع |
|----------------|---------------|--------------------|------------------|--|--------------|--------------|-------------------------------|
| | التحريري % 40 | العملي (OSPE) % 30 | اعمال السنة % 30 | Name | Weeks | Credit hours | |
| 125 | 50 | 37.5 | 37.5 | Central nervous system | 4 | 5 | |
| 125 | 50 | 37.5 | 37.5 | special senses | 4 | 5 | |
| 175 | 70 | 52.5 | 52.5 | Gastro-intestinal system | 5 | 7 | |
| 75 | 50 | - | 25 | Research, evidence-based and biostatistics | 3 | 3 | |
| متطلب كليه | 50 | | | Elective (III) | Longitudinal | 2 | |
| 500 | | | | | 16 | 22 | المجموع |

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YEAR 2, 4TH SEMESTER CENTRAL NERVOUS SYSTEM

1- Basic information:

Course specifications of:

- Program on which the module is given Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- Module title: Central nervous system and special senses module.
- Academic year/level: 2nd level /4th semester.
- Code: S4M1/C
- Credit hours for the module: 5
- Study weeks: (4)
- Departments offering the course:
 - Department of Anatomy.
 - Department of Physiology.
 - Department of Histology.
 - Department of Biochemistry.
 - Department of pathology.
 - Department of Microbiology.
 - Department of Parasitology.
 - Department of Pharmacology.
 - Department of Neuromedicine.
 - Department of Neurosurgery.
 - Department of Radiology.

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| Course Title | Contact Hours | | | | Credit hours |
|------------------------|---------------|----------------|-----|----------|--------------|
| | Lectures | Practical (X2) | CBL | SDL (X3) | |
| Central Nervous System | 47 | 23 | 3 | 2 | 5 |

Teaching Departments

| | lectures | Practical | SDL |
|---------------|-----------|-----------|----------|
| Anatomy | 12 | 8 | |
| Histology | 6 | 2 | |
| Physiology | 12 | 7 | 2 |
| Pathology | 3 | 2 | |
| Pharmacology | 5 | 0 | |
| Biochemistry | 3 | - | |
| Microbiology | 4 | 2 | |
| Parasitology | 2 | 2 | |
| Radiology | 1 | - | |
| Neuromedicine | 1 | - | |
| Neurosurgery | 1 | - | |
| Total | 50 | 23 | 2 |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

2. Overall aim:

At the end of the Module the students will be able to:

- Outline the structure and relations of different parts of the nervous system.
- Identify the functions of different parts of the nervous system with structure correlation.
- Describe the histological structure of cerebral cortex, cerebellum and different levels of brain stem and spinal cord.
- Identify sensory and motor functions of different areas of cerebral cortex and consequences of their lesions.
- Identify cranial nerves and their origin, courses in head and neck and consequences of cranial nerves injury.
- Identify the structure of meninges and blood brain barrier.
- Describe ventricular system and CSF circulation and pathology of hydrocephalus.
- Identify and describe bacteria and viruses causing meningitis and encephalitis.
- Discuss polio and rabies as regard pathogenesis, prevention, and management.
- Identify important parasites affecting CNS and the eye.
- Identify types, function, and mechanism of action of different neurotransmitters.
- Classify antiepileptic drugs and Know mechanism of action and adverse effects of different classes.
- Identify sedative-hypnotic drugs as regard mechanism of action and adverse effects.
- Describe brain metabolism and sphingolipids.
- Describe common meningeal and glial tumors.
- Recognize normal radiological appearance of brain.
- Identify radiological appearance of common diseases (haemorrhage, stroke, and tumors).

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

3. Learning outcomes (LOs)

By the end of this module the student will be able to:

Competency Area I: The graduate as a health care provider

I.4. Perform appropriately timed full physical examination of patients appropriate to the age, gender, and clinical presentation of the patient while being culturally sensitive.

I.4.1 Identify different parts of the central nervous system on the models and know how to differentiate between them.

1.4.2 Identify the horizontal sections of the brain at different levels on the model which help him to read the CT of the brain in the future.

1.4.3 Judging on the pathological features of different disorders of the nervous system based on gross and microscopic pictures aiming to reach correct diagnosis.

1.4.4 Use effectively the microscope to describe the morphological features of bacteria and Parasites under the microscope.

1.4.5 Perform the different ways of microbiological culture and to differentiate between bacteria on solid media.

1.4.6 describe normal radiologic anatomy of brain.

1.4.7 Recognize the radiologic appearance of common diseases (hemorrhage, stroke, tumors...)

1.4.8 Construct patient's symptoms and signs in terms of anatomic, pathologic, and functional diagnostic significances.

I.6 Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.

I.6.1 Identify diagnostic and infective stage of parasites affecting CNS and eye

I.6.2 Identify diagnostic tests commonly used for parasitic infection.

I.6.5 Judge results of parasitological, serological, molecular and radiological findings and apply them.

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1.6.6 Apply the knowledge and skills in interpreting different laboratory tests and predict expected results.

I.6.7 Clarify methods of CSF collection.

I.8 Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand.

1.8.1 Express systemic thinking and personal judgment in clinical problem solving.

Competency Area IV: The graduate as a scholar and scientist

4.7 Describe drug actions: therapeutics and pharmacokinetics; side effects and interactions, including multiple treatments, long term conditions and non-prescribed medication; and effects on the population.

4.7.1 Classify antiepileptic drugs according to mechanism of action.

4.7.2 Identify principles of choice of antiepileptic drugs.

4.7.3 Describe adverse effects of antiepileptic drugs.

4.7.4 Recognize sedative hypnotic drugs and identify members.

4.7.5 Explain mechanism of action and adverse effects of sedative hypnotic drugs.

Competency Area V: The graduate as a member of the health team and system

5.2. Respect colleagues and other health care professionals and work cooperatively with them, negotiating overlapping and shared responsibilities, and engaging in shared decision-making for effective patient management.

5.2.1 Communicate effectively with other health care professionals to maximize patient benefits and minimize the risk of errors.

5.3 Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports collaborative work.

5.3.1 Implement collaborative teamwork during small group teaching (SDL).

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5.6. Evaluate his/her work and that of others using constructive feedback.

5.6.1 Monitor the effectiveness and side effects of therapy.

5.6.2 Report adverse drug effects and decrease drug-drug interactions.

Competency Area VI: The graduate as a lifelong learner and researcher

6.3 Identify opportunities and use various resources for learning.

6.3.1 Use information technology effectively in the field of clinical pharmacology and search the internet for newly discovered drugs.

6.3.2 Recognize the importance of life-long self-learning and give a strong commitment to it.

6.6 Effectively manage learning time and resources and set priorities.

6.6.1 Criticize the resources of biomedical information including the available electronic facilities and communication technology to update his/her knowledge, improve his/her medical practice and to manage and manipulate information effectively.

4- Module Contents

1. Theoretical

| L | TITLE | Department | Hours |
|----|---|--------------|-------|
| L1 | Introduction to anatomic organization of CNS and CNS development | Anatomy | 2h |
| L2 | Common CNS presentation symptoms | Neurosurgery | 1h |
| L3 | External features of spinal cord | Anatomy | 2h |
| L4 | Introduction to nervous system, sensory receptors and somatic sensations (mechanical –thermal). | Physiology | 2h |

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| | | | |
|-----|---|---------------|----|
| L5 | Ultra structure of PNS (Receptors, Synapse, Ganglia) Generation and degeneration of nerve tissue | Histology | 1h |
| L6 | Internal features of spinal cord | Anatomy | 1h |
| L7 | Pain sensation, pain analgesia system and somatic sensations from the head | Physiology | 2h |
| L8 | Cross sectional of spinal cord at different levels | Histology | 1h |
| L9 | Internal and External features of Brain Stem | Anatomy | 1h |
| L10 | Cranial Nerves 1 | Anatomy | 1h |
| L11 | Cranial Nerves 2 | Anatomy | 1h |
| L12 | Drugs of CNS | Pharmacology | 3h |
| L13 | Cross sectional of Brain stem at different levels | Histology | 1h |
| L14 | Diencephalon -Ventricular system and CSF circulation | Anatomy | 1h |
| L15 | CNS inflammation | Pathology | 1h |
| L16 | Functions of thalamus and somatic sensory areas of cerebral cortex and abnormal sensations | Physiology | 1h |
| L17 | Poliomyelitis – Rabies | Microbiology | 4h |
| L18 | Synaptic transmission- reflex action- stretch reflex | Physiology | 1h |
| L19 | Structure of brain meninges -Blood – CSF barrier BBB | Histology | 1h |
| L20 | Clinical Case Parkinsonism | Neuromedicine | 2h |
| L21 | Cerebral Cortex and limbic system | Anatomy | 1h |

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| | | | |
|-----|---|--------------|----|
| L22 | Brain metabolism and Sphingolipids | Biochemistry | 2h |
| L23 | Basal ganglia and Cerebellum | Anatomy | 1h |
| L24 | Glial and meningeal tumors | Pathology | 1h |
| L25 | Hypothalamus, Intellectual functions and equilibrium | Physiology | 1h |
| L26 | Structure of cerebral cortex and cerebellum | Histology | 2h |
| L27 | Motor functions of Basal ganglia | Physiology | 2h |
| L28 | Parasites affecting CNS | Parasitology | 2h |
| L29 | Motor functions of cerebellum | Physiology | 2h |
| L30 | Blood Supply of brain and spinal cord | Anatomy | 1h |
| L31 | Cerebrovascular and degenerative diseases | Pathology | 1h |
| L32 | Neurotransmitters structure, types and signaling pathway | Biochemistry | 3h |
| L33 | Sedative hypnotic drugs | Pharmacology | 2h |
| L34 | Motor Cortex, descending tracts and motor lesions | Physiology | 1h |
| L35 | Normal neuroradiology And radiological presentation of common CNS Pathology | Radiology | 1h |

2. Practical

| No | Title | Department | Hours |
|----|---|------------|-------|
| P1 | External Features of spinal cord and Brain Stem | Anatomy | 4h |
| P2 | Cranial Nerves, Blood Supply of the Brain | Anatomy | 4h |
| P3 | Cerebellum, Basal Ganglia, Cerebral Cortex | Anatomy | 4h |
| P4 | Diencephalon, Ventricular system | Anatomy | 2h |

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| | | | |
|-----|--|--------------|----|
| P5 | Bounderies of the Orbit – Ear Anatomy | Anatomy | 2h |
| P6 | Histological Structure of Nervous Tissue, Spinal and Sympathetic ganglia- Cross sectional of Cerebral Cortex | Histology | 2h |
| P7 | Cross sectional of Spinal cord, Brain Stem, Cerebellum | Histology | 2h |
| P8 | Crude and Fine Touch - Vibration sense – Pain | Physiology | 2h |
| P9 | 3 rd ,4 th ,6 th cranial nerves | Physiology | 2h |
| P10 | 5 th and 7 th Cranial Nerves | Physiology | 2h |
| P11 | Superficial Reflexes | Physiology | 2h |
| P12 | Stretch Reflex | Physiology | 2h |
| P13 | Tendon jerk | Physiology | 2h |
| P14 | Olfactory, Optic and 8 th cranial Nerves | Physiology | 2h |
| P15 | CNS Inflammation, Cerebrovascular and degenerative diseases | Pathology | 2h |
| P16 | Glial and meningeal tumors | Pathology | 2h |
| P17 | Polio and Rabis | Microbiology | 2h |
| P18 | Meningites and Encephalitis | Microbiology | 2h |
| P19 | Parasites affecting CNS | Parasitology | 4h |

5-Teaching methods

Lectures:

Conducted by a Professor/assistant Professor and introduce the essential concepts and knowledge, the identification of scientific backgrounds, the explanation of complicated issues and topics and the potential for clinical application.

Tutorial classes

Conducted by an assistant Professor and lecturer in small teaching groups to emphasize complicated medical topics and clinical cases. They are held

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in the corresponding department and are included in the teaching plan. Division of students into groups alternating between direct contact and online lectures.

Practical classes: Division of students into groups in the labs and then each group is divided into 4 smaller sub- groups in 2 labs simultaneously. These Subgroups of students allow interaction, presentations and feedback. The plan for practical training is attached in the instructional units section. Each lab includes a presentation of the scheduled topic by one of the staff. Then the students perform their recommended tasks themselves helped by joiner staff aided with microscopes, projector slides, data show photos.

Students' activities: Students will be divided into small groups. Each formed of 10 students. Each group is assigned for oral presentation on a specific topic. Topics are determined by staff member committee. Students will cooperate, prepare and present their projects in front of the evaluation committee.

6-Assessment

1-Formative:

This form of assessment is designed to give you feedback to help you to identify areas for improvement. It includes a mixture of MCQs, short answer-questions (SAQs), extended matching questions (EMQs), case-solving exercises and independent learning activities in all subjects. These will be given during tutorial sessions and practical. The answers are presented and discussed

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immediately with you after the assessment. The results will be made available to you.

2-Summative

This type of assessment is used for judgment or decisions to be made about your performance. It serves as:

- Verification of achievement for the student satisfying requirement
- Motivation of the student to maintain or improve performance.
- Certification of performance
- Grades

In this Course your performance will be assessed according to the following:

| | |
|---------------------------|-------------------|
| 13.Continuous Assessment | 30 % (37.5 marks) |
| 14.Practical | 30 % (37.5 marks) |
| 15.Final Exam (Two Hours) | 40 % (50 marks) |

| | |
|--------------|--------------------------|
| Total | 100 % (125 marks) |
|--------------|--------------------------|

Written Exams will include multiple choice questions (MCQs). These will cover material presented during the lectures, tutorials, CBL presentations, and SDL.

First quiz will be held at 10-12 AM Saturday of 2nd week of the module.

Second quiz will be held at 10-12 AM Saturday of 4th week of the module. In case of an emergency, the module coordinator must be notified.

Practical examination: Will be arranged by the departments

STUDENT'S RESPONSIBILITY

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رسالة الكلية: نلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملزمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
العنوان: شارع الجيش، كفر الشيخ، جمهورية مصر العربية

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- Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.
- If there is anything that the module coordinator can do to assist you during the course, please feel free to contact him.

Sites

| Activity | Site |
|---|--------------------------|
| 1-Theme Lectures | Main lecture Hall |
| 2- Case based learning & Tutorial sessions | Academic departments |
| 3- Practical sessions & exam. | |
| Anatomy | Anatomy dissection Hall |
| Histology | Histology department |
| Physiology | Physiology department |
| Biochemistry | Biochemistry Department |
| Pathology | Pathology department |
| Microbiology | Microbiology department |
| Pharmacology | Pharmacology department. |
| Parasitology | Parasitology department |
| 4- Written Assessment | |
| Final module exam. & quizzes | Examination Hall |

Text Books and References

Anatomy: Drake, R., Vogl, A.W. and Mitchell, A.W., 2009. Gray's anatomy for students E-book. Elsevier Health Sciences

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

Histology: Gartner, L.P. and Hiatt, J.L., 2006. Color textbook of histology ebook. Elsevier Health Sciences.

Physiology: Hall, J.E., 2020. Guyton & hall physiology review e-book. Elsevier Health Sciences.

Biochemistry: Satyanaryana, U. and Chakrapani, U., 2021. Essentials of biochemistry. Elsevier India Microbiology Cornelissen, C.N., Harvey, R.A. and Fisher, B.D., 2012. Microbiology (Vol. 3). Lippincott Williams & Wilkins

Parasitology: Garcia, L.S., 2006. Diagnostic medical parasitology. American Society for Microbiology Press

Pathology: Klatt, E.C. and Kumar, V., 2014. Robbins and Cotran review of pathology. Elsevier Health Sciences

Pharmacology: Whalen, K., 2018. Lippincott® Illustrated Reviews: Pharmacology. Wolters kluwer india Pvt Ltd

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YEAR 2- 4TH SEMESTER

SPECIAL SENSES

1- Basic information:

Course specifications of:

- Program on which the module is given Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- Module title: Special senses module.
- Academic year/level: 2nd level /4th semester.
- Code: S4M2/S
- Credit hours for the module: 5
- Study weeks: (4)
- Departments offering the course:
 - Department of Anatomy.
 - Department of Physiology.
 - Department of Histology.
 - Department of Biochemistry.
 - Department of pathology.
 - Department of Microbiology.
 - Department of Parasitology.
 - Department of Pharmacology.
 - Department of Neuromedicine.
 - Department of Neurosurgery.
 - Department of Radiology.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| Course Title | Contact Hours | | | | Credit hours |
|----------------|---------------|----------------|-----|----------|--------------|
| | Lectures | Practical (X2) | CBL | SDL (X3) | |
| Special senses | 47 | 23 | 3 | 2 | 5 |

Teaching Departments

| | Lectures | Practical | CBL | SDL |
|---------------|-----------|-----------|----------|----------|
| Anatomy | 15 | 8 | - | - |
| Physiology | 13 | 6 | - | 1 |
| Parasitology | 3 | 1 | - | - |
| Pharmacology | 4 | 2 | - | 1 |
| Pathology | 8 | 2 | - | - |
| Histology | 4 | 4 | - | - |
| Neuromedicine | - | - | 2 | - |
| Audiology | - | - | 1 | - |
| Total | 47 | 23 | 3 | 2 |

2. Overall aim:

By the end of this module the student will be able to:

- Outline the structure and relations of the special senses, and the ways in which this structure may be imaged and examined.

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- Describe the histological structure of the eye, ear.
- Identify the functions of different parts of special senses with structure correlation.
- Identify sensory and motor functions of different areas of special senses organs and consequences of their lesions.
- Identify important parasites affecting the eye.
- Identify anatomy and functions of different parts of the eye.
- Identify anatomy and functions of different parts of the ear.
- Identify various causes of otological diseases.

3. Learning outcomes (LOs)

By the end of this module the student will be able to:

Competency Area I: The graduate as a health care provider

1.1 Take and record a structured, patient centered history.

1.1.1 Communicate effectively with individuals regardless of their social, cultural, ethnic backgrounds, or their disabilities.

1.6 Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.

1.6.1 Identify diagnostic and infective stages of *parasites affecting eye* .

1.6.2 Differentiate diagnostic tests commonly used for parasitic infections.

1.6.3 Judge results of parasitological, serological and molecular tests and apply them.

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1.9 Retrieve, analyze, and evaluate relevant and data from literature, using information technologies and library resources, in order help solve a clinical problem based on evidence (EBM).

1.9.1 Use different sources of information to obtain data

1.10 Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.

1.10.1 Construct different knowledge and analyze given information to help in solving difficult problem.

Competency Area II: The graduate as a health care promoter

2.4 Identify the major health risks in his/her community, including demographic, occupational and environmental risks; endemic diseases, and prevalent chronic diseases.

2.4.1 List different organisms affecting the special senses organs.

2.9 Adopt suitable measures for infection control.

2.9.1 Clarify clinical picture, diagnostic, therapeutic and preventive interventions against different microbes.

Competency Area III: The graduated as a professional

3.5 Ensure confidentiality and privacy of patients' information.

3.5.1 Respect and follow the institutional code of conduct.

3.5.2 Maintain professional image in manner, dress speech and interpersonal relationships that is consistent with the medical profession's accepted contemporary standards in the community.

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Competency Area IV: The graduate as a scholar and scientist

4.1 Describe normal structure of the body and its major organ systems and explain their functions

4.1.1 Describe the anatomy of the eye, orbit, ear, nose its sinuses, blood supply.

4.1.2 Retell the development of special senses organs.

4.1.3 Discuss the general histologic features of the eye, ear.

4.5 Identify various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of illness/disease and explain the ways in which they operate on the body (pathogenesis).

4.5.1 Analyze the congenital anomalies on embryological basis.

4.6 Describe altered structure and function of the body and its major organ systems that are seen in various diseases and conditions.

4.6.1 Define the congenital anomalies of the eye.

4.7 Describe drug actions: therapeutics and pharmacokinetics; side effects and interactions, including multiple treatments, long term conditions and non-prescribed medication; and effects on the population.

4.7.1 Recognize Principles of anti glaucoma drugs.

Competency Area V: The graduate as a member of the health team and system

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

5.2 Respect colleagues and other health care professionals and work cooperatively with them, negotiating overlapping and shared responsibilities, and engaging in shared decision-making for effective patient management.

5.2.1 Honor and respect, superiors, colleagues and any other member of the health profession.

5.3 Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports collaborative work.

5.3.1 Communicate effectively using all methods.

5.6 Evaluate his/her work and that of others using constructive feedback.

5.6.1 Express themselves freely and adequately by improving their descriptive capabilities and enhancing their communication skills.

Competency Area VI: The graduate as a lifelong learner and researcher

6.2 Develop, implement, monitor, and revise a personal learning plan to enhance professional practice

6.2.1 Utilize information technology to improve his/her professional practice.

6.2.2 Perform self-appraisal & seek continuous learning.

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6.4 Engage in inter-professional activities and collaborative learning to continuously improve personal practice and contribute to collective improvements in practice.

6.4.1 Work as team leader as well as a member in larger teams.

6.5 Recognize practice uncertainty and knowledge gaps in clinical and other professional encounters and generate focused questions that address them.

6.5.1 Manage scientific meetings and appropriately utilize time.

4- Module Contents

1. Theoretical

| NO | TITLE | DEPARTMENT | HOURS |
|----|--|------------|-------|
| L1 | Anatomy of orbit | Anatomy | 2 |
| L2 | Anatomy of eye and extraocular muscles | Anatomy | 2 |
| L3 | Nerves of eye and visual pathway | Anatomy | 3 |
| L4 | Anatomy of ear | Anatomy | 2 |
| L5 | Vestibulocochlear pathway | Anatomy | 2 |
| L6 | Anatomy of nose and paranasal sinuses | Anatomy | 2 |
| L7 | Olfactory pathway | Anatomy | 2 |
| L8 | Introduction , ocular appendages | Physiology | 2 |
| L9 | Aquos humor , glaucoma | Physiology | 2 |

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| | | | |
|----------|--|---------------|---|
| L10 | Cornea, lens, accommodation | Physiology | 2 |
| L11 | Retina, color vision | Physiology | 3 |
| L12 | Visual pathway, binocular vision | physiology | 2 |
| L13 | Hearing, taste , smell sensation | physiology | 2 |
| L14 | Ocular parasites | parasitology | 3 |
| L16 | Histology of eye | Histology | 2 |
| L17 | Histology of ear | Histology | 2 |
| L18 | Drugs of glaucoma | Pharmacology | 2 |
| L19 | Drugs of glaucoma | Pharmacology | 2 |
| L20 | Pathology of eye diseases | Pathology | 2 |
| L21 | Pathology of ear diseases | Pathology | 2 |
| L22 | Diseases of nose and paranasal sinuses | Pathology | 2 |
| L23 | Diseases of the tongue and oral cavity | Pathology | 2 |
| CB L1 | Audiovestibular medicine clinical | Audiology | 1 |
| CB L2 | Examination of cranial nerves | neuromedicine | 2 |

2. practical

| No | Title | Department | HOURS |
|----|---|------------|-------|
| P1 | External Features of spinal cord and Brain Stem | Anatomy | 4h |

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
العنوان: شارع الجيش، كفر الشيخ، جمهورية مصر العربية

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| | | | |
|-----|--|--------------|----|
| P2 | Cranial Nerves, Blood Supply of the Brain | Anatomy | 4h |
| P3 | Cerebellum, Basal Ganglia, Cerebral Cortex, Diencephalon, Ventricular system | Anatomy | 4h |
| P4 | Bounderies of the Orbit – Ear Anatomy | Anatomy | 4h |
| P5 | Histological Structure of Nervous Tissue, Spinal and Sympathetic ganglia- Cross sectional of Cerebral Cortex | Histology | 4h |
| P6 | Cross sectional of Spinal cord, Brain Stem, Cerebellum | Histology | 4h |
| P7 | Crude and Fine Touch - Vibration sense - Pain | Physiology | 4h |
| P8 | 3 rd ,4 th ,6 th , 5 th , 7 th and 8 th cranial nerves | Physiology | 4h |
| P9 | Superficial Reflexes, Stretch Reflex and Tendon jerk | Physiology | 4h |
| P10 | Parasites of eye and special senses | parasitology | 2h |
| P11 | Diseases and tumors of special senses | Pathology | 4h |
| P12 | Glaucoma drugs | pharmacology | 4h |

5-Teaching methods

Lectures:

Conducted by a Professor/assistant Professor and introduce the essential concepts and knowledge, the identification of scientific backgrounds, the explanation of complicated issues and topics and the potential for clinical application.

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Tutorial classes

Conducted by an assistant Professor and lecturer in small teaching groups to emphasize complicated medical topics and clinical cases. They are held in the corresponding department and are included in the teaching plan. Division of students into groups alternating between direct contact and online lectures.

Practical classes: Division of students into groups in the labs and then each group is divided into 4 smaller sub- groups in 2 labs simultaneously. These Subgroups of students allow interaction, presentations and feedback. The plan for practical training is attached in instructional unit's section. Each lab includes a presentation of the scheduled topic by one of the staff. Then the students perform their recommended tasks themselves helped by joiner staff aided with microscopes, projector slides, data show photos.

Students' activities: Students will be divided into small groups. Each formed of 10 students. Each group is assigned for an oral presentation on a specific topic. Topics are determined by the staff member committee. Students will cooperate, prepare and present their projects in front of the evaluation committee.

6-Assessment

1-Formative:

This form of assessment is designed to give you feedback to help you to identify areas for improvement. It includes a mixture of MCQs, short answer-questions (SAQs), extended matching questions (EMQs), case-solving

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exercises and independent learning activities in all subjects. These will be given during tutorial sessions and practical. The answers are presented and discussed immediately with you after the assessment. The results will be made available to you.

2-Summative

This type of assessment is used for judgment or decisions to be made about your performance. It serves as:

- Verification of achievement for the student satisfying requirement
- Motivation of the student to maintain or improve performance.
- Certification of performance
- Grades

In this Course your performance will be assessed according to the following:

| | |
|------------------------|--------------------|
| Continuous Assessment | 30 % (75 marks) |
| Practical | 30 % (37.5 marks) |
| Final Exam (Two Hours) | 40 % (37.5 marks) |

Total **100 % (125 marks)**

Written Exams will include multiple choice questions (MCQs). These will cover material presented during the lectures, tutorials, CBL presentations, and SDL.

First quiz will be held at 10-12 AM Saturday of 2nd week of the module.

Second quiz will be held at 10-12 AM Saturday of 4th week of the module. In case of an emergency, the module coordinator must be notified.

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Practical examination: Will be arranged by the departments.

STUDENT'S RESPONSIBILITY

- Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.
- If there is anything that the module coordinator can do to assist you during the course, please feel free to contact him.

Sites

| Activity | Site |
|--|-------------------------|
| 1-Theme Lectures | Main lecture Hall |
| 2- Case based learning & Tutorial sessions | Academic departments |
| 3- Practical sessions & exam. | |
| Anatomy | Anatomy dissection Hall |
| Histology | Histology department |
| Physiology | Physiology department |
| Biochemistry | Biochemistry Department |
| Pathology | Pathology department |
| Microbiology | Microbiology department |

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| | |
|------------------------------|--------------------------|
| Pharmacology | Pharmacology department. |
| Parasitology | Parasitology department |
| 4- Written Assessment | |
| Final module exam. & quizzes | Examination Hall |

Text Books and References

Anatomy: Drake, R., Vogl, A.W. and Mitchell, A.W., 2009. Gray's anatomy for students E-book. Elsevier Health Sciences

Histology: Gartner, L.P. and Hiatt, J.L., 2006. Color textbook of histology ebook. Elsevier Health Sciences.

Physiology: Hall, J.E., 2020. Guyton & hall physiology review e-book. Elsevier Health Sciences.

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YEAR 2- 4TH SEMESTER MODULE (3) GASTROINTESTINAL SYSTEM

1- Basic information:

Course specifications of:

- Program on which the course is given Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- Module title: gastrointestinal system module
- Academic year/level: 2nd level /4th semester.
- Code: S4M3/G
- Credit hours for the Module: 7
- Study weeks: (5)
- Department offering the module:
 - Department of Anatomy.
 - Department of Histology.
 - Department of Physiology.
 - Department of Pharmacology.
 - Department of Pathology.
 - Department of Microbiology.
 - Department of Medical Parasitology.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

- Department of Internal Medicine.
- Department of Gastroenterology, Hepatology, and infectious diseases.

Teaching Departments

| Course Title | Contact Hours | | | | Credit hours |
|------------------|---------------|----------------|-----|----------|--------------|
| | Lectures | Practical (X2) | CBL | SDL (X3) | |
| Digestive system | 67 | 28 | 5 | 5 | 7 |

| | lectures | Practical | CBL | SDL |
|-------------------|----------|-----------|-----|-----|
| Anatomy | 13 | 5 | - | - |
| Histology | 9 | 3 | - | - |
| Physiology | 13 | 4 | - | 1 |
| Pathology | 9 | 3 | - | 1 |
| Pharmacology | 5 | 3 | - | 1 |
| Microbiology | 5 | 4 | - | 1 |
| Parasitology | 10 | 4 | - | 1 |
| Biochemistry | 3 | 2 | - | - |
| Internal medicine | 0 | 0 | 5 | - |
| total | 67 | 28 | 5 | 5 |

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2. Overall aim:

By the end of this module the student will be able to:

- Make progress towards meeting some of the learning outcomes described in national academic reference standards (2017).
- Acquires the essential up-to-date basic knowledge, skills, and attitude expected from a medical student to be able to participate in the prevention, diagnosis and management of gastrointestinal diseases later in the clinical clerkship training period.
- Become a continuous self-learner.
- Know the structure of the gastrointestinal system.
- Understand the function of the gastrointestinal system.
- Know the most common diseases affecting the gastrointestinal system and their presentation.
- Understand the pathophysiology of symptoms and signs related to gastrointestinal diseases.
- Know the risk factors related to gastrointestinal diseases.

3. Learning outcomes (LOs)

By the end of this module the student will be able to:

- Competency Area I: The graduate as a health care provider

I.4. Perform appropriately timed full physical examination of patients

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
العنوان: شارع الجيش، كفر الشيخ، جمهورية مصر العربية

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appropriate to the age, gender, and clinical presentation of the patient while being culturally sensitive.

I.4.1 Identify different parts of digestive system on the models

1.4.2 Judge on the pathological features of different disorders of the digestive system based on gross and microscopic pictures aiming to reach correct diagnosis.

1.4.3 Use effectively the microscope to describe the morphological features of bacteria under the microscope.

1.4.4 Perform the different ways of microbiological culture and to differentiate between bacteria on solid media.

1.4.5 Construct patient's symptoms and signs in terms of anatomic, pathologic and functional diagnostic significances.

I.6 Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.

I.6.1 Identify diagnostic and infective stage of parasites affecting digestive system

I.6.2 Identify diagnostic tests commonly used for parasitic infection.

I.6.3 Judge results of parasitological, serological, molecular, and radiological findings and apply them.

1.6.4 Apply the knowledge and skills in interpreting different laboratory tests. And predict expected results.

I.8 Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand.

1.8.1 Express systemic thinking and personal judgment in clinical problem solving.

Competency Area II: The graduate as a health care promoter

2.9 Adopt suitable measures for infection control.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

2.9.1 Clarify clinical picture, diagnostic, therapeutic and preventive interventions against different microbes.

Competency Area IV: The graduate as a scholar and scientist

4.1 Describe normal structure of the body and its major organ systems and explain their functions.

4.1.1 Describe normal structure and function of digestive system and determining different anatomical surface markings and the course of the internal structures through:

4.1.2 Retell the development of digestive system organs.

4.1.3 Review the general histologic features of the digestive system.

4.1.4 Describe Physiological mechanism of saliva, swallowing, stomach

digestion, normal GIT motility and Intestinal absorption. and normal Physiology of Liver and biliary tract.

4.1.5 Describe Biochemistry and Metabolic function of liver.

4.5. Identify various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of illness/disease and explain the ways in which they operate on the body (pathogenesis).

4.5.1 Recognize the etiology, pathogenesis, and complications of common diseases affecting the digestive system.

4.5.2 Recognize the pathological gross and microscopic features of the different types of GIT inflammatory diseases.

4.5.3 Recognize the pathological gross and microscopic features of different GIT tumours.

4.5.4 Summarize the medically important bacteria and viruses causing GIT infections as regards their morphology, and growth requirement and growth cycle, virulence factors, clinical diseases, laboratory diagnosis, treatment, prevention and control of infectious diseases.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

4.6. Describe altered structure and function of the body and its major organ systems that are seen in various diseases and conditions.

4.6.1 Define the congenital anomalies of the digestive system

4.7 Describe drug actions: therapeutics and pharmacokinetics; side effects and interactions, including multiple treatments, long term conditions and non-prescribed medication; and effects on the population.

4.7.1 Describe Drugs affecting GIT motility.

Competency Area V: The graduate as a member of the health team and system

5.2. Respect colleagues and other health care professionals and work cooperatively with them, negotiating overlapping and shared responsibilities, and engaging in shared decision-making for effective patient management.

5.2.1 Communicate effectively with other health care professionals to maximize patient benefits and minimize the risk of errors.

5.3 Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports collaborative work.

5.3.1 Implement collaborative teamwork during small group teaching (SDL).

5.6. Evaluate his/her work and that of others using constructive feedback.

5.6.1 Monitor the effectiveness and side effects of therapy.

5.6.2 Report adverse drug effects and decrease drug-drug interactions.

Competency Area VI: The graduate as a lifelong learner and researcher

6.2 Develop, implement, monitor, and revise a personal learning plan to enhance professional practice.

6.2.1 Use information technology to improve his/her professional practice.

6.2.2 Perform self-appraisal & seek continuous learning.

6.3 Identify opportunities and use various resources for learning.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

6.3.1 Use information technology effectively in the field of clinical pharmacology and search the internet for newly discovered drugs.

6.3.2 Recognize the importance of life-long self-learning and give a strong commitment to it.

6.6 Effectively manage learning time and resources and set priorities.

6.6.1 Appraise the resources of biomedical information including the available electronic facilities and communication technology to update his/her knowledge, improve his/her medical practice and to manage and manipulate information effectively.

4 - Module Contents

1. Theoretical lectures

| TITLE | DEPARTMENT | HOURS |
|---|-------------------|-------|
| Case study | Internal Medicine | 5h |
| Anatomy Of mouth cavity, palate, floor of the mouth, Salivary glands | Anatomy | 2h |
| Histology of oral cavity | Histology | 1h |
| Physiology Of saliva, swallowing | Physiology | 3h |
| Pharmacology Of Drugs affecting GIT motility 1 | Pharmacology | 2h |
| Pathology Of Salivary Glands Diseases, Tumors& Oesophageal Pathology. | Pathology | 2h |
| Anatomy Of Muscles of mastication and tempromandibular joint | Anatomy | 2h |
| Histology of Stomach | Histology | 2h |
| Anatomy f Peritoneum | Anatomy | 1h |

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
العنوان: شارع الجيش، كفر الشيخ، جمهورية مصر العربية

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| | | |
|---|--------------|----|
| Histology of Small and large intestine | Histology | 2h |
| Anatomy of Liver and biliary tract | Anatomy | 2h |
| Pharmacology Drugs affecting GIT motility 2 | Pharmacology | 3h |
| Anatomy of digestive tube | Anatomy | 2h |
| Pathology of Diseases of stomach | Pathology | 2h |
| Anatomy Of Liver and biliary system, Blood supply of the gut | Anatomy | 1h |
| Physiology of Intestine and absorption | Physiology | 3h |
| Pathology of Inflammatory diseases of the small intestine, large intestine, and appendix. | Pathology | 2h |
| Microbiology Gastrointestinal infectios | Microbiology | 2h |
| Parasitology Nematods | Parasitology | 3h |
| Histology of GIT glands | Histology | 2h |
| Microbiology of Gastrointestinal infectios and Food poisoning 2 | Microbiology | 2h |
| Pathology of Diseases of the Liver and gall bladder | Pathology | 1h |
| Anatomy Of development of gut | Anatomy | 2h |
| Histology of Salivary glands and pancreas | Histology | 2h |
| Pathology of Tumours of intestine, and gastrointestinal ulcers | Pathology | 2h |
| Biochemistry Of Metabolic function of liver | Biochemistry | 3h |
| Physiology Of Stomach | Physiology | 3h |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| | | |
|--|---|----|
| Parasitology Trematods | Parasitology | 2h |
| Parasitology Protozoa | Parasitology | 3h |
| Physiology of Pancreas | Physiology | 3h |
| Microbiology Food, water and milk born infections | Microbiology Food, water and milk born infections | 1h |
| Anatomy Development of the gut Part2 | Anatomy | 1h |
| Parasitology Nematods, Trematods | Parasitology | 2h |

2. Practical

| TITLE | DEPARTMENT | HOURS |
|--|------------|-------|
| Anatomy Of mouth cavity, palate, floor of the mouth, Salivary glands | Anatomy | 2h |
| Anatomy of digestive tube | Anatomy | 4h |
| Anatomy Of Liver and biliary system | Anatomy | 4h |
| Histology of oral cavity | Histology | 2h |
| Histology of Liver and biliary system | Histology | 4h |
| Physiology Of saliva, swallowing | Physiology | 2h |
| Physiology of Intestine and absorption | Physiology | 4h |

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملزمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
العنوان: شارع الجيش، كفر الشيخ، جمهورية مصر العربية

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| | | |
|---|--------------|----|
| Physiology Of Stomach | Physiology | 2h |
| Pharmacology Of Drugs affecting GIT motility 1 | Pharmacology | 4h |
| Pharmacology Drugs affecting GIT motility 2 | Pharmacology | 2h |
| Pathology Of Salivary Glands Diseases, Tumors& Oesophageal Pathology. | Pathology | 4h |
| Pathology of Diseases of gastrointestinal tract | Pathology | 2h |
| Microbiology Gastrointestinal infections | Microbiology | 2h |
| Microbiology of Gastrointestinal infectios and Food poisoning 2 | Microbiology | 4h |
| Microbiology Food, water and milk born infections | Microbiology | 4h |
| Parasitology Trematodes and Cestodes | Parasitology | 4h |
| Biochemistry Of Metabolic function of liver | Biochemistry | 4h |
| Parasitology Nematodes | Parasitology | 2h |
| Parasitology Protozoa | Parasitology | 1h |

Teaching methods

Lectures:

Conducted by a Professor/assistant Professor and introduce the essential concepts and knowledge, the identification of scientific backgrounds, the explanation of complicated issues and topics and the potential for clinical application.

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
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رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

Tutorial classes

Conducted by an assistant Professor and lecturer in small teaching groups to emphasize complicated medical topics and clinical cases. They are held in the corresponding department and are included in the teaching plan. Division of students into groups alternating between direct contact and online lectures.

Practical classes: Division of students into groups in the labs and then each group is divided into 4 smaller sub- groups in 2 labs simultaneously. These Subgroups of students allow interaction, presentations and feedback. The plan for practical training is attached in instructional unit's section. Each lab includes a presentation of the scheduled topic by one of the staff. Then the students perform their recommended tasks themselves helped by joiner staff aided with microscopes, projector slides, data show photos.

Students' activities: Students will be divided into small groups. Each formed of 10 students. Each group is assigned for oral presentation on a specific topic. Topics are determined by staff member committee. Students will cooperate, prepare and present their projects in front of evaluation committee.

Assessment

Formative:

This form of assessment is designed to give you feedback to help you to identify areas for improvement. It includes a mixture of MCQs, short answer-questions (SAQs), case-solving exercises and independent learning activities in all subjects. These will be given during tutorial sessions and practical. The

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

answers are presented and discussed immediately with you after the assessment.

The results will be made available to you.

Summative

This type of assessment is used for judgment or decisions to be made about your performance. It serves as:

Verification of achievement for the student satisfying requirement

Motivation of the student to maintain or improve performance.

Certification of performance

Grades

In this Course your performance will be assessed according to the

following:

| | |
|-------------------------------------|--------------|
| 1. Continuous Assessment marks) | 25 % (52.5 |
| 2. Practical marks) | 33.3 % (52.5 |
| 3. Final Exam (Two Hours) marks) | 41.6 % (70 |
| <hr/> | |
| 100% (175mark) | |

Written Exams will include multiple choice questions (MCQs). These will cover material presented during the lectures, tutorials, CBL presentations, and SDL. Final examination will be held 10-12 AM first Saturday of fourth module at the main exam. Hall.

First quiz will be held at 10-12 AM Saturday of 2nd week of Es module.

Second quiz will be held at 10-12 AM Thursday of 4th week of ES module. In case of an emergency, the module coordinator must be notified.

Practical examination: Will be arranged by the departments.

STUDENT'S RESPONSIBILITY

- Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.
- If there is anything that the module coordinator can do to assist you during the course, please feel free to contact him.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

Sites

| Activity | Site |
|--|--------------------------|
| 1-Theme Lectures | Main lecture Hall |
| 2- Case based learning | Academic departments |
| 3- Practical sessions & exam. | |
| Anatomy | Anatomy dissection Hall |
| Histology | Histology department |
| Physiology | Physiology department |
| Biochemistry | Biochemistry Department |
| Pathology | Pathology department |
| Microbiology | Microbiology department |
| Pharmacology | Pharmacology department. |
| 4- Written Assessment | |
| Final module exam. & quizzes | Examination Hall |

Text Books and References for System Modules

Anatomy: Drake, R., Vogl, A.W. and Mitchell, A.W., 2009. Gray's anatomy for students E-book. Elsevier Health Sciences

Histology: Gartner, L.P. and Hiatt, J.L., 2006. Color textbook of histology ebook. Elsevier Health Sciences.

Physiology: Hall, J.E., 2020. Guyton & hall physiology review e-book. Elsevier Health Sciences.

Biochemistry: Satyanaryana, U. and Chakrapani, U., 2021. Essentials of biochemistry. Elsevier India Microbiology Cornelissen, C.N., Harvey, R.A. and Fisher, B.D., 2012. Microbiology (Vol. 3). Lippincott Williams & Wilkins

Parasitology: Garcia, L.S., 2006. Diagnostic medical parasitology. American Society for Microbiology Press

Pathology: Klatt, E.C. and Kumar, V., 2014. Robbins and Cotran review of pathology. Elsevier Health Sciences

Pharmacology: Whalen, K., 2018. Lippincott® Illustrated Reviews: Pharmacology. Wolters kluwer india Pvt Ltd

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

YEAR2- 4TH SEMESTER MODULE (4) RESEARCH, EVIDENCE-BASED AND BIostatISTICS

1- Basic information:

Course specifications of:

- **Program on which the module is given** Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- **module title:** Research, evidence- based and biostatistics.
- **Academic year/level:** 2nd level /4th semester.
- **Code:** S4M4/REB
- **Credit hours for the module:** 3
- **Study weeks:** (3)
- **Departments offering the course:**
 - Department of public health and Community medicine.

| Course Title | Lecturs | CBL | SDL (X3) | Credit hours |
|---|---------|-----|----------|--------------|
| Research, evidence-based and biostatistics. | 40 | 0 | 5 | 3 |

2. Overall aim:

At the end of the Module the students will be able to:

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

- Master the principles of medical biostatistics, application of practical skills in research & development of ethical analysis skills.

3. Learning outcomes (LOs)

By the end of this module the student will be able to:

Competency Area I: The graduate as a health care provider

1.9 Retrieve, analyze, and evaluate relevant and current data from literature, using information technologies and library resources, in order to help solve a clinical problem based on evidence (EBM).

1.9.1: Define basic concepts of biostatistics, e.g., Variables, measures of central tendency, dispersion, Correlation and regression, Hypothesis, sample and sampling technique, tests of significance, Probability, normal distribution... etc.

1.9.2: identify methods of data presentation.

1.9.3: Identify risk measures.

1.9.4: Identify and list ethical principles of statistical analysis.

1.9.5: Identify the different terms related to research methodology.

1.9.6: Classify the different study designs stressing in those used in medical field.

1.9.7: Highlight the previously studied biostatistics essential information.

1.9.8: Discuss the different tactics and statistical calculations used in risk estimation.

1.9.9: Discuss the different pitfalls of observational research design as bias and confounding.

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1.9.10: Discuss the determinant factors in experimental research design as randomization, blinding, matching and control groups.

Competency Area II: The graduate as a health care promoter

2.4 Identify the major health risks in his/her community, including demographic, occupational and environmental risks; endemic diseases, and prevalent chronic diseases

2.4.1: Explain the design in observational research studies with examples for each entity.

2.4.2: Explain the design in experimental research studies with examples for each entity.

2.4.3: Explain the value and phases of conduct of clinical trials.

2.4.4: Apply the epidemiological studies and surveillance on the community health problems managed by the ministry of Health and Population in Egypt.

Competency Area III: The graduated as a professional

3.1 Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.

3.1. Present regular reflection on and assess his/her performance using various performance indicators and information sources.

3.1.2 Acquire the skills of good listening and self-learning.

3.1.3 Practice the value of teamwork by acting in small groups with adequate cooperation with his/her colleagues.

3.1.4 Integrate in inter-professional activities and collaborative learning to continuously improve personal practice and contribute to collective improvements in practice.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

Competency Area V: The graduate as a member of the health team and system

5.3 Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports collaborative work.

5.3.1 Implement collaborative teamwork during small group teaching (SDL).

5.7 Recognize own personal and professional limits and seek help from colleagues and supervisors when necessary.

5.7.1 Work effectively within a team with respect to each other, their seniors & other colleagues involved in teaching & subsequently in future practice.

Competency Area VI: The graduate as a lifelong learner and researcher

6.3 Identify opportunities and use various resources for learning.

6.3.1 Interacts positively with colleagues, peers, and professors on web pages.

6.3.2 Use various resources in collecting information (Web-based learning, SDL).

6.6 Effectively manage learning time and resources and set priorities (PBL and Assignment)

6.6.1 Achieve and perform the required duties from him on time (assignments).

4- Module Contents

1. Theoretical lectures

| NO | Topic | HOURS |
|----|--------------------------------|-------|
| 1. | Introduction to Biostatistics. | 1 h |
| 2. | Population & Sampling. | 2 h |
| 3. | Variables. | 1 h |
| 4. | Measures of central tendency | 2 h |
| 5. | Measures of dispersion. | 1 h |
| 6. | Normal distribution. | 2 h |
| 7. | Probability Theory. | 2 h |

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
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رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| | | |
|-----|--|-------------|
| 8. | Hypothesis. | 2 h |
| 9. | Inferential statistics and confidence interval. | 1 h |
| 10. | Parametric (t-test, paired t-test, ANOVA, Repeated measure ANOVA). | 2 h |
| 11. | Non-parametric (Wilcoxon signed rank test, Mann-Whitney U-test). | 2 h |
| 12. | Chi square test. | 2 h |
| 13. | Measures of risk. | 2 h |
| 14. | Correlation and Regression analysis. | 2 h |
| 15. | Types of errors | 2 h |
| 16. | Introduction to research methodology | 2 h |
| 17. | Classification of study designs | 3 h |
| 18. | Value and phases of conduct of clinical trial | 2 h |
| 19. | Association and causation | 2 h |
| 20. | Data collection & presentation | 2 h |
| 21. | Protocol writing | 2 h |
| | Total hours | 40 h |

Teaching methods

Lectures:

Conducted by a Professor/assistant Professor and introduce the essential concepts and knowledge, the identification of scientific backgrounds, the explanation of complicated issues and topics and the potential for clinical application.

Tutorial classes

Conducted by an assistant Professor and lecturer in small teaching groups to emphasize complicated medical topics and clinical cases. They are held in the corresponding department and are included in the teaching plan. [Division of students into groups alternating between direct contact and online lectures.]

Practical classes: 5 groups of 100 students, each in a teaching room at the department.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

Students' activities: for (90min) through distributing variety of training exercises to be solved in the small groups (15 students each) using a white board for each subgroup. Students have to complete the logbook of the corresponding topic together with some of the training exercises under supervision of a tutor.

Assessment

- **Formative:** This form of assessment is designed to give you feedback to help you to identify areas for improvement. It includes a mixture of MCQs, short answer-questions (SAQs), extended matching questions (EMQs), case-solving exercises and independent learning activities in all subjects. These will be given during tutorial sessions and practical. The answers are presented and discussed immediately with you after the assessment. The results will be made available to you.
- **Summative:** This type of assessment is used for judgment or decisions to be made about your performance. It serves as:
 - Verification of achievement for the student satisfying requirement
 - Motivation of the student to maintain or improve performance
 - Certification of performance
 - Grades

| Assessment Method | Date | Marks | % of Total |
|-------------------------------------|--------------|-------|------------|
| a. end module Continuous assessment | End module | 25 | 30% |
| 2. End semester | End semester | 50 | 70% |
| Total | | 75 | 100% |

- **Written Exams** will include multiple choice questions (MCQs) at the end of the module while at the end of the semester, short assays will be added too.
- **Practical examination:** Will be arranged by the departments.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

- **SDL presentation:** Evaluation is done by a staff members committee that represents all the teaching departments according to the following rubric criteria.
- **Weight of Assessment:**

| Evaluation | Type | Marks | % |
|--------------|--|-------|-----|
| Assessment 1 | Logbook completion | 5 | 5 |
| Assessment 2 | Continuos Assissent (Quiz) | 10 | 13 |
| Assessment 3 | End round MCQ | 10 | 13 |
| Assessment 4 | End Round practical exam (MCQ, OSPE, problems) | - | - |
| Assessment 6 | Final Written exam | 50 | 70 |
| Total | | 75 | 100 |

STUDENT'S RESPONSIBILITY

Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.

If there is anything that the module coordinator can do to assist you during the course, please feel free to contact him.

Textbooks and References for System Modules:

-USMLE Step 1 lecture Notes 2016 Social and Behavioral Science.by Kaplan, Inc.Published by Kaplan Medical, a division of Kaplan, Inc.750 Third Avenue.New York, NY 10017. Printed in the United States of America10 9 8 7 6 5 4 3 2 1 Course ISBN: 978-1-5062-0775-9 Pages 19-40

- Essential Medical Statistics, Betty R. Kirkwood, Jonathan A. C. Sterne, 2nd edition. Published by Blackwell Science Ltd, 2003 ISBN 10: [0865428719](#) / ISBN 13: [9780865428713](#). partA p13,partB page 43 ,partC page141

-Medical Statistics (Betty R. Kirkwood and Jonathan A.C. Sterne) second edition

- Basic Statistics and Epidemiology . A practical guide

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

YEAR2- 4TH SEMESTER MODULE (5) ELECTIVE MODULE (APPLIED PULMONARY PHYSIOLOGY)

1- Basic information:

Course specifications of:

- Program on which the module is given Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- module title: Elective III.
- Academic year/level: 2nd level /4th semester.
- Code: S4M5/E3AP
- Credit hours for the module: 2
- Study weeks: longitudinal.
- Departments offering the course:
 - Department of Physiology.

Teaching Departments

| Course title | lecture |
|--|---------|
| Applied Pulmonary physiology. elective course | 30 |

2. Overall aim:

At the end of the Module the students will be able to:

- Recognize the function of respiratory system.

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- Recognize the mechanics of breathing.
- Recognize pressure volume relationship in respiratory system.
- Recognize the control of breathing.
- Outline the metabolic function of respiratory system.
- Outline physiological response to hypoxia and hypercapnia.
- Describe the respiratory regulation of acid base balance.
- Describe gas diffusion and blood flow to the lung and regional differences.

3. Learning outcomes (LOs)

By the end of this module the student will be able to:

Competency Area I: The graduate as a health care provider

1.6 Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.

1.6.1 Differentiate diagnostic tests commonly used for pulmonary function.

1.9 Retrieve, analyze, and evaluate relevant and data from literature, using information technologies and library resources, in order help solve a clinical problem based on evidence (EBM).

1.9.1 Use different sources of information to obtain data

1.10 Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.

1.10.1 Construct different knowledge and analyze given information to help in solving difficult problem.

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Competency Area V: The graduate as a member of the health team and system

5.2. Respect colleagues and other health care professionals and work cooperatively with them, negotiating overlapping and shared responsibilities, and engaging in shared decision-making for effective patient management.

5.2.1. Honor and respect, superiors, colleagues and any other member of the health profession.

5.3. Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports collaborative work.

5.3.1. Communicate effectively using all methods.

5.6 Evaluate his/her work and that of others using constructive feedback.

5.6.1 Express themselves freely and adequately by improving their descriptive capabilities and enhancing their communication skills .

Competency Area VI: The graduate as a lifelong learner and researcher

6.2 Develop, implement, monitor, and revise a personal learning plan to enhance professional practice

6.2.1 Utilize information technology to improve his/her professional practice.

6.2.2 Perform self-appraisal & seek continuous learning.

6.4 Engage in inter-professional activities and collaborative learning to continuously improve personal practice and contribute to collective improvements in practice.

6.4.1 Work as team leader as well as a member in larger teams.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

6.5 Recognize practice uncertainty and knowledge gaps in clinical and other professional encounters and generate focused questions that address them.

6.5.1 Manage scientific meetings and appropriately utilize time.

4- Module Contents

1. Theoretical lectures

| NO | TITLE | HOURS |
|----|--|-------|
| L1 | Mechanics of breathing | 4h |
| L2 | Pressure volume relationship in respiratory system | 4h |
| L3 | Pressure volume relationship in respiratory system | 4h |
| L4 | Exercise & high altitude | 4h |
| L5 | physiological responses to hypoxia & hypercapnia | 4h |
| L6 | Control of breathing | 4h |
| L7 | Transport of oxygen and co2 in the blood | 4h |
| L8 | Revision | 2h |

5- Teaching and learning methods

| Course | Lecture | Web based L |
|------------------------------|---------|-------------|
| Applied Pulmonary physiology | √ | √ |

6. COURSE ASSESSMENT:

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العنوان: شارع الجيش، كفر الشيخ، جمهورية مصر العربية

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Written Exams short questions or / and multiple choice questions (MCQs).

STUDENT'S RESPONSIBILITY

- Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.
- If there is anything that the module coordinator can do to assist you during the course, please feel free to contact him.

Sites

| Activity | | Site |
|-------------------|--|------------------|
| Final module exam | | Examination Hall |

Textbooks and References for System Modules

Physiology: Hall, J.E., 2020. Guyton & hall physiology review e-book. Elsevier Health Sciences.

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YEAR2- 4TH SEMESTER MODULE (5)

ELECTIVE MODULE (APPLIED NEURO ANATOMY)

1- Basic information:

Course specifications of:

- Program on which the module is given Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- module title: Elective III.
- Academic year/level: 2nd level /4th semester.
- Code: S4M5/E3AN
- Credit hours for the module: 2
- Study weeks: longitudinal.
- Departments offering the course:
 - Department of Anatomy.

Teaching Departments

| Course title | lecture |
|---|---------|
| Applied Neuro Anatomy. elective course | 30 |

2. Overall aim:

At the end of the Module the students will be able to:

- Apply the anatomical planes of orientation as you look at the CNS specimens and cross-sectional imaging studies.

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- Describe the major surface markings of the forebrain and brainstem.
- Describe the typical symptoms seen in spinal cord injuries.
- Identify the cranial nerves distribution and define the effect of their injury.
- Describe the location/organization of grey matter and white matter in the cerebellum and manifestations of its injury.
- Relate the three meningeal layers and the spaces between them to common pathologies that can be found in these real and potential spaces.
- Explain the organization of the ventricular system and the location of its component parts, as well as the circulation of cerebrospinal fluid (CSF).
- Be able critically read and present data from scientific papers

3. Learning outcomes (LOs)

By the end of this module the student will be able to:

Competency Area I: The graduate as a health care provider

1.1 Take and record a structured, patient centered history.

1.1.1 Communicate effectively with individuals regardless of their social, cultural, ethnic backgrounds, or their disabilities.

1.6 Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.

1.6.1 Interpret results of radiological Investigation for neurological assessment

1.8 Apply knowledge of the clinical and biomedical sciences relevant to

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The clinical problem at hand.

1.8.1 Diagnose & differentiate between types of neurological disorders

1.9 Retrieve, analyze, and evaluate relevant and current data from literature, using information technologies and library resources, in order to help solve a clinical problem based on evidence (EBM).

1.9.1 Manage learning resources effectively to reach to a clinical decision based on evidence.

1.10 Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.

1.10.1 Construct different knowledge and analyze given information to help in solving difficult problem.

1.10.2 Perform appropriately timed full physical examination of patients appropriate to the age, gender, and clinical presentation of the patient while being culturally sensitive.

1.10.3 Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand).

1.11 Perform diagnostic and intervention procedures in a skillful and safe manner, adapting to unanticipated findings or changing clinical circumstances.

1.11.1 Assess manifestation of different neurological diseases.

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1.11.2 Relate the location and general function of the 12 cranial nerves to the clinical neurological exam.

1.11.3 Describe the typical symptoms seen in spinal cord injuries as they relate to motor, sensory and autonomic function to the tracts discussed.

Competency Area II: The graduate as a health care promoter

2.1 Identify the basic determinants of health and principles of health improvement.

2.1.1 Apply the neuroanatomy of the cranial nerves to typical clinical presentations.

2.1.2 Describe the manifestations of different types of cerebral stroke.

Competency Area III: The graduated as a professional

3.1 Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.

3.1.1 Know his/her own personal and professional limits and consult other colleagues and supervisors when necessary.

3.5 Ensure confidentiality and privacy of patients' information.

3.5.1 Respect and follow the institutional code of conduct.

3.5.2 Maintain professional image in manner, dress speech and interpersonal relationships that is consistent with the medical profession's accepted contemporary standards in the community.

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Competency Area V: The graduate as a member of the health team and system

5.2 Respect colleagues and other health care professionals and work cooperatively with them, negotiating overlapping and shared responsibilities and engaging in shared decision-making for effective patient management.

5.2.1 Demonstrate respect, appropriate professional behavior and establish good relations in all aspects of his/her practice.

5.2.2 Know his/her own personal and professional limits and consult other colleagues and supervisors when necessary.

5.4 Apply leadership skills to enhance team functioning, the learning environment, and/or the health care delivery system.

5.4.1 Work effectively within team

5.4.2 Practice leadership skills during practical and media sessions

Competency Area VI: The graduate as a lifelong learner and researcher

6.2 Develop, implement, monitor, and revise a personal learning plan to enhance professional practice

6.2.1 Utilize information technology to improve his/her professional practice.

6.2.2 Perform self-appraisal & seek continuous learning.

6.2.3 Continue self-learning.

6.3 Engage in inter-professional activities and collaborative learning to continuously improve personal practice and contribute to collective improvements in practice.

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6.3.1 Work as team leader as well as a member in larger teams.

4 – Module Contents

1. Theoretical lectures

| NO | TITLE | HOURS |
|----|-------------------------|-------|
| L1 | Lesions of spinal cord. | 5h |
| L2 | Cranial nerve lesions. | 5h |
| L3 | Cerebellar lesion | 5h |
| L4 | Hydrocephalus | 5h |
| L5 | Degenerative disease | 5h |
| L6 | Cerebral stroke | 5h |

5- Teaching and learning methods

| Course | Lecture | Web based L |
|-----------------------|---------|----------------|
| Applied Neuro anatomy | √ | √ |

6. COURSE ASSESSMENT:

Written Exams short questions or / and multiple choice questions (MCQs).

STUDENT'S RESPONSIBILITY

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

- Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.
- If there is anything that the module coordinator can do to assist you during the course, please feel free to contact him.

Sites

| Activity | Site |
|-------------------|------------------|
| Final module exam | Examination Hall |

Textbooks and References for System Modules

Anatomy: Drake, R., Vogl, A.W. and Mitchell, A.W., 2009. Gray's anatomy for students E-book. Elsevier Health Sciences

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YEAR 3- 5TH SEMESTER

| النهاية العظمى | الدرجات | | | الحزم الدراسية (Modules) | | | المستوى الثالث – الفصل الخامس |
|-------------------|------------------|--------------------------|------------------------|---|-------|-----------------|-------------------------------|
| | التحريري % 40 | العملي (OSPE) % 30 | اعمال السنة % 30 | Name | Weeks | Credit hours | |
| 100 | 40 | 30 | 30 | Community medicine and public health | 4 | 4 | |
| 125 | 50 | 37.5 | 37.5 | Forensic & toxicology | 4 | 5 | |
| 100 | 40 | 30 | 30 | Early clinical experience, communication skills and professionalism | 4 | 4 | |
| 100 | 40 | 30 | 30 | Psychiatry | 4 | 4 | |
| متطلب كلية | 50 | - | - | Elective (IV) | - | 2 | |
| 525 | | | | | 16 | 23 | المجموع |

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YEAR 3- 5TH SEMESTER

COMMUNITY MEDICINE AND PUBLIC HEALTH

MODULE (1) MODULE

1- Basic information:

Course specifications of:

- **Program on which the module is given** Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- **Module title:** Community medicine and public health.
- **Academic year/level:** 3rd level /5th semester.
- **Code:** S5M1/CP
- **Credit hours for the module:** 6
- **Study weeks:** (6)
- **Departments offering the module:**
 - Department of public health and Community medicine

Teaching department

| Module title | Theoretical hours | Practical hours | Credit hours |
|--------------------------------------|-------------------|-----------------|--------------|
| Community medicine and public health | 40 hours | 20 hours | 4 |

1. Overall aim:

At the end of the Module the students will be able to:

- Adopt a healthy lifestyle & sound behavior to become role models for the individuals, families, & communities they will serve in the future.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزًا للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكًا فعالًا في الارتقاء بالخدمات الصحية محليًا وإقليميًا ودوليًا.

- Be Community-oriented, capable of anticipating & responding to community health needs within the primary health care (PHC) setting according to the policies, regulations, & guidelines of the Ministry of Health & population (MOHP) with respect to medical ethics.
- Promote outstanding programs of medical care to serve society & to promote environmental sanitation & development.

3. Learning outcomes (LOs)

By the end of this module the student will be able to:

Competency Area I: The graduate as a health care provider

1.6. Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.

1.6.1. Summarize the Investigation and response to some communicable, non-communicable and infectious disease outbreaks.

1.6.2. Define epidemiology & determinants of communicable & non communicable diseases & health problems, presented throughout the age spectrum.

Competency Area II: The graduate as a health care promoter

2.4 Identify the major health risks in his/her community, including demographic, occupational and environmental risks; endemic diseases, and prevalent chronic diseases.

2.4.1. Identify the prevalent health problems in a community, using various epidemiological strategies.

2.4.2. Identify Health care system, rural health, Child health, Occupational disease, School, and adolescence disease.

2.4.3. Apply risk assessment methods to health problems to determine strategies for appropriate response.

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2.6 Recognize the epidemiology of common diseases within his/her community and apply the systematic approaches useful in reducing the incidence and prevalence of those diseases.

- 2.6.1 Identify Basic terms and concept of epidemiology.
- 2.6.2. Describe disease frequency, trends in health & disease.
- 2.6.3. Use appropriate health education methods & materials.

Competency Area III: The graduated as a professional

3.5. Ensure confidentiality and privacy of patients' information.

- 3.5.1. Critisize Health care system, rural health, Child health, Occupational disease Environmental health.
- 3.5.2. Enumerate behavioral & social variables impacting health & disease.

3.8. Refer patients to appropriate health facility at the appropriate stage.

- 3.8.1. Discuss principles of disease prevention & early detection of common community health problems including occupational & environmental health-related problems.
- 3.8.2. Apply suitable measures for prevention & control of communicable & non communicable diseases.
- 3.8.3 Apply cost effectiveness of health care management.

Competency Area IV: The graduate as a scholar and scientist

4.5 Identify various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of illness/disease and explain the ways in which they operate on the body (pathogenesis).

- 4.5.1 Define Dynamics and patterns of disease transmission.
- 4.5.2 Design prevention & control programs for communicable & non communicable health problems of special public concern.

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4.8 Demonstrate basic sciences specific practical skills and procedures relevant to future practice, recognizing their scientific basis, and interpret common diagnostic modalities, including: imaging, electrocardiograms, laboratory assays, pathologic studies, and functional assessment tests.

4.8.1. Select various epidemiological strategies for Prevention and control of different diseases.

4.8.2. Use data / information for situation analysis.

4.8.3. Use communication skills & health education messages in caring for patients & apply appropriate infection prevention practices.

Competency Area V: The graduate as a member of the health team and system

5.2 Respect colleagues and other health care professionals and work cooperatively with them, negotiating overlapping and shared responsibilities and engaging in shared decision-making for effective patient management.

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

5.2.2. Deal with situations where communication is difficult including breaking bad news.

5.2.3. Apply methods of assessment of different types of vaccination

Competency Area VI: The graduate as a lifelong learner and researcher

6.3 Identify opportunities and use various resources for learning.

6.3.1 Interacts confidently with colleagues, peers, and professors on web pages.

6.3.2 Use various properties in collecting information (Web-based learning, SDL).

6.3.3. Conduct a health education session.

6.3.3. Adopt principles of the lifelong learning needs of the medical profession.

4 – Module Contents

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

1. Theoretical lectures

| | Topics | Hours |
|-----|--|-----------|
| L1 | Basics terms and concepts | 2 |
| L2 | Basic principles of Epidemiology | 2 |
| L3 | Dynamics and patterns of disease transmission | 2 |
| L4 | Prevention and control of communicable diseases | 2 |
| L5 | Measuring disease frequency | 2 |
| L6 | Investigation and response to an infectious disease outbreak | 2 |
| L7 | Screening | 2 |
| L8 | Public Health Surveillance | 2 |
| L9 | Epidemiology of selected communicable diseases | 4 |
| L10 | Vaccination | 2 |
| L11 | Non-Communicable Diseases (NCDs) | 2 |
| L12 | Health care system & Primary health care | 2 |
| L13 | Rural Health | 2 |
| L14 | Child health | 2 |
| L15 | School and Adolescence Health | 2 |
| L16 | Demography & Vital Statistics | 2 |
| L17 | Health Care Management and Administration | 2 |
| L18 | Occupational Health | 2 |
| L19 | Environmental Health | 2 |
| | Total | 40 |

2. Practical:

| Topics | Hours |
|--------|-------|
|--------|-------|

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
العنوان: شارع الجيش، كفر الشيخ، جمهورية مصر العربية

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| | | |
|----|--|----|
| P1 | Measuring disease frequency | 6h |
| P2 | Investigation and response to an infectious disease outbreak | 6h |
| P3 | Screening | 6h |
| P4 | Public Health Surveillance | 6h |
| P5 | Vaccination | 6h |
| P6 | Child health | 6h |
| P7 | Demography & Vital Statistics | 4h |

Teaching methods

Lectures:

Conducted by a Professor/assistant Professor and introduce the essential concepts and knowledge, the identification of scientific backgrounds, the explanation of complicated issues and topics and the potential for clinical application.

Tutorial classes

Conducted by an assistant Professor and lecturer in small teaching groups to emphasize complicated medical topics and clinical cases. They are held in the corresponding department and are included in the teaching plan. [Division of students into groups alternating between direct contact and online lectures.]

Practical classes: 5 groups of 100 students, each in a teaching room at the department.

Students' activities: for (90min) through distributing variety of training exercises to be solved in the small groups (15 students each). Students have to complete the logbook of the corresponding topic together with some of the training exercises under supervision of a tutor.

Assessment

- **Formative:** This form of assessment is designed to give you feedback to help you to identify areas for improvement. It includes a mixture of MCQs, short answer-questions (SAQs), extended matching questions (EMQs), case-solving exercises and independent learning activities in all subjects. These will be given during tutorial sessions and practical. The answers are

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

presented and discussed immediately with you after the assessment. The results will be made available to you.

➤ **Summative:** This type of assessment is used for judgment or decisions to be made about your performance. It serves as:

- Verification of achievement for the student satisfying requirement
- Motivation of the student to maintain or improve performance.
- Certification of performance
- Grades

| Assessment Method | Date | Marks | % of Total |
|-------------------------------------|--------------|-------|------------|
| b. end module Continuous assessment | End module | 25 | 30% |
| 3. End semester | End semester | 50 | 70% |
| Total | | 75 | 100% |

- **Written Exams** will include multiple choice questions (MCQs) at the end of the module while at the end of the semester, short essays will be added too.
- **Practical examination:** Will be arranged by the departments.
- **SDL presentation:** Evaluation is done by a staff members committee that represents all the teaching departments according to the following rubric criteria.
- **Weight of Assessment:**

| Evaluation | Type | Marks | % |
|--------------|--|-------|-----|
| Assessment | End round MCQ | 30 | 30 |
| Assessment | End Round practical exam (MCQ, OSPE, problems) | 30 | 30 |
| Assessment | Final Written exam | 40 | 40 |
| Total | | 100 | 100 |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

STUDENT'S RESPONSIBILITY

Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.

Textbook

Bhalwar RV Vaidya R Armed Forces Medical College Department of Community Medicine World Health Organization.

TextBook of Public Health and Community Medicine. 1st ed. Pune: Department of Community Medicine Armed Forces Medical College: World Health Organization; 2009.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

YEAR 3- 5TH SEMESTER MODULE (2)

FORENSIC AND TOXICOLOGY

1- Basic information:

Course specifications of:

- Program on which the module is given Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- Module title: Forensic and toxicology.
- Academic year/level: 3rd level /5th semester.
- Code: S5M2/FT.
- Credit hours for the module: 5
- Study weeks: (4)
- Departments offering the module:
 - Department of Forensic and toxicology.

| Course Title | Contact Hours | | | | Credit hours |
|---|---------------|----------------|-----|----------|--------------|
| | Lectures | Practical (X3) | CBL | SDL (X3) | |
| Forensic Medicine & Clinical Toxicology | 45 | 12 | 6 | 12 | 5 |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

2. Overall aim:

At the end of the Module the students will be able to:

- Provide basic background of different medico-legal aspects of living and dead individuals.
- Provide ability to diagnose and report different types of wounds.
- Provide ability to diagnose and report different types of deaths.
- Provide the ability to diagnose sexual offences.
- Provide ability to diagnose and provide 1st aid in some intoxicated patients, general lines of treatment in drug dependence and common insecticides.
- Recognize different medico-legal aspects of living and dead individuals regarding personal identification, diagnosis of death, causes and manner of death, types of wounds and their complications.
- Explain medical legal (ML) aspects of different cases of sexual offences.
- Discuss different patterns of wound and different types of violent asphyxia and their medico legal importance.
- Explain different types of physical injuries and their medico legal importance.
- Identify the principles of early clinical manifestations and diagnosis of acute common toxic substances and drugs of abuse.
- Describe the principles of management of common and life-threatening illnesses associated with common toxic substances and drugs of abuse.
- Explain initial appropriate first aid treatment and antidotal measure for common drugs and toxic substances in our society.

3. Intended learning outcomes (ILOs)

By the end of this module the student will be able to:

Competency Area I: The graduate as a health care provider

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

1.3. Assess the mental state of the patient.

1.3.1 Assess the consciousness level of the patient.

1.6. Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.

1.6.1. Differentiate diagnostic tests commonly used for toxicology cases.

1.6.2. Judge results of serological, urine tests and radiological findings and apply them.

1.6.3. Clarify method of collection of urine sample.

1.10 Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.

1.10.1 Construct different knowledge and analyze given information to help in solving difficult problems.

Competency Area III: The graduated as a professional

3.5. Ensure confidentiality and privacy of patients' information

3.5.1 Respect and follow the institutional code of conduct.

3.5.2 Maintain professional image in manner, dress speech and interpersonal relationships that is consistent with the medical profession's accepted contemporary standards in the community.

Competency Area V: The graduate as a member of the health team and system

5.2 Respect colleagues and other health care professionals and work cooperatively with them, negotiating overlapping and shared responsibilities and engaging in shared decision-making for effective patient management.

5.2.1. Communicate effectively with other health care professionals to maximize patient benefits and minimize the risk of errors.

5.2.2. Cooperate with other colleagues to provide a full understanding of clinical cases.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

5.3. Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports collaborative work.

5.3.1 Implement collaborative teamwork during small group teaching (SDL

Competency Area VI: The graduate as a lifelong learner and researcher

6.3 Identify opportunities and use various resources for learning.

6.3.1. Employ information technology effectively in the field of clinical pharmacology and search the internet for newly discovered drugs.

6.3.2. Recognize the importance of life-long self-learning and give a strong commitment to it.

4- Module Contents

3. Theoretical lectures

| NO | TITLE | DEPARTMENT | HOURS |
|----|--|--|-------|
| L1 | Identification | FORENSIC MEDICINE AND CLINICAL TOXICOLOGY | 3 |
| L2 | Identification | | 3 |
| L3 | Injuries | | 3 |
| L4 | Thanatology | | 3 |
| L5 | Medicolegal approach to delivery & pregnancy | | 3 |
| L6 | General toxicology | | 3 |
| L7 | Botulism | | 3 |
| L8 | Drug dependence | | 3 |
| L9 | sexual offences | | 3 |

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
العنوان: شارع الجيش، كفر الشيخ، جمهورية مصر العربية

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| | | | |
|-----|-----------------|--|---|
| L10 | Asphyxia | | 4 |
| L11 | Firearm | | 4 |
| L12 | Sexual assaults | | 4 |
| L13 | Abortion | | 4 |
| L14 | Corrosives | | 4 |
| L15 | Revision | | 4 |

21. Practical

| No | Title | Department | Hours |
|-----|--------------------------------|---|-------|
| P1 | Identification. | Forensic medicine and clinical toxicology | 3h |
| P2 | Identification | | 3h |
| P3 | Wounds and medicolegal report. | | 3h |
| P4 | Death certificate. | | 3h |
| P5 | Firearm weapons | | 3h |
| P6 | Firearm injuries | | 3h |
| P7 | General toxicology. | | 3h |
| P8 | Common poisons and antidotes. | | 3h |
| P9 | Toxic plants | | 3h |
| P10 | Toxicological sheet | | 3h |
| P11 | Asphyxia | | 3h |
| P12 | Revision | | 3h |

Teaching methods

Lectures:

Conducted by a Professor/assistant Professor and introduce the essential concepts and knowledge, the identification of scientific backgrounds, the explanation of complicated issues and topics and the potential for clinical application.

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
العنوان: شارع الجيش، كفر الشيخ، جمهورية مصر العربية

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Tutorial classes

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Practical classes: 5 groups of 100 students, each in a teaching room at the department.

Students' activities: for (90min) through distributing variety of training exercises to be solved in the small groups (15 students each). Students have to complete the logbook of the corresponding topic together with some of the training exercises under supervision of a tutor.

Assessment

- **Formative:** This form of assessment is designed to give you feedback to help you to identify areas for improvement. It includes a mixture of MCQs, short answer-questions (SAQs), extended matching questions (EMQs), case-solving exercises and independent learning activities in all subjects. These will be given during tutorial sessions and practical. The answers are presented and discussed immediately with you after the assessment. The results will be made available to you.
- **Summative:** This type of assessment is used for judgment or decisions to be made about your performance. It serves as:
 - Verification of achievement for the student satisfying requirement
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رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| Assessment Method | Date | Marks | % of Total |
|-------------------------------------|--------------|-------|------------|
| c. end module Continuous assessment | End module | 25 | 30% |
| 4. End semester | End semester | 50 | 70% |
| Total | | 75 | 100% |

- **Written Exams** will include multiple choice questions (MCQs) at the end of the module while at the end of the semester, short assays will be added too.
- **Practical examination:** Will be arranged by the departments.
- **SDL presentation:** Evaluation is done by a staff members committee that represents all the teaching departments according to the following rubric criteria.
- **Weight of Assessment:**

| Evaluation | Type | Marks | % |
|--------------|--|-------|-----|
| Assessment 1 | Logbook completion | 5 | 5 |
| Assessment 2 | Continuos Assissent (Quiz) | 10 | 13 |
| Assessment 3 | End round MCQ | 10 | 13 |
| Assessment 4 | End Round practical exam (MCQ, OSPE, problems) | - | - |
| Assessment 6 | Final Written exam | 50 | 70 |
| Total | | 75 | 100 |

STUDENT'S RESPONSIBILITY

Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.

Textbook of Forensic Medicine & Toxicology: Principles & Practice - E-Book, Krishan Vj. 2014.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

YEAR 3- 5TH SEMESTER EARLY CLINICAL EXPERIENCE, COMMUNICATION SKILLS AND PROFESSIONALISM

1- Basic information:

Course specifications of:

- Program on which the module is given Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- Module title: Early clinical experience, communication skills and ethics module.
- Academic year/level: 3rd level /5th semester.
- Code: S5M3/CCE
- Credit hours for the module: 4
- Study weeks: (4).
- Department offering the module:
 - Members of General surgery department
 - Members of Medical Education.
 - Members of Forensic and toxicology department.

Teacing Departments

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| Course Title | Lectures | Practical | SDL | Credit hours |
|--|-----------|----------------|----------|--------------|
| Early clinical experience, communication skills and medical ethics | 38 | 13 | 9 | 4 |
| | lectures | Practical (X3) | SDL (X3) | |
| early clinical experience | 18 | 10 | 3 | |
| communication skills | 10 | 1.5 | 3 | |
| medical ethics | 10 | 1.5 | 3 | |
| Total | 38 | 13 | 9 | |

2. Overall aim:

At the end of the Module the students will be able to:

- Develop an advanced knowledge of communication and ethical reasoning skills, in order to develop a capacity for moral agency required for medical practice.
- Know the terms, language, and major systems of ethical reasoning.
- Develop an awareness of the criteria influencing the act of making and implementing ethical judgments and decisions.
- Recognize ethical conflicts and situations arising in the different communication contexts.
- Be able to create and use their own personal code of ethics.
- Know basic information about sutures, abscess, and shock.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

3. Learning outcomes (LOs)

By the end of this module the student will be able to:

Competency Area I: The graduate as a health care provider

1.1. Take and record a structured, patient centered history.

1.1.1 Perform and document history taking and physical examination of surgical, urologic, orthopedic or neuro-surgical patients and construct patient's symptoms and signs in meaningful diagnostic terms.

1.1.2 Analyze and integrate the results of history taking, physical examinations and investigations to identify, prioritize and assess management strategies for various surgical diseases, emergencies as well as life threatening conditions.

1.1.3 Summaries patient's illness and present information in organized clear manner.

1.2. Adopt an empathic and holistic approach to the patients and their problems.

1.2.1 Conduct sincere and effective patient interviews (regardless of their social or cultural backgrounds), properly explain their condition and plan of management, obtain consents and convey bad news in a professional way.

1.4. Perform appropriately timed full physical examination of patients appropriate to the age, gender, and clinical presentation of the patient while being culturally sensitive.

1.4.1 Describe the clinical symptoms and signs of the most important general surgical, urological, orthopedic and cardiothoracic disorders.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

1.4.2 Analyze patient symptoms and physical findings to generate a list of differential diagnosis for each problem.

1.5. Prioritize issues to be addressed in a patient encounter.

1.5.1 Prioritize the top issues to address at a given visit that could provide a novel approach to the problem of patient complexity.

1.5.2 Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.

1.5.3 Define the appropriate diagnostic tools and therapeutic lines (medical/surgical) for the surgical disorders (including urological, nervous, cardio-thoracic, and orthopedic disorders) with emphasis on their prioritization in management plans.

1.5.4 Classify the most appropriate and cost-effective diagnostic investigations for surgical conditions to reach the proper final diagnosis.

1.5.5 Analyze and integrate the results of history taking, physical examinations and investigations in order to identify, prioritize and assess management strategies for various surgical diseases, emergencies as well as life threatening conditions.

1.5.6 Adopt strategies and apply measures that promote patient safety.

1.5.7 Define principles of infection control and basics of patients' safety and safety procedures during surgical practice.

1.5.8 Respect patients' rights and involve them and or their families/careers in management decisions.

1.5.9 Recognize the ethical principles that govern decision-making in surgical practice.

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1.5.10 Interpret decisions according to medico-legal aspects and different situations of uncertainty in surgical practice and cope with by proper counseling, consultation, and referral.

1.11 Perform diagnostic and intervention procedures in a skillful and safe manner, adapting to unanticipated findings or changing clinical circumstances.

1.11.1 Perform venipuncture and collecting blood samples.

1.11.2 Insert a cannula into peripheral veins.

1.11.3 Establish peripheral intravenous access and setting up an infusion; use of infusion devices.

1.11.4 Give intramuscular, subcutaneous, intradermal and intravenous injections.

1.11.5 Suture of superficial wounds

Competency Area III: The graduated as a professional

3.1. Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, & respect:

3.1.1 Explain and describe effective and non-effective communication techniques.

3.1.2 Differentiate between verbal and non-verbal communication.

3.1.3. Identify behaviors that interfere with effective communication.

3.1.4 List elements of active listening and benefits of professional communication.

3.3. Respect the different cultural beliefs and values in the community they serve.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزًا للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكًا فعالًا في الارتقاء بالخدمات الصحية محليًا وإقليميًا ودوليًا.

3.3.1. Deal appropriately with different cultural beliefs and values in the community they serve.

3.4. Treat all patients equally, and avoid stigmatizing any category regardless of their social, cultural, ethnic backgrounds, or their disabilities.

3.4.1 provide equity and disapprove social stigma.

3.5. Ensure confidentiality and privacy of patients' information.

3.5.1. Demonstrate professional behavior attributes of patient respect, autonomy, consent, non-maleficence, and confidentiality while taking history and conducting physical examination of patients.

3.5.2. Maintain confidentiality in patient care and give due respect to patient privacy.

3.5.3. Adhere to the professional standards and laws governing the practice, and abide by the national code of ethics issued by the Egyptian Medical Syndicate.

3.6 Recognize basics of medico legal aspects of practice, malpractice and avoid common medical errors.

3.6.1 Identify and discuss the medicolegal and ethical issues as it pertains to abortion, medical termination of pregnancy, organ transplantation.

3.7. Recognize and manage conflicts of interest.

3.7.1. Demonstrate a sound grasp of the theories and principles governing ethical decision-making, major ethical dilemmas in medicine and an approach toward resolving them.

3.8. Refer patients to appropriate health facility at the appropriate stage.

3.8.1. Recognize ethical - basics that govern patient's referral.

Competency Area V: The graduate as a member of the health team and system

5.2. Respect colleagues and other health care professionals and work

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

cooperatively with them, negotiating overlapping and shared responsibilities, and engaging in shared decision-making for effective patient management.

5.2.1. Utilize appropriate communication skills to obtain a history, diagnosis, discuss and deliver an effective treatment plan to patients in an emphatic and holistic approach including breaking up bad news.

5.3. Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports collaborative work.

5.3.1. Communicate ideas and arguments effectively with peers and tutors.

5.3.2. Communicate effectively with patients, families, colleagues and other healthcare professionals.

5.3.3. Perform interview techniques and demonstrate or explain appropriate patient education practices and use the best negotiation and delegation skills.

5.4. Apply leadership skills to enhance team functioning, the learning environment, and/or the health care delivery system.

5.4.1. Realize different personality types and leadership styles.

5.5. Communicate effectively using a written health electronic medical record, or other digital technology.

5.5.1. Demonstrate proper grammar and writing skills.

5.6. Evaluate his/her work and that of others using constructive feedback.

5.6.1. Appreciate and respect everyone's personality.

5.7. Recognize your own personal and professional limits and seek help from colleagues and supervisors when necessary.

5.7.1. Appraise concepts of weakness and strength points.

5.9. Use health informatics to improve the quality of patient care.

5.9.1. Practice the communication skills and data collection which are needed to analyze problems and get results to achieve the different aims.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

5.10. Document clinical encounters in an accurate, complete, timely, and accessible manner, in compliance with regulatory and legal requirements.

5.10.1. Discuss the aspects of electronic communication methods.

Competency Area VI: The graduate as a lifelong learner and researcher

6.1. Regularly reflect on and assess his/her and information sources.

6.1.1. Be an active learning participant by assuming accountability in preparing for each class.

6.7. Demonstrate an understanding of the scientific principles of research including its ethical aspects and scholarly inquiry and Contribute to the work of a research study.

6.7.1. Demonstrate ethical & Legal aspects of medical research.

4 – Module Contents

1. Theoretical lectures

| NO | TITLE | DEPARTMENT | HOURS |
|----|--|-----------------|-------|
| L1 | History taking (part 1). | General surgery | 1h |
| L2 | History taking (part2). | General surgery | 1h |
| L3 | History taking (part3). | General surgery | 1h |
| L4 | Clinical examination of a surgical case (part 1). | General surgery | 1h |
| L5 | Clinical examination of a surgical case (part 2). | General surgery | 1h |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| | | | |
|-----|---|-----------------|----|
| L6 | Clinical examination of a surgical case (part3). | General surgery | 1h |
| L7 | Informed surgical consent (part 1). | General surgery | 1h |
| L8 | Informed surgical consent (part 2). | General surgery | 1h |
| L9 | Basic surgical skills (part 1). | General surgery | 1h |
| L10 | Basic surgical skills (part 2). | General surgery | 1h |
| L11 | Basic surgical skills (part 3). | General surgery | 1h |
| L11 | Wound types, healing and complications | General surgery | 1h |
| L12 | Suppuration, abscess diagnosis | General surgery | 1h |
| L13 | Surgical infections | General surgery | 1h |
| L14 | Shock | General surgery | 1h |
| L15 | Haemorrhage | General surgery | 1h |
| L16 | Blood transfusion | General surgery | 1h |
| L17 | History of human communication. | parasitology | 1h |
| L18 | Definition and purposes of communication. Principles of effective communication. | parasitology | 1h |
| L19 | Difficult conversations | parasitology | 1h |
| L20 | Process of communication. Communication channels | parasitology | 1h |
| L21 | Types of communications | parasitology | 1h |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| | | | |
|-----|--|-------------------|----|
| L22 | Characteristics of effective communicator | parasitology | 1h |
| L23 | Personality types Leadership style | parasitology | 1h |
| L24 | Five Key Steps for Clinical Interviews | parasitology | 1h |
| L25 | Breaking bad news | parasitology | 1h |
| L26 | The C-O-N-E-S Protocol The E-V-E Protocol | parasitology | 1h |
| L27 | The meaning of ethics. | Forensic medicine | 1h |
| L28 | Professionalism (lecture 1) | Forensic Medicine | 1h |
| L29 | Professionalism (lecture 2) | Forensic Medicine | 1h |
| L30 | Patient's Rights | Forensic Medicine | 1h |
| L31 | Informed consent | Forensic medicine | 1h |
| L32 | Patient Responsibilities | Forensic medicine | 1h |
| L33 | Ethical Relations with Fellow Colleagues | Forensic medicine | 1h |
| L34 | Medico-legal Responsibilities of a Medical practitioner | Forensic medicine | 1h |
| L35 | Steps to solve ethical problems | Forensic medicine | 1h |
| L36 | Ethical and legal aspects of organ transplantation | Forensic medicine | 1h |

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| | | | |
|-----|-----|----------------|----|
| L37 | ECG | Cardiology | 1h |
| L38 | CPR | Intensive care | 1h |

2. Practical

| No | Title | Department | Hors |
|-----|---|-------------------|------|
| P1 | History taking. | General surgery | 2h |
| P2 | Clinical examination of a surgical case | General surgery | 2h |
| P3 | Informed surgical consent | General surgery | 1h |
| P4 | Basic surgical skills. | General surgery | 4h |
| P5 | Wound types, healing and complications | General surgery | 1h |
| P6 | Suppuration and abscess diagnosis | General surgery | 2h |
| P7 | Surgical infections | General surgery | 2h |
| P8 | Shock | General surgery | 2h |
| P9 | Haemorrhage | General surgery | 2h |
| P10 | Blood transfusion | General surgery | 2h |
| P11 | Difficult conversations | parasitology | .5 h |
| P12 | Kalamazo check list | Parasitology | 2 h |
| P13 | Communication protocols. | parasitology | 2h |
| P14 | Informed consent and Patient referral | Forensic medicine | 2h |
| P15 | Steps to solve ethical problems. | Forensic medicine | 2.5h |

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رسالة الكلية: نلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
العنوان: شارع الجيش، كفر الشيخ، جمهورية مصر العربية

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| | | | |
|-----|--|----------------|----|
| P16 | CPR | Intensive care | 2h |
| P17 | Intramuscular injection, subcutaneous, intradermal and intravenous injections. | Anasthsia | 2h |
| P18 | venipuncture and collecting blood samples. | Anasthsia | 2h |
| P19 | Insert a cannula into peripheral veins. | Anasthsia | 2h |
| P20 | peripheral intravenous access and setting up an infusion; use of infusion devices. | Anasthsia | 2h |

Teaching methods

Lectures: Division of students into groups alternating between direct contact and online lectures. This module was taught using flipped model where students read or watch preclass material and then discussion was carried out during the lecture.

Recorded videos by the students was used as ateaching material as a form of adult learning.

<https://drive.google.com/drive/folders/1T77P2o5BpXCyvFI9XOm5TR2J8zKdU71F?usp=sharing>.

<https://drive.google.com/file/d/1curloyjuNru9vdKshZbwTb3v3v3CRoY/view?usp=sharing>.

<https://drive.google.com/file/d/13YzsW-NgnTV5tn2vLya3POaDMBgypGGP/view?usp=sharing>.

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<https://drive.google.com/file/d/1Mj5u3RBQgRhe7XeV32-i717NfkHQHPsj/view?usp=sharing>

Practical classes: Division of students into groups in the labs and then each group is divided into 4 smaller sub- groups in 2 labs simultaneously. These Subgroups of students allow interaction, presentations and feedback. The plan for practical training is attached in instructional units section. Each lab includes presentation of the scheduled topic by one of the staff. Then the students perform their recommended tasks themselves helped by joiner staff aided with microscopes, projector slides, data show photos.

Students' activities: Students will be divided into small groups. Each group is assigned for an oral presentation on a specific topic. Topics are determined by the staff member committee. Students will cooperate, prepare and present their projects in front of the evaluation committee.

Assessment

Formative:

This form of assessment is designed to give you feedback to help you to identify areas for improvement. It includes a mixture of MCQs, short answer-questions (SAQs), extended matching questions (EMQs), case-solving exercises and independent learning activities in all subjects. These will be given during tutorial sessions and practical. The answers are presented and discussed immediately with you after the assessment. The results will be made available to you.

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملزمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
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Summative

This type of assessment is used for judgment or decisions to be made about your performance. It serves as:

- Verification of achievement for the student satisfying requirement
- Motivation of the student to maintain or improve performance
- Certification of performance
- Grades

In this Course your performance will be assessed according to the following:

- Continuous Assessment **30 % (30 marks)**
- Practical **30 % (30 marks)**
- Final Exam (Two Hours) **40 % (40 marks)**

Total = 100 % (100 mark)

Written Exams will include multiple choice questions (MCQs). These will cover material presented during the lectures, tutorials, CBL presentations, and SDL. Final examination will be held 10-12 AM first Saturday of fourth module at the main exam. Hall.

First quiz will be held at 10-12 AM Saturday of 2nd week of US module.

Second quiz will be held at 10-12 AM Saturday of 4th week of US module. In case of an emergency, the module coordinator must be notified.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

Practical examination: Will be arranged by the departments

STUDENT'S RESPONSIBILITY

- Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.
- If there is anything that the module coordinator can do to assist you during the course, please feel free to contact him
- **Sites**

| Activity | Site |
|-------------------------------|----------------------|
| 1-Theme Lectures | Main lecture Hall |
| 2- Case based learning | Academic departments |
| 3- Practical sessions & exam. | Academic departments |

Textbooks and References

Effective Communication Skills for Medical Practice:

<https://www.researchgate.net/publication/284912095>.

The Complete Guide to Communication Skills in Clinical Practice.

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YEAR 3- 5TH SEMESTER

PSYCHIATRY

MODULE (4)

1- Basic information:

Course specifications of:

- **Program on which the module is given** Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- **Module title:** Psychiatry.
- **Academic year/level:** 3rd level /5th semester.
- **Code:** S5M4/P
- **Credit hours for the module:** 4
- **Study weeks:** (4)
- **Departments offering the module:**
 - Department of Neuropsychiatry

| Course Title | Contact Hours | | | | Credit hours |
|--------------|---------------|----------|-----|-----|--------------|
| | Lectures | Clinical | CBL | SDL | |
| Psychiatry | 30 | 22 | 4 | 4 | 4 |

1. Overall aim:

At the end of the Module the students will be able to:

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملزمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
العنوان: شارع الجيش، كفر الشيخ، جمهورية مصر العربية

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- communicate properly with patients in addition to skillful clinical evaluation and considerable amount of theoretical knowledge to practice psychiatry at a general practitioner's level.
- Describe the physician patient relationship.
- Identify psychological phenomena such as coping mechanisms, defenses, and family dynamics.
- Understand the biological, psychological, and socio-cultural aspects of human behavior across the lifespan.
- Understand the past experiences that continue to impact the patient's perception, thinking, and behavior.
- Understand the effect of stress on psychological behaviors.
- Identify Understand the developmental issues during Infancy, Childhood and Adolescence.
- the Challenges during Adulthood and Old age.
- Describe the personal and professional issues that may positively and negatively impact on the patient.

2. 3. Learning outcomes (LOs)

By the end of this module the student will be able to:

Competency Area I: The graduate as a health care provider

1.2. Adopt an empathic and holistic approach to the patients and their problems.

1.2.1 Determine emotional and psychiatric problems of the patient.

1.3. Assess the mental state of the patient.

1.3.1. Assess GCS of the patient

1.3.2. Assess memory, attention, and concentration of the patient.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

1.4. Perform appropriately timed full physical examination of patients appropriate to the age, gender, and clinical presentation of the patient while being culturally sensitive.

1.4.1 Take full history from the patient and informant

1.4.2 Perform full physical examination.

1.6. Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.

1.6.1 Select appropriate investigations such as psychological tests and laboratory tests according to examination and history.

1.7. Recognize and respond to the complexity, uncertainty, and ambiguity inherent in medical practice.

1.7.1 Determine psychiatric symptoms as in form of hallucination, delusion.

1.10. Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.

1.10.1 making a differential diagnosis.

1.10.2 correlate the results of history, physical and laboratory tests to reach a meaningful diagnosis.

1.16. Apply the appropriate pharmacological and nonpharmacological approaches to alleviate pain and provide palliative care for seriously ill people, aiming to relieve their suffering and improve their quality of life.

1.16.1 Prescribe pharmacological and non pharmacological approaches as psychoanalysis, psycho education and psychotherapy.

1.17. Contribute to the care of patients and their families at the end of life, including management of symptoms, practical issues of law and certification.

1.17.1 Perform psychotherapy and group therapy for patients and their families.

Competency Area II: The graduate as a health care promoter

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

2.1 Identify the basic determinants of health and principles of health improvement.

2.1.1 Take detailed history and correlated nature of patient lifestyle with medical condition.

2.2 Recognize the economic, psychological, social, and cultural factors that interfere with wellbeing.

2.2.1 Determine in detail social, psychological, behavioral, educational, and economic factors to help in welling and overcoming of obstacles.

2.3 Discuss the role of nutrition and physical activity in health.

2.3.1 Determine the nature of nutrition and its role in mental health.

2.8 Identify vulnerable individuals that may be suffering from abuse or neglect and take the proper actions to safeguard their welfare.

2.8.1 Identify the abuser person and how to deal with him.

2.8.2 Identify the abused one and try to take actions to save him.

Competency Area III: The graduated as a professional

3.1. Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.

3.1.1 Present regular reflection on and assess his/her performance using various performance indicators and information sources.

3.1.2 Acquire the skills of good listening and self-learning.

3.1.3 Practice the value of teamwork by acting in small groups with adequate cooperation with his/her colleagues.

3.2. Adhere to the professional standards and laws governing the practice and abide by the national code of ethics issued by the Egyptian Medical Syndicate.

3.2.1 respect autonomy, congeniality, and justice among patients

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

3.3. Respect the different cultural beliefs and values in the community they serve.

3.3.1 Judge impacts of various interventions and respect patient autonomy

3.4. Treat all patients equally, and avoid stigmatizing any category regardless of their social, cultural, ethnic backgrounds, or their disabilities.

3.4.1 Provide equal opportunities for clinical examination and management for all patients.

3.5. Ensure confidentiality and privacy of patients' information.

3.5.1 Communicate effectively and sensitively with patients and relatives

3.6. Recognize basics of medico-legal aspects of practice, malpractice and avoid common medical errors.

3.6.1 Take informed written consent from the patient before any influential intervention.

Competency Area IV: The graduate as a scholar and scientist

4.3 Recognize and describe main developmental changes in humans and the effect of development and aging on the individual and his family.

4.3.1 Correlate pathogenesis and different personal factors

4.4 Explain normal human behavior and apply theoretical frameworks of psychology to interpret the varied responses of individuals, groups and societies to disease.

4.4.1 Determine normal behavior and determine different types of personality.

4.7 Describe drug actions: therapeutics and pharmacokinetics; side effects and interactions, including multiple treatments, long term conditions and non-prescribed medication; and effects on the population.

4.7.1 Determine the mechanism of actions and interactions of the different drugs.

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Competency Area V: The graduate as a member of the health team and system

5.2 respect colleagues and other health care professionals and work cooperatively with them, negotiating overlapping and shared responsibilities and engaging in shared decision-making for effective patient management.

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

Competency Area VI: The graduate as a lifelong learner and researcher

6.2 Develop, implement, monitor and revise a personal learning plan to enhance professional practice.

6.2.1 Appraise personal planning for improvement clinical practice by research, more and more scientific knowledge.

6.3 Identify opportunities and use various resources for learning.

6.3.1 Deal with colleagues, peers and professors on web pages.

6.3.2 Use various resources in collecting information (Web-based learning, SDL).

4- Module Contents

1. Theoretical lectures

| NO | TITLE | DEPARTMENT | HOURS |
|----|---|------------|-------|
| L1 | Psychopharmacology | Psychiatry | 2 |
| L2 | Psychopharmacology | | 2 |
| L3 | Schizophrenia and Other Psychotic Disorders | | 3 |
| L4 | Schizophrenia and Other Psychotic Disorders | | 2 |

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
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| | | |
|-----|---|---|
| L5 | Mood disorder | 2 |
| L6 | Mood disorder | 3 |
| L7 | Anxiety disorder | 2 |
| L8 | OCD | 3 |
| L9 | Somatic symptom and related disorders | 2 |
| L10 | Substance-Related and Addictive Disorders | 3 |
| L11 | Neurocognitive Disorders | 2 |
| L12 | Childhood disorders | 2 |
| L13 | Childhood disorders | 2 |
| L14 | Revision | 2 |
| L15 | Revision | 2 |

2. Practical

| No | Title | Hours |
|-----|--|-------|
| L1 | Sheet demonstration (history taking) | 2 |
| L2 | Sheet demonstration (mental state examination) | 1 |
| L3 | Sheet demonstration (mental state examination) | 1 |
| L4 | delusional disorder | 1 |
| L5 | Schizophrenia | 1 |
| L6 | MDD | 1 |
| L7 | Bipolar disorder(mania) | 1 |
| L8 | Anxiety disorder | 1 |
| L9 | OCD | 1 |
| L10 | Illness anxiety disorder | 1 |

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رسالة الكلية: نلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
العنوان: شارع الجيش، كفر الشيخ، جمهورية مصر العربية

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| | | |
|-----|--------------------------|---|
| L11 | Somatoform disorder | 1 |
| L12 | ADHD | 1 |
| L13 | Autism spectrum disorder | 1 |
| L14 | Substance use disorder | 1 |
| L15 | Panic disorder | 1 |
| L16 | Body dysmorphic disorder | 1 |
| L17 | Postpartum depression | 1 |
| L18 | Brief psychotic disorder | 1 |
| L19 | Revision | 2 |
| C20 | Revision | 1 |

Teaching methods

Lectures:

Conducted by a Professor/assistant Professor and introduce the essential concepts and knowledge, the identification of scientific backgrounds, the explanation of complicated issues and topics and the potential for clinical application.

Tutorial classes

Conducted by an assistant Professor and lecturer in small teaching groups to emphasize complicated medical topics and clinical cases. They are held in the corresponding department and are included in the teaching plan. [Division of students into groups alternating between direct contact and online lectures.]

Practical classes: 5 groups of 100 students, each in a teaching room at the department.

Students' activities: for (90min) through distributing variety of training exercises to be solved in the small groups (15 students each). Students have to complete the logbook of the corresponding topic together with some of the training exercises under supervision of a tutor.

Assessment

- **Formative:** This form of assessment is designed to give you feedback to help you to identify areas for improvement. It includes a mixture of MCQs,

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short answer-questions (SAQs), extended matching questions (EMQs), case-solving exercises and independent learning activities in all subjects. These will be given during tutorial sessions and practical. The answers are presented and discussed immediately with you after the assessment. The results will be made available to you.

➤ **Summative:** This type of assessment is used for judgment or decisions to be made about your performance. It serves as:

- Verification of achievement for the student satisfying requirement
- Motivation of the student to maintain or improve performance
- Certification of performance
- Grades

➤ **Written Exams** will include multiple choice questions (MCQs) at the end of the module while at the end of the semester, short essays will be added too.

➤ **Practical examination:** Will be arranged by the departments.

➤ **SDL presentation:** Evaluation is done by a staff members committee that represents all the teaching departments according to the following rubric criteria.

➤ **Weight of Assessment:**

| Assessment Method | Date | Marks | % of Total |
|---------------------------|--------------|-------|------------|
| ○ End module Exam | End module | 30 | 30% |
| ● Final end semester exam | End semester | 40 | 40% |
| ● Practical exam | End module | 30 | 30% |
| Total | | 100 | 100% |

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STUDENT'S RESPONSIBILITY

Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.

If there is anything that the module coordinator can do to assist you during the course, please feel free to contact him.

Text books

Sadock, B. J., Ahmad, S., & Sadock, V. A. (2019). Kaplan & Sadock's pocket handbook of clinical psychiatry (Sixth edition.). Philadelphia: Wolters Kluwer.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزًا للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكًا فعالًا في الارتقاء بالخدمات الصحية محليًا وإقليميًا ودوليًا.

MODULE (5)

THE ELECTIVE IV (SPORT PHYSIOLOGY) MODULE (5)

1- Basic information:

Course specifications of:

- **Program on which the Module is given** Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- **Module title:** Sport injuries.
- **Academic year/level:** 3rd level /5th semester.
- **Code:** S5M5/E4SI
- **Credit hours for the module:** 2
- **Study weeks:** longitudinal.
- **Departments offering the module:**
 - Department of Biochemistry

2. Overall aim:

At the end of the Module the students will be able to:

- Gain skills, working knowledge and understanding of the principles and concepts applicable to musculoskeletal injuries.
- To improve health care in general and the profession of athletic training in particular.
- gain skill in Diagnosis of various sports injuries.
- gain knowledge of methods of treatment of sports injuries.

4- learning outcomes (LOs)

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملزمة بالأسس العلمية والمعرفية والمهارات التقنية وفقًا للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية الطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
العنوان: شارع الجيش، كفر الشيخ، جمهورية مصر العربية

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By the end of this course the student will be able to:

Competency Area I: The graduate as a health care provider

1.1 Take and record a structured, patient centered history.

1.1.1 Communicate effectively with individuals regardless of their social, cultural, ethnic backgrounds, or their disabilities.

1.9 Retrieve, analyze, and evaluate relevant and data from literature, using information technologies and library resources, in order help solve a clinical problem based on evidence (EBM).

1.9.1 Use different sources of information to obtain data

1.10 Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.

1.10.1 Construct different knowledge and analyze given information to help in solving difficult problem.

1.10.2 Perform appropriately timed full physical examination of patients appropriate to the age, gender, and clinical presentation of the patient while being culturally sensitive.

1.10.3 Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand).

Competency Area III: The graduated as a professional

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

3.1 Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.

3.1.1 Know his/her own personal and professional limits and consult other colleagues and supervisors when necessary.

3.5 Ensure confidentiality and privacy of patients' information.

3.5.1 Respect and follow the institutional code of conduct.

3.5.2 Maintain professional image in manner, dress speech and interpersonal relationships that is consistent with the medical profession's accepted contemporary standards in the community.

Competency Area V: The graduate as a member of the health team and system

5.2 Respect colleagues and other health care professionals and work cooperatively with them, negotiating overlapping and shared responsibilities and engaging in shared decision-making for effective patient management.

5.2.1 Demonstrate respect, appropriate professional behavior and establish good relations in all aspects of his/her practice.

5.2.2 Know his/her own personal and professional limits and consult other colleagues and supervisors when necessary.

5.4 Apply leadership skills to enhance team functioning, the learning environment, and/or the health care delivery system.

5.4.1 Work effectively within team

5.4.2 Practice leadership skills during practical and media session

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

5- Teaching and learning methods

| Course | Lecture | Web based L |
|------------------|---------|----------------|
| Sport Physiology | √ | √ |

6. COURSE ASSESSMENT:

Written Exams short questions or / and multiple choice questions (MCQs).

STUDENT'S RESPONSIBILITY

- Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.
- If there is anything that the module coordinator can do to assist you during the course, please feel free to contact him.

Sites

| Activity | Site |
|-------------------|------------------|
| Final module exam | Examination Hall |

Textbooks and References for System Modules

Eltorai, A. E., Ebersson, C. P., & Daniels, A. H. (Eds.). (2018). Essential

Orthopedic Review: Questions and Answers for Senior Medical Students.

Springer.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

YEAR3- 5TH SEMESTER

THE ELECTIVE IV (MOLECULAR MEDICINE) MODULE

(5)

1- Basic information:

Course specifications of:

- **Program on which the Module is given** Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- **Module title:** Molecular medicine.
- **Academic year/level:** 3rd level /5th semester.
- **Code:** S5M5/E4MM
- **Credit hours for the module:** 2
- **Study weeks:** longitudinal.
- **Departments offering the module:**
 - Department of Biochemistry

2. Overall aim:

At the end of the Module the students will be able to:

- Gain an overview about the basic concept of the underlying molecular mechanisms involved in tissue health and diseases.
- Provide the students with an appropriate exposure that can assist the students in understanding basic genetic and molecular alteration in health and disease

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

- Enable the students to be oriented with concepts of genomic instability and main driver mutations and how this field gave us a new perspective and new technology used in the diagnosis, treatment and new drugs design.
- Acquire essential scientific knowledge about misfolded protein cell response, inducers of cell death and uncontrolled signaling pathways.

4- Learning outcomes (LOs)

By the end of this course the student will be able to:

Competency Area I: The graduate as a health care provider

1.6. Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.

1.6.1. Describe proper laboratory investigation based on given clinical data to approach proper case diagnosis.

1.8 Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand.

- 1.8.1. Explain the common clinical problems on the basis of relevant genetic data (clinical molecular biology).
- 1.8.2. Recognize the discrepancies of abnormally rewired signaling pathways in cancer.
- 1.8.3. Evaluate the levels of non-functional plasma enzymes in various diseases.
- 1.8.4. Implicate the role of different mechanisms of cell death in tissue homeostasis and cancer development.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

1.8.5. Identify the possible molecular targets that can be considered as diagnostic and prognostic biomarkers for different types of diseases.

1.9 Retrieve, analyze, and evaluate relevant and current data from literature, using information technologies and library resources, in order to help solve a clinical problem based on evidence (EBM).

1.9.1 Analyze biochemical, genetic data and current data from literature

Competency Area II: The graduate as a health care promoter

2.1. Identify the basic determinants of health and principles of health improvement.

2.1.1 Identify the genetic background and induced mutation underlying cancer induction.

2.1.2. Present new molecular targets for cancer diagnosis and treatment.

Competency Area IV: The graduate as a scholar and scientist

4.2 Explain the molecular, biochemical and cellular mechanisms important in maintaining the body's homeostasis:

4.2.1 Define the normal structure of proteins, nucleotide sequences, signalling pathways and enzymes their normal functions in human body.

4.2.2 Identify the mode of action isoenzymes and their role in the diagnosis of diseases for better management.

4.2.3 Discuss the mechanisms underlying programmed cell death.

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4.2.4 Summarize the normal role of protein folding and sorting and the consequences of misfolded protein.

4.5 Identify various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of illness/disease and explain the ways in which they operate on the body (pathogenesis).

4.5.1 Recognize different defects in DNA repair systems and their role in induction of various types of cancer and gene mutations.

4.5.2 Identify the possibility of incidence of hereditary disease according to their mode of inheritance.

4.5.3 Demonstrate the abnormalities associated with different types of tumor markers and their implications in cancer diagnosis and prognosis.

4.5.4 Delineate the possible role of anti-apoptotic factors in cancer initiation.

4.5.5 Implicate the role of prions in induction of different types of tissue degeneration.

4.5.6 Estimate the involvement of oxidative stress in the development of various diseases.

4.5.7 Introduce the possible role of dysregulated growth signalling pathways in cancer initiation.

4.9. Demonstrate basic sciences specific practical skills and procedures relevant to future practice, recognizing their scientific basis, and

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقًا للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
العنوان: شارع الجيش، كفر الشيخ، جمهورية مصر العربية

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interpret common diagnostic modalities, including: imaging, electrocardiograms, laboratory assays, pathologic studies, and functional assessment tests.

4.9.1. Interpret the significance of high levels of different iso-enzymes, serum tumor antigens and tumor biomarkers.

4.9.2. Evaluate causes of abnormal levels of different growth factors, tumor suppressors and different patterns of DNA methylations

Competency Area V: The graduate as a member of the health team and system

5.3 Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports collaborative work.

5.3.1 Implement collaborative team work during small group teaching.

Competency Area VI: The graduate as a lifelong learner and researcher

6.3 Identify opportunities and use various resources for learning.

6.3.1 Interacts positively with colleagues, peers and professors on web pages.

6.3.2 Use various resources in collecting information.

6.6 Effectively manage learning time and resources and set priorities (PBL and Assignment)

6.6.1 Achieve and perform the required duties from him on time (assignments).

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

4- Module Contents

1. Theoretical lectures

| NO | Topics | Hours |
|----|---|-------|
| L1 | Introduction to molecular medicine | 2h |
| L2 | DNA repair systems and their implications in cancer initiation and treatment | 4 h |
| L3 | Protein chemistry, functional and non-functional plasma enzymes | 4h |
| L4 | Protein folding and cell response to misfolded protein | 2h |
| L5 | Introduction to prions and their implication in myeloid degeneration of different tissues | 3h |
| L6 | Tumor suppressor genes and different tumor biomarkers | 3 h |
| L7 | Programmed cell death in health and disease | 2 h |
| L8 | Introduction to growth signaling pathways and their discrepancies in cancer. | 4 h |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

5- Teaching and learning methods

| Course | Web based | |
|--------------------|-----------|---|
| | Lecture | L |
| Molecular medicine | √ | √ |

6. COURSE ASSESSMENT:

Written Exams short questions or / and multiple-choice questions (MCQs).

STUDENT'S RESPONSIBILITY

- Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.
- If there is anything that the module coordinator can do to assist you during the course, please feel free to contact him.

Sites

| Activity | Site |
|-------------------|------------------|
| Final module exam | Examination Hall |

Textbooks and References for System Modules

Harper's Illustrated Biochemistry: 31st Ed by Victor W. Rodwell, David A. Bender, Kathleen M. Botham, Peter J. Kennelly, P. Anthony Weil, McGraw-Hill companies New York, 2014.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

YEAR 3- 6TH SEMESTER

| النهاية العظمى | الدرجات | | | الحزم الدراسية (Modules) | | | المستوى الثالث – الفصل السادس |
|-------------------|------------------|--------------------------|-----------------------------|--------------------------|--------------|-----------------|-------------------------------|
| | التحريري % 40 | العملي (OSPE) % 30 | اعمال السند ة 30 % | Name | Weeks | Credit hours | |
| 150 | 60 | 45 | 45 | Ophthalmology | 6 | 6 | |
| 150 | 60 | 45 | 45 | Surgery (I) | 5 | 6 | |
| 150 | 60 | 45 | 45 | Medicine (I) | 5 | 6 | |
| متطلب كلية | 50 | - | - | Elective (V) | Longitudinal | 2 | |
| 450 | | | | | 16 | 20 | المجموع |

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YEAR 3- 6TH SEMESTER OPHTHALMOLOGY MODULE (1)

1- Basic information:

Course specifications of:

- Program on which the module is given Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- Module title: Ophthalmology module.
- Academic year/level: 3rd level /6th semester.
- Code: S6M1/O
- Credit hours for the module: 6
- Study weeks: (6)
- Departments offering the module:
 - Department of Ophthalmology

| | lectures | Practical (X3) | SDL (X3) | Credit hours |
|---------------|----------|-------------------|-------------|--------------|
| Ophthalmology | 60 | 24 | 6 | 6 |

2. Overall aim:

At the end of the Module the students will be able to:

- learn basics of Ophthalmology

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

- Recognize important clinical lesions and be familiar with recent methods of diagnosis and proper management.
- Acquire skills necessary for applying the scientific analytic methods in ophthalmology using available resources and saving the environment.
- Recognize ethical principles related to the practice in this specialty.

3. Learning outcomes (LOs)

By the end of this module the student will be able to:

Competency Area I: The graduate as a health care provider

1.1 Take and record a structured, patient centered history.

1.1.1 Recognize the principles of ophthalmological clinical examination.

1.1.2 Apply and document a complete or focused ophthalmological medical history in the outpatient, inpatient or emergency settings.

1.4. Perform appropriately timed physical examination of patients, as a general practitioner, appropriate to the age, gender, and clinical presentation of the patient while being culturally sensitive.

1.4.1. Construct patient's symptoms and physical signs in terms of anatomic, pathologic and functional diagnostic significances

1.6. Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.

1.6.1. Select the most appropriate and cost-effective diagnostic laboratory investigations for common ophthalmological disorders to reach the proper final diagnosis within a short time.

1.10. Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

1.10.1. Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.

1.13. Establish patient-centered management plans in partnership with the patient, his/her family and other health professionals as appropriate, using Evidence Based Medicine in management decisions.

1.13.1. Formulate a management plan for common ophthalmological diseases and acute emergencies.

Competency Area II: The graduate as a health care promoter

2.1 Identify the basic determinants of health and principles of health improvement.

2.1.1. Define necessary information about the basic principles of health promotion, prevention, and control of ophthalmological diseases.

Competency Area III: The graduated as a professional

3.1. Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.

3.1.1. Demonstrate respect to all patients irrespective to their socioeconomic levels, culture or religious beliefs and use language appropriate to the patient's culture.

3.1.2. Recognize and effectively deal with unethical behavior of other members of healthcare team.

3.1.3. Adopt an empathic and holistic approach to the patients and their problems and provide care to patients who are unable to pay.

3.5. Ensure confidentiality and privacy of patients' information.

3.5.1 Deal with patients in a compassionate and altruistic manner.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

3.5.2 Perform a privacy polishes and programs that protect patients' data during and after the health surface period.

3.6. Recognize basics of medico-legal aspects of practice, malpractice and avoid common medical errors.

3.6.1 Establish workshops and training programs for younger residents and health practitioners teaching them basics of medicolegal aspects of practice.

3.6.2 Define diseases, and interventional maneuvers clearly in detailed consents approved by the patients and/or their guardians.

3.6.3 work in the hole ophthalmological department according to approved guidelines accepted globally.

Competency Area IV: The graduate as a scholar and scientist

4.2 Describe the normal structure of the body and its major organ systems and explain their functions.

4.1.1. Describe the normal ocular structures.

4.1.2. Explain clinical data with integration of basic anatomical, biochemical, pathological and physiological scientific facts.

4.1.3. Correlate between histological structure, blood supply and function of the eye.

4.5. Identify various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of the common illness/disease and explain the ways in which they operate on the body (pathogenesis).

4.5.1. Recognize the etiology, pathogenesis, and complications of common ophthalmological illnesses and diseases, with special emphasis on environmental and traumatic causes.

4.5.2. Identify the natural history of common ophthalmological illnesses with understanding of the importance of risk factors, surveillance and

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screening for prevention and early detection of common ophthalmological disorders.

4.5.3. Describe the principles of management of common ophthalmological illnesses including medical and surgical intervention (invasive and non-invasive).

4.6. Describe altered structure and function of the body and its major organ systems that are seen in various diseases and conditions.

4.6.1. Identify the clinical features and principles of diagnosis of common ophthalmological disease and the scientific basis of common diagnostic studies with emphasis on their prioritization in management plans.

Competency Area V: The graduate as a member of the health team and system

5.2. Respect colleagues and other health care professionals and work cooperatively with them, negotiating overlapping and shared responsibilities, and engaging in shared decision-making for effective patient management.

5.2.1. Communicate effectively with other health care professionals to maximize patient benefits and minimize the risk of errors.

5.2.2. Cooperate with other colleagues to provide a full understanding of clinical cases.

5.3. Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports collaborative work.

5.3.2 Implement collaborative teamwork during small group teaching (SDL).

Competency Area VI: The graduate as a lifelong learner and researcher

6.3. Identify opportunities and use various resources for learning.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

6.3.1. Recognize the importance of life-long self-learning and give a strong commitment to it.

6.6. Effectively manage learning time and resources and set priorities.

6.6.1. Consider the resources of biomedical information including the available electronic facilities and communication technology to update his/her knowledge, improve his/her medical practice and to manage and manipulate information effectively.

4 –Module Contents

1.Theoretical lectures

| NO | TITLE | DEPARTMENT | HOURS |
|-----|--------------------------------|---------------|-------|
| L1 | Examination of the Eye | Ophthalmology | 4h |
| L2 | Eye lid | Ophthalmology | 4h |
| L3 | Cornea | Ophthalmology | 4h |
| L4 | Lacrimal system | Ophthalmology | 4h |
| L5 | Sclera | Ophthalmology | 4h |
| L6 | Lens anatomy and Cataract | Ophthalmology | 4h |
| L7 | Glaucoma | Ophthalmology | 4h |
| L8 | Uvea | Ophthalmology | 4h |
| L9 | Orbital diseases | Ophthalmology | 4h |
| L10 | Retina | Ophthalmology | 4h |
| L11 | Visual pathway and optic nerve | Ophthalmology | 4h |
| L12 | Intraocular tumors | Ophthalmology | 4h |
| L13 | Errors of refraction | Ophthalmology | 4h |

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| | | | |
|-----|--------------------------------|---------------|----|
| L14 | Ocular motility and strabismus | Ophthalmology | 3h |
| 15L | Trauma and emergency | Ophthalmology | 3h |
| L16 | Laser in ophthalmology | Ophthalmology | 3h |

Practical:

| NO | Title | Department | Hours |
|-----|---|---------------|-------|
| P1 | Clinical sheet including detailed history taking and external appearance. | Ophthalmology | 6h |
| P2 | Examination of Eye lid and visual acuity | Ophthalmology | 6h |
| P3 | Examination of lacrimal system and cornea. | Ophthalmology | 6h |
| P4 | IOP, field and pupil examination | Ophthalmology | 6h |
| P5 | Examination of lens and lens operations | Ophthalmology | 6h |
| P6 | Glaucoma operations | Ophthalmology | 6h |
| P7 | Examination of retina and retina operations | Ophthalmology | 6h |
| P8 | Lacrimal diseases and lacrimal operations | Ophthalmology | 6h |
| P9 | Ocular motility and pupil examination | Ophthalmology | 6h |
| P10 | Slit lamp and applanation tonometry | Ophthalmology | 6h |
| P11 | Direct and indirect ophthalmoscopy | Ophthalmology | 6h |

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| | | | |
|-----|--|---------------|----|
| P12 | OCT, FFA and topography Clinical Examination. | Ophthalmology | 6h |
|-----|--|---------------|----|

Lectures: Division of students into groups alternating between direct contact and online lectures.

Practical classes: Small group teaching, problem based learning, data show presentations including pictures & video clips, live cases and surgeries with interactive discussions. Attendance with guidance in Outpatient clinic: once / week.

Students' activities: Students will be divided into small groups. Each formed of 10 students. Each group is assigned for oral presentation on a specific topic. Topics are determined by staff member committee. Students will cooperate, prepare and present their projects in front of evaluation committee.

Assessment

Formative: This form of assessment is designed to give you feedback to help you to identify areas for improvement. It includes a mixture of MCQs, short answer-questions (SAQs), extended matching questions (EMQs), case-solving exercises and independent learning activities in all subjects. These will be given during tutorial sessions and practical. The answers are presented and discussed immediately with you after the assessment. The results will be made available to you.

Summative: This type of assessment is used for judgment or decisions to be made about your performance. It serves as:

- Verification of achievement for the student satisfying requirement
- Motivation of the student to maintain or improve performance
- Certification of performance
- Grades

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| Assessment Method | Date | Marks | % of Total |
|----------------------|--------------|-------|------------|
| end module | | | 30% |
| Continous assessment | End module | 45 | |
| End semester | End semester | 60 | 40% |
| Practical exam | End module | 45 | 30% |
| Total | | 100 | 100% |

- **Written Exams** will include multiple choice questions (MCQs) at the end of the module while at the end of the semester, short assays will be included.
- **Practical examination:** Will be arranged by the department.
- **SDL presentation:** Evaluation is done by a staff members committee that represents all the teaching departments according to the following rubric criteria.
- **Weight of Assessment:**

| | End Module | Practical | End semester |
|---------------|------------|-----------|--------------|
| Ophthalmology | 45 | 45 | 60 |
| Total | 45 | 45 | 60 |

STUDENT'S RESPONSIBILITY

- Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.
- The minimum acceptable attendance is 75%, students who fail to meet their attendance requirements are deprived of their final practical exam.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

- If there is anything that the module coordinator can do to assist you during the course, please feel free to contact him.

Textbooks

Kanski's Clinical Ophthalmology A Systematic Approach, (2016)
8th ed., Brad Bowling

Manual of ophthalmology (2016), by Nema H V. CBS Publishers 3-
Practical guide to vive and osce. (2018), by Wel Yan, NG. World
Scientific, London

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

YEAR 3- 6TH SEMESTER SURGERY I MODULE (2)

1- Basic information:

Course specifications of:

- **Program on which the module is given** Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- **Module title:** Surgery I.
- **Academic year/level:** 3rd level /6th semester.
- **Code:** S6M2/S1
- **Credit hours for the module:** 6
- **Study weeks:** (5)
- **Departments offering the module:**
 - Department of General surgery
 - Department of Urosurgery department

Teaching departments

| | Lectures | Practical (X3) | SDI (X3) | Credit hours |
|----------------------------|----------|----------------|----------|--------------|
| General surgery department | 48 | 18 | 3 | 6 |
| General urology department | 12 | 6 | 3 | |
| Total | 60 | 24 | 6 | |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

1. Overall aim:

At the end of the Module the students will be able to:

- Prepare students to apply medical information and use it to solve clinical problems of patients.
- Integrate different branches of medicine to prepare an efficient graduate.
- Urge students to be lifelong learners.

3. Learning outcomes (LOs)

By the end of this module the student will be able to:

Competency Area I: The graduate as a health care provider

1.1. Take and record a structured, patient centered history.

1.1.1. Communicate effectively with individuals regardless of their social, cultural, ethnic backgrounds, or their disabilities.

1.6. Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.

1.6.1. Order appropriate general surgical and urological investigations.

Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation. 1.10.

1.10.1. Construct appropriate management plan for patients with common and important general surgically and urological diseases.

1.10.2. Take and record a structured patient-centered history in acute and chronic general surgical and urological conditions.

Competency Area II: The graduate as a health care promoter

2.4 Identify the major health risks in his/her community, including demographic, occupational and environmental risks; endemic diseases, and prevalent chronic diseases.

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملزمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
العنوان: شارع الجيش، كفر الشيخ، جمهورية مصر العربية

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

2.4.1. Describe the clinical picture, investigations and differential diagnosis of the various common and important general surgical and urological diseases and disorders.

2.6 Recognize the epidemiology of common diseases within his/her community and apply the systematic approaches useful in reducing the incidence and prevalence of those diseases.

2.6.1 Describe the principles of operative intervention including indications for intervention, preoperative preparation, and postoperative care and complications.

Competency Area III: The graduated as a professional

3.5. Ensure confidentiality and privacy of patients' information.

3.5.1. Perform full confidential physical examination appropriate to age and gender in acute and chronic clinical general surgical and urological conditions.

3.8. Refer patients to appropriate health facility at the appropriate stage.

3.8.1. Respect the patient's right to know and share in decision making as well as dignity, privacy, information confidentiality and autonomy.

Competency Area IV: The graduate as a scholar and scientist

4.1 Describe the normal structure of the body and its major organ systems and explain their functions.

4.1.1. Demonstrate the anatomy of general surgically and urological important structures, organs and regions.

4.5 Identify various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of illness/disease and explain the ways in which they operate on the body (pathogenesis).

4.5.1. Explain the prophylaxis and treatment of the various common and important general surgically and urological diseases and disorders.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

4.5.2. List the procedures and minimally invasive techniques used in the treatment of general surgically and urological diseases.

4.8 Demonstrate basic sciences specific practical skills and procedures relevant to future practice, recognizing their scientific basis, and interpret common diagnostic modalities, including: imaging, electrocardiograms, laboratory assays, pathologic studies, and functional assessment tests.

4.8.1. Perform an emergency-directed examination for patients with common general surgically and urological emergencies.

4.8.2. Know palliative care for untreatable general surgical and urological conditions.

Competency Area V: The graduate as a member of the health team and system

5.2 Respect colleagues and other health care professionals and work cooperatively with them, negotiating overlapping and shared responsibilities and engaging in shared decision-making for effective patient management.

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

5.2.2. Write safe prescriptions of different types of drugs.

Competency Area VI: The graduate as a lifelong learner and researcher

6.3 Identify opportunities and use various resources for learning.

6.3.1 Interacts confidently with colleagues, peers and professors on web pages.

6.3.2 Use various properties in collecting information (Web-based learning, SDL).

6.6 Effectively manage learning time and resources and set priorities (Assignment)

6.6.1 Achieve and perform the required duties from him on time (assignments).

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

4 – Module Contents

1. Theoretical lectures

| NO | TITLE | HOURS |
|--------------|---|-----------|
| L1 | Common thyroid surgical disorders | 14 |
| L2 | Common breast surgical disorders | 20 |
| L3 | Common Salivary glands disorders and surgical Swellings including common neck swellings | 14 |
| L4 | applied renal anatomy | 2 |
| L5 | Renal stones and urolithiasis | 2 |
| L6 | prostate | 2 |
| L7 | Common Urological tumors | 2 |
| L8 | inguinal scrotal swellings | 2 |
| L9 | Common emergencies in urology | 2 |
| Total | | 60 |

1. Practical:

| NO | TITLE | HOURS |
|----|---|-------|
| P1 | Common thyroid surgical disorders | 20 |
| P2 | Common breast surgical disorders | 20 |
| P3 | Common Salivary glands disorders and surgical | 14 |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| | Swellings including common neck swellings | |
|----|---|---|
| P4 | applied renal anatomy | 3 |
| P5 | Renal stones and urolithiasis | 3 |
| P6 | prostate | 3 |
| P7 | Common Urological tumors | 3 |
| P8 | inguinal scrotal swellings | 3 |
| P9 | Common emergencies in urology | 3 |

Teaching methods

Lectures:

Conducted by a Professor/assistant Professor and introduce the essential concepts and knowledge, the identification of scientific backgrounds, the explanation of complicated issues and topics and the potential for clinical application.

Tutorial classes

Conducted by an assistant Professor and lecturer in small teaching groups to emphasize complicated medical topics and clinical cases. They are held in the corresponding department and are included in the teaching plan. Division of students into groups alternating between direct contact and online lectures.]

Practical classes: 5 groups of 100 students, each in a teaching room at the department.

Students' activities: for (90min) through distributing variety of training exercises to be solved in the small groups (15 students each) using a white board for each subgroup. Students have to complete the logbook of the corresponding topic together with some of the training exercises under supervision of a tutor.

Assessment

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملزمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
العنوان: شارع الجيش، كفر الشيخ، جمهورية مصر العربية

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

- **Formative:** This form of assessment is designed to give you feedback to help you to identify areas for improvement. It includes a mixture of MCQs, short answer-questions (SAQs), extended matching questions (EMQs), case-solving exercises and independent learning activities in all subjects. These will be given during tutorial sessions and practical. The answers are presented and discussed immediately with you after the assessment. The results will be made available to you.
- **Summative:** This type of assessment is used for judgment or decisions to be made about your performance. It serves as:
 - Verification of achievement for the student satisfying requirement
 - Motivation of the student to maintain or improve performance
 - Certification of performance
 - Grades

| Assessment Method | Date | Marks | % of Total |
|-------------------------------------|--------------|-------|------------|
| d. end module Continuous assessment | End module | 25 | 30% |
| 5. End semester | End semester | 50 | 70% |
| Total | | 75 | 100% |

- **Written Exams** will include multiple choice questions (MCQs) at the end of the module while at the end of the semester, short essays will be added too.
- **Practical examination:** Will be arranged by the departments.
- **SDL presentation:** Evaluation is done by a staff members committee that represents all the teaching departments according to the following rubric criteria.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

➤ **Weight of Assessment:**

| Assessment Method | Date | Marks | % of Total |
|---|--------------|-------|------------|
| 1. end module Continuous assessment | End module | 40 | 26.6% |
| 2. SDL | End module | 5 | 3.3% |
| 3. End semester | End semester | 60 | 40% |
| 4. Practical exam | End module | 45 | 30% |
| Total | | 150 | 100% |

STUDENT'S RESPONSIBILITY

Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.

If there is anything that the module coordinator can do to assist you during the course, please feel free to contact him.

Text books

Browse's Introduction to the Symptoms & Signs of Surgical Disease. Browse NL, Black J and Burnand KG (Editors). 5th edition. 2014

Bailey & Love's Short Practice of Surgery. Williams NS, Bulstrode JK and O'Connell PR (Editors). 27th edition. 2018

Andrology, Male Reproductive Health and Dysfunction, Eberhard Nieschlag, Hermann M. Behre, Susan Nieschlag. Springer-Verlag Berlin Heidelberg 2010

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

YEAR 3- 6TH SEMESTER

MEDICINE I

MODULE (3)

1- Basic information:

Course specifications of:

- Program on which the module is given Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- Module title: Medicine I.
- Academic year/level: 3rd level /6th semester.
- Code: S6M3/M1
- Credit hours for the module: 6
- Study weeks: (5)
- Departments offering the module:
 - Department of Internal Medicine

Teaching departments

| | Lectures | Practical (X3) | SDL (X3) | Credit hours |
|------------------------------|----------|----------------|----------|--------------|
| Internal Medicine department | 60 | 24 | 6 | 6 |

2. Overall aim:

At the end of the Module the students will be able to:

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزًا للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكًا فعالًا في الارتقاء بالخدمات الصحية محليًا وإقليميًا ودوليًا.

- provide students with basic information about hematological, endocrinological and nephrological health related disorders.
- apply medical information and use it to solve clinical problems of patients.
- Integrate different branches of medicine to prepare an efficient graduate.

3. Learning outcomes (LOs)

By the end of this module the student will be able to:

Competency Area I: The graduate as a health care provider

1.1. Take and record a structured, patient centered history.

1.1.1. Diagnose and manage diabetic, endocrinal hematological and nephrological disorders and emergencies.

1.6. Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.

1.6.1. Recognize causes, clinical manifestation, investigations and management of Anemia, leukemia, lymphoma, Bleeding disorder, Coagulation disorder polycythemia, myeloproliferative syndrome, multiple myeloma, and Blood transfusion.

1.10. Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.

1.10.1. Select and interpret appropriate imaging techniques in detection and management of diabetes, hematological and nephrological endocrinal disorders.

Competency Area II: The graduate as a health care promoter

2.4 Identify the major health risks in his/her community, including demographic, occupational and environmental risks; endemic diseases, and prevalent chronic diseases.

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقًا للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
العنوان: شارع الجيش، كفر الشيخ، جمهورية مصر العربية

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

2.4.1. Demonstrate knowledge of causes, investigations and treatments for disorders of the hypothalamus, pituitary gland, thyroid disorders, goiter, thyroid cancer parathyroid, suprarenal, and adrenal glands.

2.4.2. Summarize the causes diagnosis and management, investigations and treatments for disorders of the primary and secondary gonadal failure, hirsutism, gynecomastia and menstrual irregularity.

2.6 Recognize the epidemiology of common diseases within his/her community, and apply the systematic approaches useful in reducing the incidence and prevalence of those diseases.

2.6.1. Demonstrate knowledge to etiology, pathophysiology and different treatment options of Acromegaly, Hyperprolactinemia, Hypopituitarism, Diabetes insipidus, SIADH, thyrotoxicosis, Myxedema, Cretinism, Goiter, Thyroid cancer, Hyperparathyroidism, Hypoparathyroidism, Suprarenal gland, Conn's syndrome, Cushing syndrome, Adrenogenital syndrome, Addison's syndrome, pheochromocytoma, Diabetes mellitus, hypoglycemia Hirsutism and gynecomastia

Competency Area III: The graduated as a professional

3.5. Ensure confidentiality and privacy of patients' information.

3.5.1. Communicate effectively and sensitively with patients and relatives.

Competency Area IV: The graduate as a scholar and scientist

4.5 Identify various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of illness/disease and explain the ways in which they operate on the body (pathogenesis).

4.5.1. Demonstrate knowledge to basics of Acute renal failure, Chronic renal failure, Nephrotic syndrome, and Nephritic syndrome.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

4.5.2. Identify the different types with the underlying basis of diabetes mellitus and the principles of management of different types and different stages of diabetic complications.

4.8 Demonstrate basic sciences specific practical skills and procedures relevant to future practice, recognizing their scientific basis, and interpret common diagnostic modalities, including: imaging, electrocardiograms, laboratory assays, pathologic studies, and functional assessment tests.

4.8.1. Interpret basic clinical, laboratory and radiological tests in the field of endocrinology hematology nephrology and diabetes.

Competency Area V: The graduate as a member of the health team and system

5.2 Respect colleagues and other health care professionals and work cooperatively with them, negotiating overlapping and shared responsibilities and engaging in shared decision-making for effective patient management.

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

Competency Area VI: The graduate as a lifelong learner and researcher

6.3 Identify opportunities and use various resources for learning.

6.3.1 Interacts confidently with colleagues, peers and professors on web pages.

6.3.2 Use various properties in collecting information (Web-based learning, SDL).

6.6 Effectively manage learning time and resources and set priorities

(Assignment)

6.6.1 Achieve and perform the required duties from him on time (assignments).

4 – Module Contents

2. Theoretical lectures

3.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| NO | TITLE | HOURS |
|--------------|--|-----------|
| L1 | Pituitary gland, Acromegaly | 1.5 |
| L2 | Hyperprolactinemia, Hypopituitarism | 3 |
| L3 | Diabetes insipidus, SIADH | 3 |
| L4 | Thyroid gland, Thyroid disease, 1ry thyrotoxicosis, Myxedema, Cretinism, Goiter Thyroid cancer Parathyroid gland, Ca metabolism, Hyperparathyroidism, Hypoparathyroidism | 6 |
| L5 | Suprarenal gland, Conn's syndrome, Cushing syndrome, Adrenogenital syndrome, Addison's syndrome, pheochromocytoma | 7.5 |
| L6 | Diabetes mellitus, hypoglycemia | 6 |
| L7 | Aplastic anemia, Iron deficiency anemia, Megaloblastic anemia, Hemolytic anemia, Anemia of chronic disease Hirsutism, gynecomastia, | 7.5 |
| L8 | Leukemia, acute leukemia, chronic myeloid leukemia, chronic lymphocytic leukemia, myeloproliferative syndrome | 3 |
| L9 | Hodgkin's lymphoma, non-Hodgkin lymphoma Multiple myeloma , | 1.5 |
| L10 | bleeding disorder, purpura, coagulation disorder, polycythemia Blood transfusion | 9 |
| L11 | Acute renal failure, Chronic renal failure Nephrotic syndrome, Nephritic syndrome | 12 |
| Total | | 60 |

2. Practical

| NO | Title | hours |
|----|-------|-------|
|----|-------|-------|

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
العنوان: شارع الجيش، كفر الشيخ، جمهورية مصر العربية

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| | | |
|----|---|---|
| P1 | Vital signs (blood pressure and temperature) | 8 |
| P2 | Cyanosis | 8 |
| P3 | Thyroid examination | 8 |
| P4 | Lower limb edema | 8 |
| P5 | Jaundice | 8 |
| P6 | Pallor and clubbing Vital signs (pulse and respiratory rate) | 8 |
| P7 | Clinical approach to lymphadenopathy case | 8 |
| P8 | bleeding disorder, purpura, coagulation disorder, polycythemia | 8 |
| P9 | Case history taking Nephrotic syndrome, Nephritic syndrome | 8 |

Teaching methods

Lectures:

Conducted by a Professor/assistant Professor and introduce the essential concepts and knowledge, the identification of scientific backgrounds, the explanation of complicated issues and topics and the potential for clinical application.

Tutorial classes

Conducted by an assistant Professor and lecturer in small teaching groups to emphasize complicated medical topics and clinical cases. They are held in the corresponding department and are included in the teaching plan. [Division of students into groups alternating between direct contact and online lectures.]

Practical classes: 5 groups of 100 students, each in a teaching room at the department.

Students' activities: for (90min) through distributing variety of training exercises to be solved in the small groups (15 students each). Students have to complete the logbook of the corresponding topic together with some of the training exercises under supervision of a tutor.

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
العنوان: شارع الجيش، كفر الشيخ، جمهورية مصر العربية

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Assessment

- **Formative:** This form of assessment is designed to give you feedback to help you to identify areas for improvement. It includes a mixture of MCQs, short answer-questions (SAQs), extended matching questions (EMQs), case-solving exercises and independent learning activities in all subjects. These will be given during tutorial sessions and practical. The answers are presented and discussed immediately with you after the assessment. The results will be made available to you.
- **Summative:** This type of assessment is used for judgment or decisions to be made about your performance. It serves as:
 - Verification of achievement for the student satisfying requirement
 - Motivation of the student to maintain or improve performance
 - Certification of performance
 - Grades

| Assessment Method | Date | Marks | % of Total |
|-------------------------------------|--------------|-------|------------|
| e. end module Continuous assessment | End module | 25 | 30% |
| 6. End semester | End semester | 50 | 70% |
| Total | | 75 | 100% |

- **Written Exams** will include multiple choice questions (MCQs) at the end of the module while at the end of the semester, short essays will be added too.
- **Practical examination:** Will be arranged by the departments.
- **SDL presentation:** Evaluation is done by a staff members committee that represents all the teaching departments according to the following rubric criteria.
- **Weight of Assessment:**

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| Assessment Method | Date | Marks | % of Total |
|--|--------------|-------|------------|
| end module Continuous assessment | End module | 40 | 26.6% |
| SDL | End module | 5 | 3.3% |
| End semester | End semester | 60 | 40% |
| 2. Practical exam | End module | 45 | 30% |
| Total | | 150 | 100% |

STUDENT'S RESPONSIBILITY

Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.

If there is anything that the module coordinator can do to assist you during the course, please feel free to contact him.

Text

Lichtman, M. A., Kaushansky, K., Kipps, T. J., Prchal, J. T., & Levi, M. M. (2011). Williams Manual of Hematology. McGraw-Hill.

Walker, B. R., & Colledge, N. R. (2013). Davidson's principles and practice of medicine e-book. Elsevier Health Sciences.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

YEAR 3- 6TH SEMESTER

THE ELECTIVE COURSE (MEDICAL EDUCATION)

MODULE (4)

1- Basic information:

Course specifications of:

- **Program on which the module is given** Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- **Module title:** Medical Education.
- **Academic year/level:** 3rd level /6th semester.
- **Code:** S6M4/E5ME
- **Credit hours for the module:** 2
- **Study weeks:** Longitudinal
- **Departments offering the module:**
 - Department of Medical Education

| | lectures | Practical | CBL | SDL |
|-------------------|----------|-----------|-----|-----|
| Medical Education | 30 | - | - | - |
| Total | 30 | - | - | - |

1. Overall aim:

At the end of the Module the students will be able to:

- Raise the competency of our graduates for the needs and expectations of society.

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
العنوان: شارع الجيش، كفر الشيخ، جمهورية مصر العربية

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزًا للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكًا فعالًا في الارتقاء بالخدمات الصحية محليًا وإقليميًا ودوليًا.

- Make the students able to cope and adjust with the explosion in medical scientific knowledge and technology besides the changing conditions in the health care delivery system.
- Promote physicians' ability for lifelong learning.
- Ensure training in the new information technologies.

3. Intended learning outcomes (ILOs)

By the end of this module the student will be able to:

3. Intended learning outcomes (ILOs)

By the end of this module the student will be able to:

Competency Area VI: The graduate as a lifelong learner and researcher

6.2 Develop, implement, monitor, and revise a personal learning plan to enhance professional practice

6.2.1 Plan and develop a course curriculum.

6.2.2 Critically evaluate a medical education curriculum from various perspectives and the emerging technologies in medical education.

6.3 Identify opportunities and use various resources for learning.

6.3.1 Evaluate teaching philosophy is and why and learn about key teaching skills and theories, put these into practice and reflect on the experience for the future.

6.5 Recognize practice uncertainty and knowledge gaps in clinical and other professional encounters and generate focused questions that address them

6.5.1 Discuss the importance of medical education and how to put the focus on patient care.

6.5.2 Demonstrate an in-depth knowledge and understanding of specific issues at the forefront of theory and practice in medical education.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

6.5.3 Support and monitor educational progress and guide personal and professional development.

6.5.4 Apply evaluation into practice to improve education for patient care.

6.6 Effectively manage learning time and resources and set priorities (PBL and Assignment)

6.6.2 Critically analyze teaching methods, theories and assessment methodologies for the application of learning

6.6.2 apply core theoretical principles to their own educational contexts.

6.6.3 Justify and critically evaluate the role of media in medical education.

4 – Module Contents

1. Theoretical lectures

| NO | TITLE | HOURS |
|-----|------------------------------------|-------|
| L1 | Introduction to Medical education. | 2h |
| L2 | Competency based education | 2h |
| L3 | Curriculum (part 1) | 2h |
| L4 | Curriculum (part 2) | 2h |
| L5 | Teaching in large group | 2h |
| L6 | Flipped classroom | 2h |
| L7 | Teaching in small group (part 1) | 2h |
| L8 | Teaching in small group (part 2) | 2h |
| L9 | E-learning | 2h |
| L10 | Assessment (part 1) | 2h |
| L11 | Assessment (part 2) | 2h |
| L12 | Assessment (part 3) | 2h |

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
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| | | |
|-----|----------|----|
| L13 | Revision | 2h |
| L14 | Revision | 2h |
| L15 | Revision | 2h |

5- Teaching and learning methods

| Course | Web based | |
|-------------------|-----------|---|
| | Lecture | L |
| Medical Education | √ | √ |

6. COURSE ASSESSMENT:

Written Exams short questions or / and multiple choice questions (MCQs).

STUDENT'S RESPONSIBILITY

- Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.
- If there is anything that the module coordinator can do to assist you during the course, please feel free to contact him.

Sites

| Activity | Site |
|-------------------|------------------|
| Final module exam | Examination Hall |

Textbooks and References for System Modules

A Practical Guide for Medical Teachers, John Dent, Ronald M. Harden, Dan Hunt. 6th edition 2021.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

YEAR 3- 6TH SEMESTER

THE ELECTIVE COURSE (EVIDENCE BASED MEDICINE AND RESEARCH METHODS)

MODULE (4)

1- Basic information:

Course specifications of:

- **Program on which the module is given** Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- **Module title:** Evidence based medicine and research methods.
- **Academic year/level:** 3rd level /6th semester.
- **Code:** S6M4/E5ER
- **Credit hours for the module:** 2
- **Study weeks:** longitudinal

2- Overall aim:

At the end of the Module the students will be able to:

- Define EBM and describe the steps of the practice of EBM.
- Enumerate the different purposes for searching the scientific biomedical literature.
- Describe the difference between background and foreground questions.
- Rephrase issues arising in patient care as correct clinical questions (PICO questions).

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
العنوان: شارع الجيش، كفر الشيخ، جمهورية مصر العربية

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- Conduct efficient searches of clinical evidence using the most appropriate terms and other tools (filters, operators, and clinical queries) in databases available through the Internet, in accordance with the type of evidence of interest (PubMed, Cochrane Library, National Guideline Clearinghouse).
- Save and retrieve the full text of materials from evidence searches.
- Critically appraise the most common types of clinical research papers (interventions, harm, diagnostic tests, and systematic reviews).
- Apply the evidence to individual patients.
- Equip the candidate with the basic and the advanced skills in scientific research and improve their capabilities to perform the scientific research efficiently.

3. Learning outcomes (LOs)

By the end of this module the student will be able to:

Competency Area I: The graduate as a health care provider

1.9 Retrieve, analyze, and evaluate relevant and current data from literature, using information technologies and library resources, in order to help solve a clinical problem based on evidence (EBM).

1.9.1 Define EBM and describe the steps of the practice of EBM.

Competency Area VI: The graduate as a lifelong learner and researcher

6.7 Demonstrate an understanding of the scientific principles of research including its ethical aspects and scholarly inquiry and Contribute to the work of a research study.

6.7.1 Recognize the importance of research.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

6.8 Critically appraise research studies and scientific papers in terms of integrity, reliability, and applicability.

6.8.1 Discuss types of study design.

6.8.2 Demonstrate the sampling methods.

6.9 Analyze and use numerical data including the use of basic statistical methods. Differentiate between causal and no causal association

6.9.1 Select the proper sample for the research.

6.9.2 Discriminate between data collection methods and techniques

4-Module Contents

1. Theoretical lectures

| No | Topic | Hours |
|----|---------------------------------------|-------|
| L1 | Introduction to research methodology. | 4h |
| L2 | Study design. | 4h |
| L3 | Sampling methods. | 4h |
| L4 | Causation association | 4h |
| L5 | Data collection methods | 4h |
| L6 | Research methodology | 5h |
| L7 | Bias | 5h |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

Teaching and learning methods

| Course | Lecture | Web based L |
|---|---------|-------------|
| Evidence based and research methodology | √ | √ |

6. COURSE ASSESSMENT:

Written Exams short questions or / and multiple choice questions (MCQs).

STUDENT'S RESPONSIBILITY

- Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.
- If there is anything that the module coordinator can do to assist you during the course, please feel free to contact him.

Sites

| Activity | Site |
|-------------------|------------------|
| Final module exam | Examination Hall |

Textbooks and References for System Modules

Mishra, Dr. Shanti Bhushan & Alok, Dr. Shashi. (2017). HANDBOOK OF research methodology.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

YEAR 4- 7TH SEMESTER

| النهاية العظمى | الدرجات | | | الحزم الدراسية (Modules) | | | المستوى الرابع - الفصل السابع |
|-------------------|------------------|--------------------------|---------------------|-------------------------------|-------|-----------------|----------------------------------|
| | التحريري % 40 | العملي (OSPE) % 30 | اعمال السنة % 30 | Name | Weeks | Credit hours | |
| 150 | 60 | 50 | 40 | Surgery (II) Medicine (II) | 6 | 6 | |
| 175 | 70 | 55 | 50 | Pediatrics (I) | 5 | 7 | |
| 175 | 70 | 55 | 50 | OGYN (I) | 5 | 7 | |
| 500 | | | | | 16 | 20 | المجموع |

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YEAR 4- 7TH SEMESTER MODULE (1) SURGERY (II), MEDICINE (II) MODULE

1- Basic information:

Course specifications of:

- Program on which the module is given Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- Module title: Surgery II, Meicine II.
- Academic year/level: 4th level /7th semester.
- Code: S7M1/S2M2
- Credit hours for the module: 6
- Study weeks: (6)
- Departments offering the module:
 - Department General surgery
 - Department of Gastroenterology, hepatology and infectious diseases

Teaching Departments

| | Lectures | Practical (X3) | Credit hours |
|--|----------|----------------|--------------|
| General surgery department | 30 | 15 | 6 |
| Gastroenterology, hepatology, and infectious diseases department | 30 | 15 | |

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
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2. Overall aim:

At the end of the Module the students will be able to:

- Know basic information about surgically health related disorders, gastroenterology, hepatology and infectious diseases.
- Apply medical information and use it to solve clinical problems.
- Integrate different branches of medicine to prepare an efficient graduate.

3. Learning outcomes (LOs)

By the end of this module the student will be able to:

Competency Area I: The graduate as a health care provider

1.1 Take and record a structured, patient centered history.

- 1.1.1 Communicate effectively with individuals regardless of their social, cultural, ethnic backgrounds, or their disabilities.
- 1.1.2 Take a full patient history from the patient itself or his relatives including all relevant data.
- 1.1.3 Order the patient complaint chronologically and analyze it properly to record a structured history.

1.3. Assess the mental state of the patient.

- 1.3.1 Use clinical assessment tools to evaluate the patient's mental status.
- 1.3.2 Interpret data as an important part of the patient examination.

1.4. Perform appropriately timed full physical examination of patients appropriate to the age, gender, and clinical presentation of the patient while being culturally sensitive.

- 1.4.1 Perform a thorough physical examination including all body systems; cardiac, chest, neurologic and abdominal examination.

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1.4.2 Consider the clinical presentation and the red flag signs of clinical emergencies while performing the physical examination.

1.4.3. Examin respecting the ethics and the patient privacy in certain age groups or genders especially teen patients.

1.6. Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.

1.6.1 select of the investigation needed according to the clinical condition of the patient.

1.6.2. Take patient history and skillful examination narrow the spectrum of the needed investigations, and though all the investigations needed should be cost-effective.

1.6.3. Interpret the investigations results and modify the patient management plan accordingly.

1.8 Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand.

1.8.1 Define the different terms of gastroenterology, hepatology and infectious diseases.

1.8.2 Enumerate different types of gastrointestinal diseases and emergencies.

1.8.3 Summarize the medically important infectious diseases as regards their clinical manifestation, laboratory diagnosis, treatment, prevention and control of infectious diseases.

1.8.4 Perform appropriately timed full physical examination patients appropriate to the age, gender, and clinical presentation of the patient.

1.9 Retrieve, analyze, and evaluate relevant and current data from literature, using information technologies and library resources, in order to help solve a clinical problem based on evidence (EBM).

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1.9.1 Arrange the efforts required to complete the tasks in specified time and identify opportunities and use various resources for learning.

1.9.2 Practice effectively using a written health record, electronic medical record, and other digital technology.

1.10. Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.

1.10.1. Construct appropriate management plan for patients with common and important general surgical diseases.

1.10.2. Take and record a structured patient-centered history in acute and chronic general surgical conditions.

1.11. Perform diagnostic and intervention procedures in a skillful and safe manner, adapting to unanticipated findings or changing clinical circumstances.

1.11.1 Perform Intervention procedures needed should be done under complete aseptic conditions to minimize risk of infection such as lumbar puncture.

1.11.2 Minimize observation differences between providers.

1.12. Adopt strategies and apply measures that promote patient safety.

1.12.1 Follow the safety instructions while performing any procedure.

1.12.2 Follow infection control guidelines strictly to promote safety of both patients and health care providers.

1.13. Establish patient-centered management plans in partnership with the patient, his/her family and other health professionals as appropriate, using Evidence Based Medicine in management decisions.

1.13.1 Discuss different management plans with the patient and/or relatives honestly and clearly.

1.13.2 Discuss advantages and disadvantages of each plan and answer any questions of the patients and their relatives and clarify any concerns.

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1.15. Provide the appropriate care in cases of emergency, immediate life support measures and basic first aid procedures.

1.15.1 Perform resuscitation to provide appropriate care.

1.16. Apply the appropriate pharmacological and nonpharmacological approaches to alleviate pain and provide palliative care for seriously ill people, aiming to relieve their suffering and improve their quality of life.

1.16.1 Apply appropriate pharmacological treatment for different diseases considering the proper dose, duration, and intervals.

1.16.2 Judge non-pharmacological treatment in certain cases.

Competency Area II: The graduate as a health care promoter

2.3 Discuss the role of nutrition and physical activity in health.

2.3.1 Educate Patient and relatives about the important role of proper nutrition in normal growth and development and prevention of overnutrition and malnutrition.

2.4 Identify the major health risks in his/her community, including demographic, occupational and environmental risks; endemic diseases, and prevalent chronic diseases.

2.4.1. Describe the clinical picture, investigations and differential diagnosis of the various common and important general surgical diseases and disorders.

2.4.2. Identify the sources and epidemiology of infectious diseases.

2.5 Describe the principles of disease prevention, and empower communities, specific groups or individuals by raising their awareness and building their capacity.

2.5.1 Provide care for specific groups

2.5.2 Plan for progress in the diagnosis, treatment and prevention of infectious disease and its application for community development.

2.6 Recognize the epidemiology of common diseases within his/her community and apply the systematic approaches useful in reducing the incidence and prevalence of those diseases.

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2.6.1 Describe the principles of operative intervention including indications for intervention, preoperative preparation, and postoperative care and complications.

Competency Area III: The graduated as a professional

3.1 Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.

3.1.1 Treat all patients equally, and avoid stigmatizing any category regardless of their social, cultural, ethnic backgrounds, or their disabilities.

3.1.2 Acquire the skills of good listening and self-learning.

3.1.3 Practice the value of teamwork by acting in small groups with adequate cooperation with his/her colleagues.

3.1.4 Recognize basics of medico-legal aspects of practice, malpractice and avoid common medical errors.

3.4. Treat all patients equally, and avoid stigmatizing any category regardless of their social, cultural, ethnic backgrounds, or their disabilities.

3.4.1 Provide the necessary care for all patients similarly regardless of their social, cultural backgrounds.

3.5. Ensure confidentiality and privacy of patients' information.

3.5.1. Perform full confidential physical examination appropriate to age and gender in acute and chronic clinical general surgical conditions.

3.8. Refer patients to appropriate health facility at the appropriate stage.

3.8.1. Respect the patient's right to know and share in decision making as well as dignity, privacy, information confidentiality and autonomy.

3.8.2 Refer patients who need special unavailable care to an appropriate health facility that can provide them with the necessary medical care.

3.8.3 Ensure safety precautions while transporting the patients.

Competency Area IV: The graduate as a scholar and scientist

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4.1 Describe the normal structure of the body and its major organ systems and explain their functions.

4.1.1. Demonstrate the anatomy of general surgically important structures, organs and regions.

4.5 Identify various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of illness/disease and explain the ways in which they operate on the body (pathogenesis).

4.5.1. Explain the prophylaxis and treatment of the various common and important surgical diseases and disorders.

4.5.2. List the procedures and minimally invasive techniques used in the treatment of general surgical diseases.

4.5.3 Discuss pathophysiology and pathogenesis of various diseases.

4.5.4 Identify causes and different types of inflammation and inflammatory cells with signs and symptoms of acute inflammation of gastrointestinal diseases.

4.5.5 Describe the mode of inheritance of different disorders.

4.6 Describe altered structure and function of the body and its major organ systems that are seen in various diseases and conditions.

4.6.1 Explain the effect of insufficient nutrition and overnutrition on health.

4.8 Demonstrate basic sciences specific practical skills and procedures relevant to future practice, recognizing their scientific basis, and interpret common diagnostic modalities, including: imaging, electrocardiograms, laboratory assays, pathologic studies, and functional assessment tests.

4.8.1. Perform an emergency-directed examination for patients with common surgical emergencies.

4.8.2. Perform palliative care for untreatable general surgical conditions.

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Competency Area V: The graduate as a member of the health team and system

5.2 Respect colleagues and other health care professionals and work cooperatively with them, negotiating overlapping and shared responsibilities and engaging in shared decision-making for effective patient management.

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

5.2.2. Write safe prescriptions of different types of drugs.

5.3 Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports collaborative work.

5.3.1 Implement collaborative teamwork during small group teaching (SDL).

Competency Area VI: The graduate as a lifelong learner and researcher

6.3 Identify opportunities and use various resources for learning.

6.3.1 Interacts confidently with colleagues, peers and professors on web pages.

6.3.2 Use various properties in collecting information (Web-based learning, SDL).

6.6 Effectively manage learning time and resources and set priorities.

6.6.1 Achieve and perform the required duties from him on time (assignments).

4- Module Contents

2. Theoretical lectures

| NO | TITLE | DEPARTMENT | HOURS |
|----|---|-----------------|-------|
| 1. | Introduction | General surgery | 2h |
| 2. | Hernia anatomy, complication, treatment | General surgery | 2h |
| 3. | Abdominal wall defect | General surgery | 2h |

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| | | | |
|-----|-------------------------|--|----|
| 4. | Esophagus 1 | General surgery | 2h |
| 5. | Esophagus 2 | General surgery | 2h |
| 6. | Stomach | General surgery | 2h |
| 7. | Small intestine, | General surgery | 2h |
| 8. | intestinal obstruction | General surgery | 2h |
| 9. | Large intestine | General surgery | 2h |
| 10. | Anal canal | General surgery | 2h |
| 11. | Liver | General surgery | 2h |
| 12. | Spleen | General surgery | 2h |
| 13. | Pancreas | General surgery | 2h |
| 14. | Biliary system 1 | General surgery | 2h |
| 15. | Biliary system 2 | General surgery | 2h |
| 16. | Esophageal disease | Gastroenterology, hepatology and infectious diseases | 1h |
| 17. | Peptic ulcer | Gastroenterology, hepatology and infectious diseases | 1h |
| 18. | Bilharziosis | Gastroenterology, hepatology and infectious diseases | 1h |
| 19. | Normal liver, cirrhosis | Gastroenterology, hepatology and infectious diseases | 1h |
| 20. | Small bowel disease | Gastroenterology, hepatology and infectious diseases | 1h |
| 21. | Diarrhea | Gastroenterology, hepatology and infectious diseases | 1h |
| 22. | Acute viral hepatitis | Gastroenterology, hepatology and infectious diseases | 1h |
| 23. | HCV | Gastroenterology, hepatology and infectious diseases | 1h |
| 24. | HBV | Gastroenterology, hepatology and infectious diseases | 1h |
| 25. | Jaundice | Gastroenterology, hepatology and | 1h |

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| | | | |
|-----|------------------------|--|----|
| | | infectious diseases | |
| 26. | Large bowel disease | Gastroenterology, hepatology and infectious diseases | 1h |
| 27. | Parasitic infection | Gastroenterology, hepatology and infectious diseases | 1h |
| 28. | Brucellosis | Gastroenterology, hepatology and infectious diseases | 1h |
| 29. | Asceites, complication | Gastroenterology, hepatology and infectious diseases | 1h |
| 30. | Portal hypertension | Gastroenterology, hepatology and infectious diseases | 1h |
| 31. | Viral infection | Gastroenterology, hepatology and infectious diseases | 1h |
| 32. | Hepatic encephalopathy | Gastroenterology, hepatology and infectious diseases | 1h |
| 33. | HIV | Gastroenterology, hepatology and infectious diseases | 1h |
| 34. | Fever | Gastroenterology, hepatology and infectious diseases | 1h |
| 35. | rabies, tetanus | Gastroenterology, hepatology and infectious diseases | 1h |
| 36. | HCC | Gastroenterology, hepatology and infectious diseases | 1h |
| 37. | Heat disorders | Gastroenterology, hepatology and infectious diseases | 1h |
| 38. | Minigitis | Gastroenterology, hepatology and infectious diseases | 1h |
| 39. | Malaria | Gastroenterology, hepatology and infectious diseases | 1h |
| 40. | Typhoid fever | Gastroenterology, hepatology and infectious diseases | 1h |

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| | | | |
|-----|--|--|-----|
| 41. | Pancreatic, biliary disease | Gastroenterology, hepatology and infectious diseases | 1h |
| 42. | COVID infection | Gastroenterology, hepatology and infectious diseases | 1h |
| 43. | upper GI bleeding, dyspepsia | Gastroenterology, hepatology and infectious diseases | 1h |
| 44. | Lower gastrointestinal bleeding, dysphasia | Gastroenterology, hepatology and infectious diseases | 1h |
| 45. | Abdominal pain, vomiting | Gastroenterology, hepatology and infectious diseases | 1h |
| | Total | | 60h |

2. Practical:

| NO | TITLE | DEPARTMENT | HOURS |
|-----|----------------------|--|-------|
| 1. | Hernia sheet | General surgery | 3h |
| 2. | Hernia examination | General surgery | 3h |
| 3. | Indirect hernia | General surgery | 3h |
| 4. | Direct hernia | General surgery | 3h |
| 5. | umbilical hernia | General surgery | 3h |
| 6. | Paraumbilical hernia | General surgery | 3h |
| 7. | Incisional hernia | General surgery | 3h |
| 8. | Recurrent hernia | General surgery | 3h |
| 9. | Hepatomegaly | General surgery | 3h |
| 10. | Splenomegaly | General surgery | 3h |
| 11. | Hepatosplenomegaly | General surgery | 3h |
| 12. | Ascitis | General surgery | 3h |
| 13. | Revision | General surgery | 3h |
| 14. | Revision | General surgery | 3h |
| 15. | Revision | General surgery | 3h |
| 16. | History taking. | Gastroenterology, hepatology and infectious diseases | 3h |
| 17. | General examination. | Gastroenterology, hepatology | 3h |

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| | | | |
|-----|---------------------------------------|--|----|
| | | and infectious diseases | |
| 18. | OSCE (general examination) | Gastroenterology, hepatology and infectious diseases | 3h |
| 19. | Abdominal inspection | Gastroenterology, hepatology and infectious diseases | 3h |
| 20. | OSCE (abdominal inspection) | Gastroenterology, hepatology and infectious diseases | 3h |
| 21. | Abdominal palpation | Gastroenterology, hepatology and infectious diseases | 3h |
| 22. | Clinical examination & OSCE (Hand on) | Gastroenterology, hepatology and infectious diseases | 3h |
| 23. | Abdominal percussion | Gastroenterology, hepatology and infectious diseases | 3h |
| 24. | Clinical examination & OSCE (Hand on) | Gastroenterology, hepatology and infectious diseases | 3h |
| 25. | Abdominal auscultation | Gastroenterology, hepatology and infectious diseases | 3h |
| 26. | Clinical examination & OSCE (Hand on) | Gastroenterology, hepatology and infectious diseases | 3h |
| 27. | Sheet discussion | Gastroenterology, hepatology and infectious diseases | 3h |
| 28. | Clinical examination & OSCE (Hand on) | Gastroenterology, hepatology and infectious diseases | 3h |
| 29. | Clinical examination & OSCE (Hand on) | Gastroenterology, hepatology and infectious diseases | 3h |
| 30. | OSCE Revision | Gastroenterology, hepatology and infectious diseases | 3h |

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Teaching methods

Lectures:

Conducted by a Professor/assistant Professor and introduce the essential concepts and knowledge, the identification of scientific backgrounds, the explanation of complicated issues and topics and the potential for clinical application.

Tutorial classes

Conducted by an assistant Professor and lecturer in small teaching groups to emphasize complicated medical topics and clinical cases. They are held in the corresponding department and are included in the teaching plan. [Division of students into groups alternating between direct contact and online lectures.]

Practical classes: 5 groups of 100 students, each in a teaching room at the department.

Students' activities: for (90min) through distributing variety of training exercises to be solved in the small groups (15 students each) using a white board for each subgroup. Students have to complete the logbook of the corresponding topic together with some of the training exercises under supervision of a tutor.

Assessment

- **Formative:** This form of assessment is designed to give you feedback to help you to identify areas for improvement. It includes a mixture of MCQs, short answer-questions (SAQs), extended matching questions (EMQs), case-solving exercises and independent learning activities in all subjects. These will be given during tutorial sessions and practical. The answers are presented and discussed immediately with you after the assessment. The results will be made available to you.
- **Summative:** This type of assessment is used for judgment or decisions to be made about your performance. It serves as:
 - Verification of achievement for the student satisfying requirement
 - Motivation of the student to maintain or improve performance
 - Certification of performance

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○ Grades

- **Written Exams** will include multiple choice questions (MCQs) at the end of the module while at the end of the semester, short essays will be added too.
- **Practical examination:** Will be arranged by the departments.
- **SDL presentation:** Evaluation is done by a staff members committee that represents all the teaching departments according to the following rubric criteria.
- **Weight of Assessment:**

| Assessment Method | Date | Marks | % of Total |
|----------------------------------|--------------|-------|------------|
| end module Continuous assessment | End module | 40 | 30% |
| End semester | End semester | 60 | 40% |
| Practical exam | End semester | 50 | 30% |
| Total | | 150 | 100% |

STUDENT'S RESPONSIBILITY

Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.

Text books

Browse's Introduction to the Symptoms & Signs of Surgical Disease. Browse NL, Black J and Burnand KG (Editors). 5th edition. 2014

Bailey & Love's Short Practice of Surgery. Williams NS, Bulstrode JK and O'Connell PR (Editors). 27th edition. 2018

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YEAR 4- 7TH SEMESTER THE PEDS I MODULE MODULE (2)

1- Basic information:

Course specifications of:

- **Program on which the module is given** Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- **Module title:** Pediatrics I.
- **Academic year/level:** 4th level /7th semester.
- **Code:** S7M2/P1
- **Credit hours for the module:** 7
- **Study weeks:** (5)
- **Departments offering the module:**
 - Department of Pediatrics

| | Lectures | Practical (X3) | SDL (X3) | Credit hours |
|------------|----------|-------------------|-------------|--------------|
| Pediatrics | 60 | 30 | 15 | 7 |

1. Overall aim:

At the end of the Module the students will be able to:

- Know basic information about pediatrics and neonatology.
- Apply medical information and use it to solve clinical problems.
- Integrate different branches of medicine to prepare an efficient graduate.
- Urge students to be a lifelong learner.

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3. Learning outcomes (LOs)

By the end of this module the student will be able to:

Competency Area I: The graduate as a health care provider

1.1. Take and record a structured, patient centered history.

1.1.1 Take a full patient history from the patient itself or his relatives including all relevant data.

1.1.2 Order the patient complaint chronologically and analyze it properly to record a structured history.

1.3 Assess the mental state of the patient.

1.3.1 Use clinical assessment tools to evaluate the patient's mental status.

1.3.2 Interpret this data as an important part of the patient examination.

1.4. Perform appropriately timed full physical examination of patients appropriate to the age, gender, and clinical presentation of the patient while being culturally sensitive.

1.4.1 Perform a thorough physical examination including all body systems; cardiac, chest, neurologic and abdominal examination.

1.4.2 Consider the clinical presentation and the red flag signs of clinical emergencies while performing the physical examination.

1.6. Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.

1.6.1 Select the investigation needed according to the clinical condition of the patient.

1.6.2. Take patient history and skillful examination narrow the spectrum of the needed investigations, and though all the investigations needed should be cost-effective.

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1.6.3. Interpret the investigations results and modify the patient management plan accordingly.

1.8 Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand.

1.8.1 Define the different terms of Pediatrics and Neonatology.

1.8.2 Enumerate different types of pediatric diseases and emergencies.

1.8.3 Summarize the medically important pediatric infectious diseases as regards their clinical manifestation, laboratory diagnosis, treatment, prevention and control of infectious diseases.

1.8.4 Perform appropriately timed full physical examination pediatric patients appropriate to the age, gender, and clinical presentation of the patient.

1.9 Retrieve, analyze, and evaluate relevant and current data from literature, using information technologies and library resources, in order to help solve a clinical problem based on evidence (EBM).

1.9.1 Arrange the efforts required to complete the tasks in specified time and identify opportunities and use various resources for learning.

1.9.2 Practice effectively using a written health record, electronic medical record, and other digital technology.

1.10. Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.

1.10.1 Interpret of the ordered laboratory and radiological investigations narrow the differential diagnosis addressed after the patient history and physical examination and help reaching the most accurate diagnosis.

1.11. Perform diagnostic and intervention procedures in a skillful and safe manner, adapting to unanticipated findings or changing clinical circumstances.

1.11.1 Perform intervention procedures needed should be done under complete aseptic conditions to minimize risk of infection such as lumbar puncture.

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1.11.2 Perform skillful interventions may yield significant results that change the clinical diagnosis and need management plan modification.

1.12. Adopt strategies and apply measures that promote patient safety.

1.12.1 Follow the safety instructions while performing any procedure.

1.12.2 Follow infection control guidelines strictly to promote safety of both patients and health care providers.

1.13. Establish patient-centered management plans in partnership with the patient, his/her family and other health professionals as appropriate, using Evidence Based Medicine in management decisions.

1.13.1 Discuss different management plans with the patient and/or relatives honestly and clearly.

1.13.2 Discuss advantages and disadvantages of each plan and answer any questions of the patients and their relatives and clarify any concerns.

1.15. Provide the appropriate care in cases of emergency, including cardio-pulmonary resuscitation, immediate life support measures and basic first aid procedures.

1.15.1 Proper training on neonatal resuscitation to provide appropriate care of newborns in the delivery room.

1.15.2 Adequate training on basic and advanced pediatric life support measures.

1.15.3 Adequate knowledge of pediatric and neonatal equipment's such as ampu bags, different endotracheal tube, and laryngoscope sizes.

1.16. Apply the appropriate pharmacological and nonpharmacological approaches to alleviate pain and provide palliative care for seriously ill people, aiming to relieve their suffering and improve their quality of life.

1.16.1 Apply appropriate pharmacological treatment for different pediatric and neonatal diseases considering the proper dose, duration, and intervals.

1.16.2 Consider non-pharmacological treatment in certain cases such as behavioral disorders.

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Competency Area II: The graduate as a health care promoter

2.3 Discuss the role of nutrition and physical activity in health.

2.3.1 Patient and relatives' education about the important role of proper nutrition in normal growth and development and prevention of overnutrition and malnutrition.

2.4 Identify the major health risks in his/her community, including demographic, occupational and environmental risks, endemic diseases, and prevalent chronic diseases.

2.4.1 Identify the sources and epidemiology of pediatric infectious diseases.

2.5 Describe the principles of disease prevention, and empower communities, specific groups or individuals by raising their awareness and building their capacity.

2.5.1 Provide care for specific groups including newborns, infants and children.

2.5.2 Plan for progress in the diagnosis, treatment and prevention of infectious disease and its application for community development.

2.5.3 Provide adequate information about the routine compulsory vaccines in Egypt in addition to the non-compulsory special vaccines.

Competency Area III: The graduated as a professional

3.1 Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.

3.1.1 Committed to wearing the white coat and show the department's ID card.

3.1.2 Treat all patients equally, and avoid stigmatizing any category regardless of their social, cultural, ethnic backgrounds, or their disabilities.

3.1.3 Practice good listening and self-learning.

3.1.4 Practice the value of teamwork by acting in small groups with adequate cooperation with his/her colleagues.

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3.1.5 Recognize basics of medico-legal aspects of practice, malpractice and avoid common medical errors.

3.4. Treat all patients equally, and avoid stigmatizing any category regardless of their social, cultural, ethnic backgrounds, or their disabilities.

3.4.1 Provide the necessary care for all patients similarly regardless of their social, cultural backgrounds.

3.5. Ensure confidentiality and privacy of patients' information.

3.5.1 Respect the patient's and/or relatives rights and privacy about the clinical condition.

3.8. Refer patients to appropriate health facility at the appropriate stage.

3.8.1 Refer patients who need special unavailable care to an appropriate health facility that can provide him with the necessary medical care.

3.8.2 Ensure safety precautions while transporting the patients.

Competency Area IV: The graduate as a scholar and scientist

4.5 Identify various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of illness/disease and explain the ways in which they operate on the body (pathogenesis).

4.5.1 Discuss pathophysiology and pathogenesis of various pediatric diseases.

4.5.2 Identify causes and different types of inflammation and inflammatory cells with signs and symptoms of acute inflammation of pediatric diseases.

4.5.3 Describe the mode of inheritance of different genetic disorders.

4.6 Describe altered structure and function of the body and its major organ systems that are seen in various diseases and conditions.

4.6.1 Explain the effect of insufficient nutrition and overnutrition on child health.

4.6.2 Discuss aspects of growth and development.

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Competency Area V: The graduate as a member of the health team and system

5.3 Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports collaborative work.

5.3.1 Implement collaborative teamwork during small group teaching (SDL).

Competency Area VI: The graduate as a lifelong learner and researcher

6.3 Identify opportunities and use various resources for learning.

6.3.1 Interacts positively with colleagues, peers and professors on web pages.

6.3.2 Use various resources in collecting information (Web-based learning, SDL).

6.6 Effectively manage learning time and resources and set priorities (PBL and Assignment)

6.6.1 Achieve and perform the required duties from him on time (assignments).

4 – Module Contents

1. Theoretical lectures

| NO | TITLE | HOURS |
|-----|---------------------------------------|-------|
| L1 | Growth and development. | 2 h |
| L2 | Preventive medicine. | 2 h |
| L3 | Behavioral disorders. | 2 h |
| L4 | Diabetes mellites: Type 1 and type 2. | 2 h |
| L5 | Short stature. | 2 h |
| L6 | Puberty: physiology and disorders. | 2 h |
| L7 | Hypothyroidism. | 2 h |
| L8 | Shock. | 2 h |
| L9 | Respiratory failure. | 2 h |
| L10 | Coma. | 2 h |
| L11 | Poisoning. | 2 h |

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العنوان: شارع الجيش، كفر الشيخ، جمهورية مصر العربية

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| | | |
|--------------|--|------------|
| L12 | Cardio-pulmonary resuscitation. | 2 h |
| L13 | Prematurity. | 2 h |
| L14 | Neonatal resuscitation. | 2 h |
| L15 | Neonatal respiratory distress. | 2 h |
| L16 | Neonatal hematological diseases. | 2 h |
| L17 | Neonatal jaundice. | 2 h |
| L18 | Neonatal sepsis. | 2 h |
| L19 | Fever: definition, types, fever with unknown origin. | 2 h |
| L20 | Bacterial infectious diseases. | 2 h |
| L21 | Viral infectious diseases. | 2 h |
| L22 | Parasitic infectious diseases. | 2 h |
| L23 | Down syndrome. | 2 h |
| L24 | Mode of inheritance. | 2 h |
| L25 | Teratogenicity and mutagens. | 2 h |
| L26 | Infant feeding. | 2 h |
| L27 | Rickets. | 2 h |
| L28 | Malnutrition: marasmus and kwashiorkor. | 2 h |
| L29 | Electrolyte disturbance. | 2 h |
| L30 | Fever with rash. | 2 h |
| Total | | 60h |

2. Practical:

| NO | TITLE | HOURS |
|----|----------------------|-------|
| L1 | History taking. | 3 h |
| L2 | General examination. | 3 h |

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| | | |
|-----|---|------|
| L3 | Cardiac examination. | 3 h |
| L4 | Abdominal examination. | 3 h |
| L5 | Chest examination. | 3 h |
| L6 | Neurological examination. | 3 h |
| L7 | Rickets: clinical case and visual aids. | 3 h |
| L8 | Kwashiorkor + OSCE (oedema & complexion) | 3 h |
| L9 | Marasmus + OSCE (anthropometry & growth charts) | 3 h |
| L10 | Hypothyroidism: clinical case and visual aids. | 3 h |
| L11 | OSCE (Growth charts) | 3 h |
| L12 | Clinical examination & OSCE (Hand on) | 3 h |
| L13 | Down syndrome: clinical case and visual aids. | 3 h |
| L14 | Mode of inheritance: visual aids. | 3 h |
| L15 | Pediatric resuscitation + OSCE (chest compression & airway opening) | 3 h |
| L16 | Meningitis + OSCE (meningeal irritation signs) | 3 hs |
| L17 | OSCE (Hand on) | 3 h |
| L18 | Fever with rash: visual aids. | 3 h |
| L19 | OSCE (general examination) | 3 h |
| L20 | Neonatal resuscitation + OSCE (PPV & chest compression) | 3 h |
| L21 | Arterial blood gases analysis. | 3 h |
| L22 | Tools and visual aids (1) | 3 h |
| L23 | OSCE (Hand on) | 3 h |
| L24 | Growth and development: visual aids. | 3 h |
| L25 | Birth injury: visual aids & clinical scenario | 3 h |
| L26 | Tools and visual aids (2) | 3 h |

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| | | |
|-----|-----------------------|-----|
| L27 | Sheet discussion | 3 h |
| L28 | OSCE Revision 1 | 3 h |
| L29 | OSCE Revision 2 | 3h |
| L30 | OSCE MOC examination. | 3 h |

Teaching methods

Lectures:

Conducted by a Professor/assistant Professor and introduce the essential concepts and knowledge, the identification of scientific backgrounds, the explanation of complicated issues and topics and the potential for clinical application.

Tutorial classes

Conducted by an assistant Professor and lecturer in small teaching groups to emphasize complicated medical topics and clinical cases. They are held in the corresponding department and are included in the teaching plan. [Division of students into groups alternating between direct contact and online lectures.]

Practical classes: 5 groups of 100 students, each in a teaching room at the department.

Students' activities: for (90min) through distributing variety of training exercises to be solved in the small groups (15 students each). Students have to complete the logbook of the corresponding topic together with some of the training exercises under supervision of a tutor.

Assessment

- **Formative:** This form of assessment is designed to give you feedback to help you to identify areas for improvement. It includes a mixture of MCQs, short answer-questions (SAQs), extended matching questions (EMQs), case-solving exercises and independent learning activities in all subjects. These will be given during tutorial sessions and practical. The answers are presented and discussed immediately with you after the assessment. The results will be made available to you.
- **Summative:** This type of assessment is used for judgment or decisions to be made about your performance. It serves as:

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- Verification of achievement for the student satisfying requirement
- Motivation of the student to maintain or improve performance
- Certification of performance
- Grades
- **Written Exams** will include multiple choice questions (MCQs) at the end of the module while at the end of the semester, short essays will be added too.
- **Practical examination:** Will be arranged by the departments.
- **SDL presentation:** Evaluation is done by a staff members committee that represents all the teaching departments according to the following rubric criteria.
- **Weight of Assessment:**

| Assessment Method | Date | Marks | % of Total |
|----------------------------------|--------------|-------|------------|
| end module Continuous assessment | End module | 50 | 30% |
| End semester | End semester | 70 | 40% |
| Practical exam | End module | 55 | 30% |
| Total | | 175 | 100% |

STUDENT'S RESPONSIBILITY

Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.

Textbooks

Montana A, Salerno M, Feola A, Asmundo A, Di Nunno N, Casella F, et al.

Risk Management and Recommendations for the Prevention of Fatal

Foreign Body Aspiration: Four Cases Aged 1.5 to 3 Years and Mini-Review of Literature. Int J Environ Res Public Health. 2020;17(13):4700.

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YEAR 4- 7TH SEMESTER

THE OGYN I MODULE

MODULE (3)

1- Basic information:

Course specifications of:

- **Program on which the module is given** Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- **Module title:** I.
- **Academic year/level:** 4th level /7th semester.
- **Code:** S7M3 /OG1
- **Credit hours for the module:**7
- **Study weeks:** (5).
- **Departments offering the module:**
 - **Department of Obstetrics and Gynecology**
 - Department of Obstetrics and gynecology.
 - Department of Gastroenterology.
 - Department of cardiology.
 - Department of Physiology.
 - Department of Radiology.
 - Department of Chest.
 - Department of Internal Medicine.
 - Department of Neurology

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| Course name | Lectures | Practical (X3) | SDL (X3) | Credit hours |
|-------------|----------|-------------------|-------------|--------------|
| Obstetrics | 60 | 40 | 5 | 7 |

| | lectures | Practical | SDL |
|---------------------------|-----------|-----------|----------|
| Obstetrics and gynecology | 53 | 32 | 5 |
| Cardiology | 1 | 1 | |
| Gastroenterology | 1 | 1 | |
| Physiology | 1 | - | |
| Radiology | - | 4 | |
| Chest | 1 | 1 | |
| Neurology | 1 | - | |
| Internal medicine | 2 | 1 | |
| Total number | 60 | 40 | 5 |

2. Overall aim:

At the end of the Module the students will be able to:

- Perform both comprehensive and problem-focused histories and physical examination of the pregnant female.
- Synthesize the data obtained from the history and physical to arrive at a diagnosis and management plan for patients presenting in the typical manner with the common obstetric conditions.

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- Show logical reasoning and decision-making on options for management for common Obstetric conditions.
- Consider the possibility of pregnancy occurring in any woman within the reproductive age.
- range who presents for medical evaluation and care.
- Describe the components of basic prenatal care.
- Perform some procedures for obstetrics.
- Assist in uncomplicated vaginal delivery.
- Demonstrate interpersonal and communication skills:
- Communicate about a new patient in both an oral presentation and a written note that presents subjective and objective data in a succinct and organized manner and is followed by a realistic assessment and plan.

3. Learning outcomes (LOs)

By the end of this module the student will be able to:

Competency Area I: The graduate as a health care provider

1.1. Take and record a structured, patient centered history.

1.1.1. Explain the importance of taking a comprehensive history from the obstetric patients.

1.2. Adopt an empathic and holistic approach to the patients and their problems.

1.2.1. Recognize the role of empathy & psychological support to the patient eg. the recurrent miscarriage patients

1.6. Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.

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1.6.1 Identify the importance of the investigation done in booking visit of antenatal care.

1.6.2 Differentiate diagnostic tests commonly used for pre-eclampsia gestational diabetes.

1.6.3 Judge results of ultrasound anomaly scans and apply them.

1.8. Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand.

1.10.2 Illustrate liver and kidney functions.

1.10.3 Clarify steps of glucose tolerance tests

1.10.4 Recognize proteinuria in urine analysis of pregnant female.

1.9 Retrieve, analyze, and evaluate relevant and current data from literature, using information technologies and library resources, in order to help solve a clinical problem based on evidence (EBM).

1.9.1. Analyze and compare treatment guidelines from literature.

1.9.2. Search for relevant information which helps him in solving clinical problems (Web-based learning, Self-learning and PBL).

1.9.3. Evaluate data about common medical disorders in pregnancy.

1.10. Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.

1.10.1. Interpret the results of blood pressure measurement, c.b.c and urine analysis in diagnosis of pre-eclampsia.

1.10.2. Identify different management strategies in different cases of abnormal pregnancy and abnormal labor.

1.10.3. Match proper drugs for selected important diseases based on patient's age, weight, health condition and drug safety during pregnancy.

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Competency area II: The graduate as a health care promoter

2.4. Identify the major health risks in his/her community, including demographic, occupational and environmental risks; endemic diseases, and prevalent chronic diseases.

- 2.4.1 Describe parasitological features and life cycle of Parasites inhabiting blood.
- 2.4.2 Clarify the clinical perspectives of Parasites affecting the blood.
- 2.4.3 Describe different types of anemia, clinical features and investigations.
- 2.4.4 Describe pathogenesis of anemia.

2.9 Adopt suitable measures for infection control.

- 2.9.1 Clarify clinical picture, diagnostic, therapeutic and preventive interventions against different microbes and Parasites inhabiting blood.

Competency Area III: The graduated as a professional

3.1 Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.

- 3.1.1 Demonstrate respect to all patients irrespective to their socioeconomic levels, culture or religious beliefs and use language appropriate to the patient's culture.
- 3.1.2 Recognize and effectively deal with unethical behavior of other members of healthcare team.

Competency Area IV: The graduate as a scholar and scientist

4.1 Describe normal structure of the body and its major organ systems and explain their functions.

- 4.1.1 Identify the anatomy of pregnant uterus.

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4.1.2 Clarify physiology of conception and mechanisms of normal labor.

4.2 Explain the molecular, biochemical, and cellular mechanisms

Important in maintaining the body's homeostasis.

4.2.1 Recognize the physiological changes in pregnancy.

4.2.2 Conclude the pathogenesis of condition of abnormal pregnancy.

4.7. Describe drug actions: therapeutics and pharmacokinetics; side effects and interactions, including multiple treatments, long term conditions and non-prescribed medication; and effects on the population.

4.7.1 Outline treatment of medical disorders in pregnancy.

4.7.2. Suggest lines of therapy in cases of abnormal pregnancy

Competency Area V: The graduate as a member of the health team and system

5.1. Respect colleagues and other health care professionals and work cooperatively with them, negotiating overlapping and shared responsibilities, and engaging in shared decision-making for effective patient management.

5.1.1. Communicate effectively with other health care professionals to maximize patient benefits and minimize the risk of errors.

5.1.2. Cooperate with other colleagues to provide a full understanding of clinical cases.

5.3 Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports collaborative work.

5.3.2 Implement collaborative teamwork during small group teaching (SDL).

5.6. Evaluate his/her work and that of others using constructive feedback.

5.6.1 Monitor the effectiveness and side effects of iron therapy.

5.6.2 Report adverse drug effects and decrease drug-drug interactions.

Competency Area VI: The graduate as a lifelong learner and researcher

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6.6. Identify opportunities and use various resources for learning.

6.6.1. Apply information technology effectively in the field of obs & gyn to clarify the latest guidance in management of cases.

6.6.2. Recognize the importance of life-long self-learning and give a strong commitment to it.

4 – Module Contents

1. Theoretical lectures

| NO | TITLE | DEPARTMENT | HOURS |
|----|--|---------------------------|-------|
| L1 | Physiology of conception Placenta & fetal membranes & fetal circulation | PHYSIOLOGY | 1h |
| L2 | Diagnosis of normal pregnancy Antenatal care & High-risk pregnancy | Obstetrics and gynecology | 2h |
| L3 | Bleeding in early pregnancy (abortion) | Obstetrics and gynecology | 2h |
| L4 | Bleeding in early pregnancy (Ectopic pregnancy) | Obstetrics and gynecology | 2h |
| L5 | Bleeding in early pregnancy GTD) | Obstetrics and gynecology | 2h |
| L6 | Vomiting with pregnancy, HEG | Obstetrics and gynecology | 2h |
| L7 | Fetal growth disorder (IUGR & Macrosomia) | Obstetrics and gynecology | 2h |
| L8 | Preterm labor Post –term pregnancy | Obstetrics and gynecology | 2h |

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| | | | |
|-----|--|---------------------------|----|
| L9 | Multifetal pregnancy | Obstetrics and gynecology | 2h |
| L10 | RH Isoimmunization | Obstetrics and gynecology | 2h |
| L11 | Intrauterine fetal death | Obstetrics and gynecology | 2h |
| L12 | Amniotic fluid Abnormalities | Obstetrics and gynecology | 2h |
| L13 | Antepartum hemorrhage (Placenta previa) Antepartum hemorrhage (vasa previa) | Obstetrics and gynecology | 2h |
| L14 | Antepartum hemorrhage (accidental Hemorrhage) DIC | Obstetrics and gynecology | 2h |
| L15 | HPN with pregnancy | Obstetrics and gynecology | 2h |
| L16 | DM with pregnancy | INTERNAL MEDICINE | 1h |
| L17 | Cardiac disorder with pregnancy | CARDIOLOGY | 1h |
| L18 | Asthma with pregnancy | CHEST | 1h |
| L19 | Epilepsy with pregnancy | NEUROLOGY | 1h |
| L20 | Thyroid disorder with pregnancy Anemia with pregnancy | INTERNAL MEDICINE | 1h |
| L21 | Jaundice with pregnancy | GIT | 1h |
| L22 | Surgical disorders with pregnancy Pyelonephritis with pregnancy | Obstetrics and gynecology | 2h |
| L23 | Normal labor (passenger) | Obstetrics and gynecology | 2h |

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| | | | |
|-----|---|---------------------------|----|
| | Normal labor (passage) | gynecology | |
| L24 | Normal labor (Power) Mechanism of normal Management of normal labor | Obstetrics and gynecology | 2h |
| L25 | Immediate care of newborn Episiotomy Obstetric anaesthesia | Obstetrics and gynecology | 2h |
| L26 | Introduction to abnormal presentation Occipitoposterior position | Obstetrics and gynecology | 2h |
| L27 | Face & brow presentation Shoulder presentation Complex presentation | Obstetrics and gynecology | 2h |
| L28 | Breech presentation Cord presentation & prolapse | Obstetrics and gynecology | 2h |
| L29 | Abnormal uterine action | Obstetrics and gynecology | 2h |
| L30 | Contracted pelvis & pelvic outlet contraction & Cpd Obstructed labor, shoulder dystocia & soft tissue dystocia | Obstetrics and gynecology | 2h |
| L31 | Third stage abnormalities | Obstetrics and gynecology | 2h |
| L32 | Third stage abnormalities Acute uterine inversion | Obstetrics and gynecology | 2h |
| L33 | Maternal injuries (cervical & perineal tears) (rupture uterus) | Obstetrics and gynecology | 2h |
| L34 | Obstetric shock | Obstetrics and gynecology | 2h |

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| | | | |
|-----|---|------------------------------|----|
| | Puerperium Induction of labor & abortion | gynecology | |
| L35 | Operative vaginal delivery C.S | Obstetrics and gynecology | 1h |

2. Practical:

| No. | Title | Department | Hours |
|-----|---|------------------------------|-------|
| L1 | Obstetric history | Obstetrics and gynecology | 3h |
| L2 | Obstetric history | Obstetrics and gynecology | 3h |
| L3 | Obstetric exam | Obstetrics and gynecology | 3h |
| L4 | Obstetric exam | Obstetrics and gynecology | 3h |
| L5 | Basics of u/s Congenital anomalies | Radiology | 6h |
| L6 | Doppler u/s | Radiology | 6h |
| L7 | 1 st trimester scan | Obstetrics and gynecology | 3h |
| L8 | 2 nd &3 rd trimester scan | Obstetrics and gynecology | 3h |
| L9 | Ctg | Obstetrics and gynecology | 3h |
| L10 | Instruments | Obstetrics and gynecology | 3h |
| L11 | Bleeding in early pregnancy case scenario (abortion) | Obstetrics and gynecology | 3h |

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| | | | |
|-----|---|---------------------------|----|
| L12 | Bleeding in early pregnancy case scenario (ectopic) | Obstetrics and gynecology | 3h |
| L13 | Antepartum hemorrhage case scenario (p.p) | Obstetrics and gynecology | 3h |
| L14 | Antepartum hemorrhage case scenario(accidental) | Obstetrics and gynecology | 3h |
| L15 | Hypertension case scenario | Obstetrics and gynecology | 3h |
| L16 | Diabetes mellitus case scenario | Internal Medicine | 3h |
| L17 | HEG case scenario | Obstetrics and gynecology | 3h |
| L18 | Anemia with pregnancy case scenario | Obstetrics and gynecology | 3h |
| L19 | Amniotic fluid Abnormalities case scenario | Obstetrics and gynecology | 3h |
| L20 | Fetal growth disorder case scenario | Obstetrics and gynecology | 6h |
| L21 | Cardiac disorder with pregnancy case scenario | Cardiology | 3H |
| L22 | Asthma with pregnancy case scenario | Chest | 3H |
| L23 | Jaundice with pregnancy case scenario | GIT | 3H |
| L24 | Pyelonephritis with pregnancy case scenario | Obstetrics and gynecology | 6h |
| L25 | Thyroid disorder with pregnancy case scenario | Internal Medicine | 3H |
| L26 | Epilepsy with pregnancy case scenario | Obstetrics and gynecology | 3h |
| L27 | Partogram | Obstetrics and | 3h |

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| | | | |
|-----|--|---------------------------|----|
| | | gynecology | |
| L28 | abnormal presentation case scenario (o. p) | Obstetrics and gynecology | 6h |
| L29 | case scenario(breech) | Obstetrics and gynecology | 6h |
| L30 | Shoulder dystocia case scenario | Obstetrics and gynecology | 3h |
| L31 | Cord prolapses case scenario | Obstetrics and gynecology | 3h |
| L32 | PPH case scenario (atony) | Obstetrics and gynecology | 3h |
| L33 | PPH case scenario (retained placenta) | Obstetrics and gynecology | 3h |
| L34 | Shoulder dystocia case scenario | Obstetrics and gynecology | 3h |
| L35 | Operative | Obstetrics and gynecology | 3h |

Teaching methods

Lectures:

Conducted by a Professor/assistant Professor and introduce the essential concepts and knowledge, the identification of scientific backgrounds, the explanation of complicated issues and topics and the potential for clinical application.

Tutorial classes

Conducted by an assistant Professor and lecturer in small teaching groups to emphasize complicated medical topics and clinical cases. They are held in the corresponding department and are included in the teaching plan. [Division of students into groups alternating between direct contact and online lectures.]

Practical classes: 5 groups of 100 students, each in a teaching room at the department.

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Students' activities: for (90min) through distributing variety of training exercises to be solved in the small groups (15 students each) using a white board for each subgroup. Students have to complete the logbook of the corresponding topic together with some of the training exercises under supervision of a tutor.

Assessment

- **Formative:** This form of assessment is designed to give you feedback to help you to identify areas for improvement. It includes a mixture of MCQs, short answer-questions (SAQs), extended matching questions (EMQs), case-solving exercises and independent learning activities in all subjects. These will be given during tutorial sessions and practical. The answers are presented and discussed immediately with you after the assessment. The results will be made available to you.
- **Summative:** This type of assessment is used for judgment or decisions to be made about your performance. It serves as:
 - Verification of achievement for the student satisfying requirement
 - Motivation of the student to maintain or improve performance
 - Certification of performance
 - Grades

| Assessment Method | Date | Marks | % of Total |
|-------------------------------------|--------------|-------|------------|
| f. end module Continuous assessment | End module | 50 | 30% |
| 7. End semester | End semester | 70 | 40% |
| Practical | | 55 | 30% |

- **Written Exams** will include multiple choice questions (MCQs) at the end of the module while at the end of the semester, short essays will be added too.
- **Practical examination:** Will be arranged by the departments.

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- **SDL presentation:** Evaluation is done by a staff members committee that represents all the teaching departments according to the following rubric criteria.

STUDENT'S RESPONSIBILITY

Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.

If there is anything that the module coordinator can do to assist you during the course, please feel free to contact him.

Text books

Gary F Cunningham, Kenneth J. Leveno, Steven L. Bloom, Jodi S. Dashe, Barbara L. Hoffman, Brian M. Casey, Catherine Y. Spong. William's Gynecology. 4th Edition, USA.

McGraw Hill / Medical, 2020 • Louise C. Kenny, Jenny E. Myers. 2017, Gynaecology by Ten teachers. 20th Edition, USA Taylor and Francis

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YEAR 4- 8TH SEMESTER

| النهائية العظمى | الدرجات | | | الحزم الدراسية (Modules) | | | المستوى الرابع – الفصل الثامن |
|--------------------|------------------|--------------------------|------------------------|-------------------------------------|-------|-----------------|-------------------------------|
| | التحريري % 40 | العملى 30 (OSPE) % | اعمال السنة 30 % | Name | Weeks | Credit hours | |
| 75 | 30 | 25 | 20 | Surgery (IIIa), Medicine (III a) | 3 | 3 | |
| 75 | 30 | 25 | 20 | Surgery (IIIb), Medicine (III b) | 3 | 3 | |
| 175 | 70 | 55 | 50 | Pediatrics (II) | 5 | 7 | |
| 175 | 70 | 55 | 50 | OGYN (II) | 5 | 7 | |
| 500 | | | | | 16 | 20 | المجموع |

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YEAR 4- 8TH SEMESTER

MODULE (1)

SURGERY (IIIA), MEDICINE (III A) MODULE

1- Basic information:

Course specifications of:

- Program on which the module is given Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- Module title: Surgery (IIIa), Medicine (III a).
- Academic year/level: 4th level /8th semester.
- Code: S8M1/S3aM3a
- Credit hours for the module: 3
- Study weeks: (3)
- Departments offering the module:
 - Departments of Rheumatology and Orthopedic surgery.

Teaching departments

| Course Title | Contact Hours | | | | Credit hours |
|--------------|---------------|----------|-----|-----|--------------|
| | Lectures | clinical | CBL | SDL | |
| ORTHOPEDIC | 14 | 6 | 1.5 | 1 | 22.5 |
| RHEUMATOLOGY | 14 | 6 | 1.5 | 1 | 22.5 |

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2. Overall aim:

At the end of the Module the students will be able to:

- Describe the physician patient relationship.
- Identify orthopedic and rheumatological complaint .
- Understand the biological, psychological and socio-cultural aspects of human behavior across the lifespan.
- Understand the relationship between special habit and health life
- Understand the effect of chronic diseases on patient health.
- Understand the developmental issues during Infancy, Childhood and Adolescence.
- Describe the personal and professional issues that may positively and negatively impact on the patient.

3. Learning outcomes (LOs)

By the end of this module the student will be able to:

Competency Area I: The graduate as a health care provider

1.1. Take and record a structured, patient centered history.

1.1.1. Diagnose orthopedic problems and emergencies

1.6. Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.

1.6.1. Recognize causes, clinical manifestation, investigations and management of orthopaedic disorders as osteomyelitis, bone tumors and metabolic bone diseases.

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1.10. Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.

1.10.1. Select and interpret appropriate imaging techniques in detection and management of orthopaedic disorders.

Competency Area II: The graduate as a health care promoter

2.4 Identify the major health risks in his/her community, including demographic, occupational and environmental risks; endemic diseases, and prevalent chronic diseases.

2.4.1. Demonstrate knowledge of causes, investigations and treatments for disorders of the body skeleton.

2.5 Describe the principles of disease prevention, and empower communities, specific groups or individuals by raising their awareness and bulding their capacity.

2.5.1 Distinguish the danger of handling and use of infectious agents on community and environment as a part of their ethical heritage.

2.5.2 Plan for progress in the diagnosis, treatment and prevention of infectious disease and its application for community development.

2.6 Recognize the epidemiology of common diseases within his/her community and apply the systematic approaches useful in reducing the incidence and prevalence of those diseases.

2.6.1. Demonstrate knowledge to etiology, pathophysiology and different treatment of orthopaedic disorders.

Competency Area III: The graduated as a professional

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Competency Area III: The graduated as a professional

3.1. Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.

3.1.1 Reflect on and assess his/her performance using various performance indicators and information sources.

3.1.3 Acquire the skills of good listening and self-learning.

3.1.4 Practice the value of teamwork by acting in small groups with adequate cooperation with his/her colleagues.

3.5. Ensure confidentiality and privacy of patients' information.

3.5.1. Communicate effectively and sensitively with patients, relatives.

3.8. Refer patient to appropriate health facility at the appropriate stage.

3.8.1. Select different drugs based on the patient condition and in different situations.

Competency Area IV: The graduate as a scholar and scientist

4.5 Identify various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of illness / disease and explain the ways in which they operate on the body pathogenesis).

4.5.1 Discuss causes of cell injury and the different cellular responses to injury.

4.5.2 Identify causes and different types of inflammation and inflammatory cells with signs and symptoms of acute inflammation.

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Competency Area V: The graduate as a member of the health team and system

5.2 respect colleagues and other health care professionals and work cooperatively with them, negotiating overlapping and shared responsibilities and engaging in shared decision-making for effective patient management.

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

Competency Area VI: The graduate as a lifelong learner and researcher

6.3 Identify opportunities and use various resources for learning.

6.3.1 Interacts positively with colleagues, peers and professors on web pages.

6.3.2 Use various resources in collecting information (Web-based learning, SDL).

4- Module Contents

1. Theoretical lectures

| NO | TITLE | DEPARTMENT | HOURS |
|----|--------------------------------|------------|-------|
| L1 | Introduction to orthopedic | Orthopedic | 1.5h |
| L2 | Osteomyelitis&septic arthritis | | 1h |
| L3 | spondylolisthesis | | 1h |
| L4 | scoliosis | | 1.5h |

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
العنوان: شارع الجيش، كفر الشيخ، جمهورية مصر العربية

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| | | | |
|-----|----------------------------------|-------------|------|
| L5 | Bone tumors | | 1h |
| L6 | osteoarthritis | | 1h |
| L7 | Deformities around joints | | 1h |
| L8 | CTEV | | 1h |
| L9 | Cerebral palsy (CP) | | 1.5h |
| L10 | DDH | | 1h |
| L11 | Nerve injuries | | 1h |
| L12 | Metabolic disease | | 1h |
| L13 | Revision | | 2h |
| L14 | Introduction to joint disease | REUMATOLOGY | 1h |
| L15 | Introduction to electrodiagnosis | | 1h |
| L16 | Musculoskeletal examination | | 1.5h |
| L17 | Rheumatoid arthritis | | 1h |
| L18 | Degenerative joint disease | | 2h |
| L19 | Juvenile idiopathic arthritis | | 1.5h |
| L20 | Seronegative arthropathy | | 1h |
| L21 | Crystalline arthropathy | | 1h |
| L22 | Systemic lupus erythromatosis | | 1h |
| L23 | Osteoporosis | | 1h |
| L24 | Systemic sclerosis | | 1.5h |
| L25 | Vasculitis | | 1h |
| L26 | Physical modalities | | 1h |

2. Practical:

| No | Title | Department | Hours |
|----|---|-------------|-------|
| P1 | Sheet demonstration (history taking, general examination) | Orthopedics | 3h |
| P2 | Sheet demonstration (Hip and knee examination) | | 3h |

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| | | | |
|-----|---|-------------|----|
| P3 | Sheet demonstration (Spine and shoulder examination) | | 3h |
| P4 | Gait disorders and Traumatology assessment | | 3h |
| P5 | Tests of incoordination and instruments | | 3h |
| P6 | Special muscle examination | | 3h |
| P7 | Joint examination, analysis of musculoskeletal complaint | Reumatology | 3h |
| P8 | Introduction to electrodiagnosis | | 3h |
| P9 | Rheumatoid arthritis, Degenerative joint disease, Juvenile idiopathic arthritis | | 3h |
| P10 | Seronegative spondyloarthropathy Crystalline arthropathy | | 3h |
| P11 | Systemic lupus erythromatosis Osteoporosis | | 3h |
| P12 | Systemic sclerosis Vasculitis, Physical modalitis | | 3h |

Teaching methods

Lectures:

Conducted by a Professor/assistant Professor and introduce the essential concepts and knowledge, the identification of scientific backgrounds, the explanation of complicated issues and topics and the potential for clinical application.

Tutorial classes

Conducted by an assistant Professor and lecturer in small teaching groups to emphasize complicated medical topics and clinical cases. They are held in the corresponding department and are included in the teaching plan. [Division of students into groups alternating between direct contact and online lectures.]

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Practical classes: 5 groups of 100 students, each in a teaching room at the department.

Students' activities: for (90min) through distributing variety of training exercises to be solved in the small groups (15 students each). Students have to complete the logbook of the corresponding topic together with some of the training exercises under supervision of a tutor.

Assessment

- **Formative:** This form of assessment is designed to give you feedback to help you to identify areas for improvement. It includes a mixture of MCQs, short answer-questions (SAQs), extended matching questions (EMQs), case-solving exercises and independent learning activities in all subjects. These will be given during tutorial sessions and practical. The answers are presented and discussed immediately with you after the assessment. The results will be made available to you.
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 - Verification of achievement for the student satisfying requirement
 - Motivation of the student to maintain or improve performance.
 - Certification of performance
 - Grades
- **Written Exams** will include multiple choice questions (MCQs) at the end of the module while at the end of the semester, short essays will be added too.
- **Practical examination:** Will be arranged by the departments.
- **SDL presentation:** Evaluation is done by a staff members committee that represents all the teaching departments according to the following rubric criteria.

STUDENT'S RESPONSIBILITY

Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.

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If there is anything that the module coordinator can do to assist you during the course, please feel free to contact him.

Text books

Eltorai, A. E., Ebersson, C. P., & Daniels, A. H. (Eds.). (2018). Essential Orthopedic Review: Questions and Answers for Senior Medical Students. Springer.

Firestein, G. S., Budd, R. C., Gabriel, S. E., McInnes, I. B., & O'Dell, J. R. (2020). Firestein & Kelley's Textbook of Rheumatology-E-Book. Elsevier Health Sciences.

Klippel, J. H., Stone, J. H., Crofford, L. J., & White, P. H. (Eds.). (2008). Primer on the rheumatic diseases.

Brust J.M. (2019). CURRENT Diagnosis & Treatment: Neurology (3rd Edition). New York : McGrawHill.

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YEAR 4- 8TH SEMESTER MODULE (2) SURGERY (IIIB), MEDICINE (III B) MODULE

1- Basic information:

Course specifications of:

- Program on which the module is given Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- Module title: Surgery (IIIb), Medicine (III b).
- Academic year/level: 4th level /8th semester.
- Code: S8M2/S3bM3b
- Credit hours for the module: 3
- Study weeks: (3)
- Departments offering the module:
 - Departments of Neurosurgery and Neuropsychiatry.

Teaching departments

| Course Title | Contact Hours | | | | Credit hours |
|--------------|---------------|---------------|-----|----------|--------------|
| | Lectures | Clinical (X3) | CBL | SDL (X3) | |
| NEUROLOGY | 15 | 5 | 1.5 | 1 | 22.5 |
| NEUROSURGERY | 12 | 8 | 1.5 | 1 | 22.5 |

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2. Overall aim:

At the end of the Module the students will be able to:

- Describe the physician patient relationship.
- Identify orthopedic and rheumatological complaint .
- Understand the biological, psychological and socio-cultural aspects of human behavior across the lifespan.
- Understand the relationship between special habit and health life
- Understand the effect of chronic diseases on patient health.
- Understand the developmental issues during Infancy, Childhood and Adolescence.
- Describe the personal and professional issues that may positively and negatively impact on the patient.

3. Learning outcomes (LOs)

By the end of this module the student will be able to:

Competency Area I: The graduate as a health care provider

1.1. Take and record a structured, patient centered history.

1.1.1 Take and record a detailed neurological history.

1.1.2 Diagnose of neurological diseases

1.3. Assess the mental state of the patient.

1.3.1. Assess GCS, memory, attention and concentration of the patient.

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1.4. Perform appropriately timed full physical examination of patients appropriate to the age, gender, and clinical presentation of the patient while being culturally sensitive.

1.4.1 Judge the examination of motor, sensory, cerebellar system and cranial nerves.

1.6. Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.

1.6.1 Ask for NCS, EMG, VEP, MRI brain, spine and other laboratory investigation according to examination and history.

1.10. Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.

1.10.2 correlate the results of history, physical and laboratory tests to reach a meaningful diagnosis.

1.11. Perform diagnostic and intervention procedures in a skillful and safe manner, adapting to unanticipated findings or changing clinical circumstances.

1.11.1 Perform EMG, NCS and cerebral catheterization in a skillful and safe manner.

1.15. Provide the appropriate care in cases of emergency, including CPR, immediate life support measures and basic first aid procedures.

1.15.1 provide CPR, TPa injection and immediate life support in emergency cases

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1.16. Apply the appropriate pharmacological and nonpharmacological approaches to alleviate pain and provide palliative care for seriously ill people, aiming to relieve their suffering and improve their quality of life.

1.16.1 Prescribe pharmacological and physical therapy to manage the patient.

Competency Area II: The graduate as a health care promoter

2.1 Identify the basic determinants of health and principles of health improvement.

2.1.1 Take detailed history and correlated nature of patient lifestyle with medical condition.

2.2 Recognize the economic, psychological, social, and cultural factors that interfere with wellbeing.

2.2.1 Determine in details risk factors to help in welling and overcoming of obstacles.

Competency Area III: The graduated as a professional

3.1. Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.

3.1.1 Reflect on and assess his/her performance using various performance indicators and information sources.

3.1.2 Acquire the skills of good listening and self-learning.

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3.1.3 Practice the value of teamwork by acting in small groups with adequate cooperation with his/her colleagues.

3.2. Adhere to the professional standards and laws governing the practice and abide by the national code of ethics issued by the Egyptian Medical Syndicate.

3.2.1 Respect autonomy, confidentiality and adustice among patients

3.3. Respect the different cultural beliefs and values in the community they serve.

3.3.1 Apraise the impacts of various interventions and respect patient autonomy

3.4. Treat all patients equally, and avoid stigmatizing any category regardless of their social, cultural, ethnic backgrounds, or their disabilities.

3.4.1 provide equal opportunities for clinical examination and management for all patients.

3.5. Ensure confidentiality and privacy of patients' information.

3.5.1 communicate effectively and sensitively with patients and relatives

3.6. Recognize basics of medico-legal aspects of practice, malpractice and avoid common medical errors.

3.6.1 Take informed written consent from the patient.

Competency Area IV: The graduate as a scholar and scientist

4.1 Describe the normal structure of the body and its major organ systems and explain their functions.

4.1.1 Descibe anatomy of brain and spinal cord and determine the function of them.

4.1.2 Determine nerve supply and actions of each muscle.

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4.3 Recognize and describe main developmental changes in humans and the effect of development and aging on the individual and his family.

4.3.1 Correlate the pathogenesis and different personal factors

4.3.2 Determine normal and abnormal brain, spinal development.

4.3.3 Describe syndroms related to abnormal brain, spinal development and how to deal with them.

4.5 Identify various causes (genetic, developmental, metabolic, toxic , microbiologic , autoimmune , neoplastic , degenerative , and traumatic) of illness / disease and explain the ways in which they operate on the body pathogenesis).

4.5.1 Discuss causes of disease and mechanism of body action to deal with them.

4.5.2 Identify causes and different types of inflammation and inflammatory cells with signs and symptoms of acute inflammation.

Competency Area V: The graduate as a member of the health team and system

5.2 respect colleagues and other health care professionals and work cooperatively with them, negotiating overlapping and shared responsibilities and engaging in shared decision-making for effective patient management.

5.2.1 communicate effectively with physicians, other health professionals and health related agencies.

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5.9 Use health informatics to improve the quality of patient care.

5.9.1 Criticize research and knowledge to improve the healthy care.

Competency Area VI: The graduate as a lifelong learner and researcher

6.2 Develop, implement, monitor and revise a personal learning plan to enhance professional practice.

6.2.1 Enhance personal planning for improvement clinical practice by research, more and more scientific knowledge.

6.3 Identify opportunities and use various resources for learning.

6.3.1 Deal with colleagues, peers and professors on web pages.

6.3.2 Use various resources in collecting information (Web-based learning, SDL).

4- Module Contents

1. Theoretical lectures

| NO | TITLE | DEPARTMENT | HOURS |
|----|---|------------------|-------|
| L1 | Introduction to neuroscience and neurosurgery | NEUROSUR GERY | 1h |
| L2 | Traumatic brain injuries and spinal injuries | | 1h |
| L3 | Developmental anomalies in neurosurgery | | 1h |
| L4 | Hydrocephalus | | 1h |
| L5 | Peripheral nerve injuries & entrapment neuropathy | | 2h |
| L6 | Spinal pathologies | | 2h |

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| | | | |
|-----|------------------------------|-----------|------|
| L7 | Intracranial tumours | Neurology | 2h |
| L8 | Head injuries | | 2h |
| L9 | Cerebrovascular diseases | | 1h |
| L10 | Brain abscess | | 1.5h |
| L11 | Trigeminal neuralgia | | 1h |
| L12 | Revision for main topics | | 1h |
| L13 | Introduction to neurology | | 1h |
| L14 | Cerebrovascular stroke | | 1.5h |
| L15 | Headache | | 1h |
| L16 | Epilepsy | | 1h |
| L17 | Demyelinating disorders | | 1h |
| L18 | Diseases of spinal cord | | 1h |
| L19 | Motor neuron diseases | | 1h |
| L20 | Disease of muscle | | 1h |
| L21 | Polyneuropathy | | 1h |
| L22 | Cerebellar disorders | | 1h |
| L23 | Movement disorders | | 1h |
| L24 | Infections of nervous system | | 1h |
| L25 | Revision | | 1h |

2. Practical

| No | Title | Department | Hours |
|----|---|--------------|-------|
| P1 | Sheet demonstration (history taking – general examination) | NEUROSURGERY | 3h |
| P2 | Motor and sensory systems examination (quadri, hemi-and paraplegias – neuropathy disorders) | | 3h |
| P3 | Cranial nerves examination | | 3h |
| P4 | Head and spinal trauma (ABC & how to manage) | | 3h |

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| | | | |
|-----|--|-----------|----|
| P5 | Hydrocephalus | Neurology | 3h |
| P6 | Entrapment neuropathies (median, ulnar, radial nerves) | | 3h |
| P7 | Spinal pathologies | | 3h |
| P8 | Revision | | 3h |
| P9 | Sheet demonstration (history taking) | | 3h |
| P10 | Sheet demonstration (cranial nerves examination) | | 3h |
| P11 | Motor system examination (hemiplegia) and tests of incoordination (Ataxia) | | 3h |
| P12 | Sensory system examination (Neuropathy disorders and myopathy) | | 3h |
| P13 | Multiple sclerosis | | 3h |

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Assessment

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 - Certification of performance
 - Grades
- **Written Exams** will include multiple choice questions (MCQs) at the end of the module while at the end of the semester, short essays will be added too.
- **Practical examination:** Will be arranged by the departments.
- **SDL presentation:** Evaluation is done by a staff members committee that represents all the teaching departments according to the following rubric criteria.

STUDENT'S RESPONSIBILITY

Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.

If there is anything that the module coordinator can do to assist you during the course, please feel free to contact him.

Text books

Eltorai, A. E., Ebersson, C. P., & Daniels, A. H. (Eds.). (2018). Essential Orthopedic Review: Questions and Answers for Senior Medical Students. Springer.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

YEAR 4- 8TH SEMESTER THE PEDIATRICS II MODULE MODULE (3)

1- Basic information:

Course specifications of:

- **Program on which the course is given** Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- **Module title:** Pediatrics II.
- **Academic year/level:** 4th level /8th semester.
- **Code:** S8M3/P2
- **Credit hours for the module:** 7
- **Study weeks:** (5)
- **Departments offering the module:**
 - Department of Pediatrics

| | lectures | Practical (X3) | SDL (X3) |
|------------|----------|-------------------|-------------|
| Pediatrics | 72 | 30 | 3 |

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملزمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
العنوان: شارع الجيش، كفر الشيخ، جمهورية مصر العربية

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

1. Overall aim:

At the end of the Module the students will be able to:

- Know basic information about special pediatrics.
- Apply medical information and use it to solve clinical problems.
- Integrate different branches of medicine to prepare an efficient graduate.
- Urge students to be lifelong learners.

3. Learning outcomes (LOs)

By the end of this module the student will be able to:

Competency Area I: The graduate as a health care provider

1.1. Take and record a structured, patient centered history.

1.1.1 Take and record a structured, patient centered history in common pediatric diseases.

1.4. Perform appropriately timed full physical examination of patients appropriate to the age, gender, and clinical presentation of the patient while being culturally sensitive.

1.4.1 Perform full physical examination of the patient with detailed cardiovascular, chest, abdominal and neurological systems examination.

1.6. Select the appropriate investigations and interpret their results taking into consideration cost/effectiveness factors.

1.6.1 Select the appropriate investigations of common pediatric diseases and interpret their results taking into consideration cost/ effectiveness factors.

1.8 Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand.

1.8.1 Define the different terms in pediatric cardiovascular, respiratory, hematological, renal and neurological diseases.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزًا للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكًا فعالًا في الارتقاء بالخدمات الصحية محليًا وإقليميًا ودوليًا.

1.8.2 Define the international criteria for diagnosis of Rheumatic fever and infective endocarditis.

1.8.3 Demonstrate different types of pediatric diseases and emergencies.

1.8.4 Summarize the medically important pediatric GIT and hepatology diseases as regards their clinical manifestation, laboratory diagnosis, treatment, prevention and control of infectious diseases.

1.8.5 Analyze given clinical information even in absence of adequate data to reach a suitable diagnosis.

1.9 Retrieve, analyze, and evaluate relevant and current data from literature, using information technologies and library resources, in order to help solve a clinical problem based on evidence (EBM).

1.9.1 Perfectly arrange the efforts required to complete the tasks in specified time and identify opportunities and use various resources for learning.

1.9.2 Practice effectively using a written health record, electronic medical record, and other digital technology.

1.10. Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.

1.10.1 Discuss that most of pediatric diseases need integration of history, examination and investigations to reach diagnosis as nephrotic syndrome, infective endocarditis and Immune thrombocytopenic purpura.

1.13. Establish patient-centered management plans in partnership with the patient, his/her family and other health professionals as appropriate, using Evidence Based Medicine in management decisions.

1.13.1 Perform systematic approach for diagnosis and treatment of different gastrointestinal, hematological, renal, cardiac thoracic and CNS diseases.

1.13.2 Discuss the plan with the family of the patient and make their agreement.

1.14 Respect patients' rights and involve them and /or their families/carers in management decisions.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

1.14.1 Participate in the management decisions of the child with his family which raise the trust with the physician.

Competency Area II: The graduate as a health care promoter

2.4 Identify the major health risks in his/her community, including demographic, occupational and environmental risks, endemic diseases, and prevalent chronic diseases.

2.4.1 Identify the risk factors of some diseases as bronchial asthma in textile industrial areas, bilharzial endemic areas as a risk of hepatitis, outdoor foods for acute hepatitis A, overcrowded areas as a risk for rheumatic fever and dental procedure in patient with congenital heart diseases as a risk for infective endocarditis.

2.5 Describe the principles of disease prevention, and empower communities, specific groups or individuals by raising their awareness and building their capacity.

2.5.1 Recognize prevention of rheumatic fever in form of good eradication of group b streptococcal infection and prevention to infective endocarditis.

2.8 Identify vulnerable individuals that may be suffering from abuse or neglect and take the proper actions to safeguard their welfare.

2.8.1 Recognize care for cerebral palsy children and their families to avoid their abuse.

Competency Area III: The graduated as a professional

3.1 Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.

3.1.1 Reflect on and assess his/her performance using various performance indicators and information sources.

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3.1.2 Acquire the skills of good listening and self-learning.

3.1.3 Practice the value of teamwork by acting in small groups with adequate cooperation with his/her colleagues.

3.1.5 Integrate in inter-professional activities and collaborative learning to continuously improve personal practice and contribute to collective improvements in practice.

3.4. Treat all patients equally, and avoid stigmatizing any category regardless of their social, cultural, ethnic backgrounds, or their disabilities.

3.4.1 Discuss treating all patients fairly and avoid recommendation of some patients.

3.5. Ensure confidentiality and privacy of patients' information.

3.5.1 Demonstrated the importance of privacy of the patient which increases the trust between the physician and the patient.

3.5.2 Discuss the privacy of adolescent patients even in front of their parents.

3.6. Recognize basics of medico-legal aspects of practice, malpractice and avoid common medical errors.

3.6.1 Recognize the basics of treating common pediatric problems and avoid malpractice by referring the patient to specialist in the disease.

3.8. Refer patients to appropriate health facility at the appropriate stage.

3.8.1 Recognize the stage at which the patient should be referred and do not be late to the dangerous stage of the disease.

3.9. Identify and report any unprofessional and unethical behaviors or physical or mental conditions related to himself, colleagues or any other person that might jeopardize patients' safety.

3.9.1 Discuss honesty in treating the patient and report any unethical behaviors.

Competency Area IV: The graduate as a scholar and scientist

4.1 Describe the normal structure of the body and its major organ systems and explain their functions.

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4.1.1 Describe the normal structure of cardiovascular, chest, gastrointestinal, renal and neurological systems and their function.

4.6 Describe altered structure and function of the body and its major organ systems that are seen in various diseases and conditions.

4.6.1 Interpret the pathogenesis of different cardiac, renal, neurological and hematological diseases.

4.6.2 Explain the effect of different neurological diseases on child health.

4.6.3 Discuss aspects of renal impairment.

4.6.4 Discuss the altered function of hematological system.

4.6.5 Discuss the hyper response of immune system in picture of bronchial asthma.

4.8 Demonstrate basic sciences specific practical skills and procedures relevant to future practice, recognizing their scientific basis, and interpret common diagnostic modalities, including: imaging, electrocardiograms, laboratory assays, pathologic studies, and functional assessment tests.

4.8.1 Demonstrate some imaging modalities such as chest x ray in common congenital heart diseases and common chest infections and electrocardiograms finding in common cardiac problems.

4.8.2 Discuss the interpretation of complete blood count in common hematological diseases and urine report in common renal diseases and infections.

Competency Area V: The graduate as a member of the health team and system

5.1 Recognize the important role played by other health care professions in patients' management.

5.1.1 Explain the effect of team work on patient health.

5.2 Respect colleagues and other health care professionals and work cooperatively with them, negotiating overlapping and shared responsibilities and engaging in shared decision-making for effective patient management.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

5.2.1 Discuss that most pediatric diseases need more than one sub-specialty for its diagnosis and management.

5.2.2 Explain the importance of respect of other colleagues and its effect on trust of the patient.

5.3 Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports collaborative work.

5.3.1 Implement collaborative teamwork during small group teaching (SDL).

Competency Area VI: The graduate as a lifelong learner and researcher

6.3 Identify opportunities and use various resources for learning.

6.3.1 Interacts positively with colleagues, peers and professors on web pages.

6.3.2 Use various resources in collecting information (Web-based learning, SDL).

6.6 Effectively manage learning time and resources and set priorities (PBL and Assignment)

6.6.1 Achieve and perform the required duties from him on time (assignments).

4- Module Contents

1. Theoretical lectures

| NO | TITLE | HOURS |
|----|---|-------|
| L1 | Acute diarrhea | 2 h |
| L2 | Management of acute diarrhea& assessment of dehydration | 2 h |
| L3 | Acute hepatitis | 2 h |
| L4 | Chronic hepatitis | 2 h |
| L5 | Cholestasis | 2 h |
| L6 | Upper respiratory tract infections | 2 h |
| L7 | Acute bronchiolitis | 2 h |
| L8 | Bronchial Asthma: pathogenesis and diagnosis | 2 h |
| L9 | Lines of treatment of bronchial asthma | 2 h |

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| | | |
|-----|---|-----|
| L10 | Lobar Pneumonia | 2 h |
| L11 | Bronchopneumonia | 2 h |
| L12 | Diagnosis of Acute rheumatic fever | 2 h |
| L13 | Lines of treatment of acute rheumatic fever | 2 h |
| L14 | Heart failure | 2 h |
| L15 | Infective endocarditis | 2 h |
| L16 | Congenital heart diseases: a cyanotic (left to right shunts & obstructive lesions) | 2 h |
| L17 | Cyanotic Congenital heart diseases: right to left shunts | 2h |
| L18 | Hematopoiesis | 2 h |
| L19 | Iron deficiency anemia | 2 h |
| L20 | Acute hemolytic anemia; G6PD | 2 h |
| L21 | Chronic hemolytic anemia: B- thalassemia | 2 h |
| L22 | Sickle cell anemia & aplastic anemia | 2 h |
| L23 | Hemostasis | 2 h |
| L24 | Differential diagnosis of purpura: Immune thrombocytopenic purpura & Henoch-Schonlein purpura | 2 h |
| L25 | Coagulation disorders: hemophilia A | 2 h |
| L26 | Lymphadenopathy & Leukemia | 2 h |
| L27 | Nephrotic syndrome | 2 h |
| L28 | Acute poststreptococcal glomerulonephritis | 2 h |
| L29 | Acute kidney injury | 2 h |
| L30 | Urinary tract infection | 2 h |
| L31 | Cerebral palsy | 2 h |
| L32 | Intellectual disability | 2 h |
| L33 | Epilepsy: epidemiology & classification | 2 h |
| L34 | Lines of treatment of different types of epilepsy | 2 h |

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| | | |
|-----|-------------------------------|-----|
| L35 | Seizures& febrile convulsions | 2 h |
| L36 | Floppy infant syndrome | 2 h |

2. Practical:

| NO | TITLE | HOURS |
|-----|--|-------|
| P1 | Cardiac examination | 3h |
| P2 | Chest examination | 3h |
| P3 | Neurological examination | 3h |
| P4 | OSCE (apex examination, percussion of the heart& cyanosis& clubbing) | 3h |
| P5 | OSCE (Tactile vocal fremitus, chest expansion & lymph nodes& edema) | 3h |
| P6 | OSCE (Neurological examination; muscle tone, reflexes, muscle power) | 3h |
| P7 | Gastroenteritis& grades of dehydration (PBL) | 3h |
| P8 | Differential diagnosis of wheezy chest, acute bronchiolitis case & auscultation of normal breathing sounds and wheezes | 3h |
| P9 | Pneumonia: clinical case & auscultation of crepitations | 3h |
| P10 | Pleural diseases: visual aids CXR (pleural effusion, pneumothorax) | 3h |
| P11 | Acute rheumatic fever: clinical case | 3h |
| P12 | Congenital heart diseases left to right shunts. Clinical case& auscultation of pansystolic murmur | 3h |
| P13 | Congenital cyanotic heart diseases: visual aids | 3h |
| P14 | Classification of anemia: CBC interpretation | 3h |
| P15 | Acute hemolytic anaemia: G6PD (PBL) | 3h |
| P16 | Chronic hemolytic anemia (Thalassemia): visual aids | 3h |
| P17 | OSCE (Hand on) | 3h |
| P18 | Differential diagnosis of purpura (ITP, HSP): visual aids | 3h |

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
العنوان: شارع الجيش، كفر الشيخ، جمهورية مصر العربية

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| | | |
|-----|---|----|
| P19 | Differential diagnosis of lymphadenopathy | 3h |
| P20 | Differential diagnosis of generalized edema & Nephrotic syndrome: clinical case | 3h |
| P21 | Urinary tract infection: urine report interpretation | 3h |
| P22 | Clinical types of cerebral palsy: clinical case | 3h |
| P23 | Differential diagnosis of flabby infant | 3h |
| P24 | OSCE (Hand on) | 3h |
| P25 | Tools and visual aids (1) | 3h |
| P26 | Tools and visual aids (2) | 3h |
| P27 | Sheet discussion | 3h |
| P28 | OSCE Revision 1 | 3h |
| P29 | OSCE Revision 2 | 3h |
| P30 | OSCE MOC examination. | 3h |

Teaching methods

Lectures:

Conducted by a Professor/assistant Professor and introduce the essential concepts and knowledge, the identification of scientific backgrounds, the explanation of complicated issues and topics and the potential for clinical application.

Tutorial classes

Conducted by an assistant Professor and lecturer in small teaching groups to emphasize complicated medical topics and clinical cases. They are held in the corresponding department and are included in the teaching plan. [Division of students into groups alternating between direct contact and online lectures.]

Practical classes: 5 groups of 100 students, each in a teaching room at the department.

Students' activities: for (90min) through distributing variety of training exercises to be solved in the small groups (15 students each). Students have to complete the logbook of the corresponding topic together with some of the training exercises under supervision of a tutor.

Assessment

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

- **Formative:** This form of assessment is designed to give you feedback to help you to identify areas for improvement. It includes a mixture of MCQs, short answer-questions (SAQs), extended matching questions (EMQs), case-solving exercises and independent learning activities in all subjects. These will be given during tutorial sessions and practical. The answers are presented and discussed immediately with you after the assessment. The results will be made available to you.
- **Summative:** This type of assessment is used for judgment or decisions to be made about your performance. It serves as:
 - Verification of achievement for the student satisfying requirement
 - Motivation of the student to maintain or improve performance
 - Certification of performance
 - Grades
- **Written Exams** will include multiple choice questions (MCQs) at the end of the module while at the end of the semester, short essays will be added too.
- **Practical examination:** Will be arranged by the departments.
- **SDL presentation:** Evaluation is done by a staff members committee that represents all the teaching departments according to the following rubric criteria.
- **Weight of Assessment:**

| Assessment Method | Date | Marks | % of Total |
|----------------------------------|--------------|-------|------------|
| end module Continuous assessment | End module | 50 | 30% |
| End semester | End semester | 70 | 40% |
| Practical exam | End module | 55 | 30% |
| Total | | 175 | 100% |

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STUDENT'S RESPONSIBILITY

Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.

Text books

Montana A, Salerno M, Feola A, Asmundo A, Di Nunno N, Casella F, et al.

Risk Management and Recommendations for the Prevention of Fatal

Foreign Body Aspiration: Four Cases Aged 1.5 to 3 Years and Mini-Review of Literature. Int J Environ Res Public Health. 2020;17(13):4700.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

YEAR 4, 8TH SEMESTER

THE OGYN II MODULE

MODULE (4)

1- Basic information:

Course specifications of:

- **Program on which the module is given** Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- **Module title:** OGYN II.
- **Academic year/level:** 4th level /8th semester.
- **Code:** S8M4 /OG2
- **Credit hours for the module:**7
- **Study weeks:** (5)
- **Departments offering the module:**
 - Department of Obstetrics and gynecology.
 - Department of Internal medicine.
 - Department of Surgery.
 - Department of Urology.
 - Department of Anatomy.
 - Department of Physiology.
 - Department of Pathology.
 - Department of Microbiology.
 - Department of Oncology.

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| Course name | Lectures | Practical (X3) | SDL (X3) | Credit hours |
|-------------|----------|----------------|----------|--------------|
| Gynecology | 72 | 28 | 5 | 7 |

Teaching departments

| | lectures | Practical | SDL |
|-------------------------|-----------|-----------|----------|
| Anatomy | 2 | - | |
| Physiology | 1 | - | |
| Microbiology | 2 | 1 | |
| Pathology | 4 | 2 | - |
| Internal medicine | 1 | - | |
| Obstetrics & gynecology | 57 | 24 | 5 |
| Surgery | 2 | - | |
| Urology | 2 | 1 | |
| Oncology | 1 | - | |
| Total | 72 | 28 | 5 |

2-Overall aim:

At the end of the Module the students will be able to:

- Know the basis for common clinical conditions and disorders, for clinical examination and performing simple clinical procedures related to the skin and female genitalia and apply basic medical science knowledge to clinical problem-solving.

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- Master basic ethical, professional, and communication skills and attitude essential for establishing and maintaining good doctor/patient relationship and appropriate attitudes with colleagues and para-medicals.
- Perform both comprehensive and problem-focused histories and physical examination of the female.
- Synthesize the data obtained from the history and physical to arrive at a diagnosis and management plan for patients presenting in the typical manner with the common gynecological conditions.
- Show logical reasoning and decision-making on options for management for common Gynecological conditions.
- Perform some procedures for gynecology.
- Demonstrate interpersonal and communication skills:
- Communicate about a new patient in both an oral presentation and a written note that presents subjective and objective data in a succinct and organized manner and is followed by a realistic assessment and plan.

3. Learning outcomes (LOs)

By the end of this module the student will be able to:

Competency Area I: The graduate as a health care provider

1.1. Take and record a structured, patient centered history.

1.1.1. Explain the importance of taking comprehensive history and performing relevant physical examination and providing information about infertility, amenorrhea, abnormal uterine bleeding, etc.

1.2. Adopt an empathic and holistic approach to the patients and their problems.

1.2.1. Express sympathy and kindness with postmenopausal women.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

1.4. Perform appropriately timed full physical examination of patients appropriate to the age, gender, and clinical presentation of the patient while being culturally sensitive.

1.4.1. Clarify the importance of full timed physical examination including general, abdominal, and local gynecological examination.

1.4.2. State the Tanner stages of breast and pubic hair development.

1.6. Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.

1.6.1. Assess infertility with basic diagnostic techniques (semen analysis, HSG, mid-luteal progesterone level).

1.6.2. Assess menstrual irregularities using different investigations.

1.6.3. Diagnose PID (ultrasound, laparoscopy , etc.).

1.6.4. Perform screening of cervical, endometrial, ovarian cancer.

1.6.5. Interpret results to reach the differential diagnosis.

1.8. Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand.

1.8.1. Define amenorrhea, infertility, pelvic inflammatory diseases, endometriosis, etc.

1.8.2. Differentiate between primary and secondary amenorrhea.

1.8.3. Clarify different causes of infertility.

1.8.4. Define hirsutism, puberty, menopause, etc.

1.8.5. Recognize abnormalities of menopause.

1.8.6. Criticize management of menopause with emphasis on hormone replacement therapy (HRT) and its protocols, cautions, and contraindications.

1.8.7. Explain the epidemiology and pathology of vulval, vaginal, cervical, uterine, and ovarian tumors.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

1.9. Retrieve, analyze, and evaluate relevant and current data from literature, using information technologies and library resources, in order to help solve a clinical problem based on evidence (EBM).

1.9.1. Analyze and compare treatment guidelines from literature.

1.9.2. Search for relevant information which helps him in solving clinical problems (Web-based learning, Self-learning and PBL).

1.10. Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.

1.10.1. List differential diagnosis of amenorrhea, abnormal uterine bleeding, PID, and sexually transmitted diseases.

1.11. Perform diagnostic and intervention procedures in a skillful and safe manner, adapting to unanticipated findings or changing clinical circumstances.

1.11.1. Evaluate the importance of hysteroscopy, laparoscopy, and D&C in gynecology.

1.11.2. List ART techniques, counsel couples about their efficacy and refer them to qualified specialists in the field, as needed.

1.12. Adopt strategies and apply measures that promote patient safety.

1.12.1. Mention the management of menopause with emphasis on hormone replacement therapy (HRT) and its protocols, cautions, and contraindications.

1.13. Establish patient-centered management plans in partnership with the patient, her family and other health professionals as appropriate, using Evidence Based Medicine in management decisions.

1.13.1. List the importance of multidisciplinary team in management decisions.

1.14. Respect patients' rights and involve them and /or their families in management decisions.

1.14.1. Discuss the patients' rights and their families in management decisions.

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1.16. Apply the appropriate pharmacological and non-pharmacological approaches to alleviate pain and provide palliative care for seriously ill people, aiming to relieve their suffering and improve their quality of life.

1.16.1. Identify different management strategies in different cases in gynecology (amenorrhea, abnormal uterine bleeding, endometriosis, fibroids, prolapse, urinary incontinence, and tumors of the genital tract).

1.16.2. Correlate proper drugs for selected important diseases based on patient's age, weight, health condition and drug safety.

Competency Area II: The graduate as a health care promoter

2.1 Identify the basic determinants of health and principles of health improvement.

2.1.1. State the physiological changes at time of puberty.

2.1.2. Describe the general principles of the development of the different parts of genital tract.

2.1.3. Describe the hormonal control of the menstrual cycle.

2.4 Identify the major health risks in her community, including demographic, occupational and environmental risks; endemic diseases, and prevalent chronic diseases.

2.4.1. List predisposing factors of acute PID.

2.4.2. Identify precipitating factors of urinary incontinence.

2.4.3. List the risk factors of uterine prolapse.

2.4.4. Clarify the predisposing factors of genital tract tumors.

2.5 Describe the principles of disease prevention, and empower communities, specific groups or individuals by raising their awareness and building their capacity.

2.5.1. Clarify preventive measures against sexually transmitted diseases.

2.5.2. State screening tools for early detection of genital tract tumors.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

2.7 Provide care for specific groups including pregnant women, newborns and infants, adolescents and the elderly.

2.7.1. Identify the high risk group to provide specific care for them.

2.9 Adopt suitable measures for infection control.

2.9.1. Clarify clinical picture, diagnostic, therapeutic and preventive interventions against different microbes and parasites inhabiting blood.

Competency Area III: The graduated as a professional

3.1. Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.

3.1.1. Demonstrate respect to all patients irrespective of their socioeconomic levels, culture or religious beliefs and use language appropriate to the patient's culture.

3.1.2. Recognize and effectively deal with unethical behavior of other members of healthcare team.

3.4. Treat all patients equally, and avoid stigmatizing any category regardless of their social, cultural, ethnic backgrounds, or their disabilities.

3.4.1. Respect all patients and treat them equally regardless their cultural, social, or their disabilities.

3.5. Ensure confidentiality and privacy of patients' information.

3.5.1 Ensure confidentiality and privacy of patients' information is essential.

3.8. Refer patients to appropriate health facility at the appropriate stage.

3.8.1. Recognize ART techniques, counsel couples about their efficacy and refer them to qualified specialists in the field, as needed.

3.8.2. Refer to qualified specialists in the oncology field.

Competency Area IV: The graduate as a scholar and scientist

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

4.1 Describe the normal structure of the body and its major organ systems and explain their functions.

- 4.1.1. List different parts of the vulva and their anatomical characteristics.
- 4.1.2. Describe the structure, axis, relations, and supports of the vagina.
- 4.1.3. State the different parts of the uterus, its relations, supports, blood supply.
- 4.1.4. Describe the anatomy of the pelvic floor and its support.
- 4.1.5. Describe the course of the pelvic part of the ureter.

4.3 Recognize and describe main developmental changes in humans and the effect of growth, development and aging on the individual and his family.

- 4.3.1. Define puberty and the physiological changes at the time of puberty.
- 4.3.2. Describe the physiological changes at time of menopause.
- 4.3.3. Express sympathy and kindness with postmenopausal women.

4.5 Identify various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of illness/disease and explain the ways in which they operate on the body (pathogenesis).

- 4.5.1. Describe the pathology of specific and non-specific chronic PID.
- 4.5.2. Demonstrate the pathology of uterine fibroids.
- 4.5.3. Explain the pathology of adenomyosis.

4.6 Describe altered structure and function of the body and its major organ systems that are seen in various diseases and conditions.

- 4.6.1. Describe the pathology of uterine fibroids.
- 4.6.2. Recognize the pathology of adenomyosis / endometriosis.
- 4.6.3. Describe different pathology of genital tract tumors.

4.7 Describe drug actions: therapeutics and pharmacokinetics; side effects and interactions, including multiple treatments, long term conditions and non-prescribed medication; and effects on the population.

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4.7.1. Demonstrate the mechanism of action of HRT in postmenopausal women and its hazards.

4.8 Demonstrate basic sciences specific practical skills and procedures relevant to future practice, recognizing their scientific basis, and interpret common diagnostic modalities, including: imaging, electrocardiograms, laboratory assays, pathologic studies, and functional assessment tests.

4.8.1. Clarify the importance of hystero-salpingo-gram (HSG) in gynecology.

4.8.2. Explain the basic principles of gynecological ultrasound.

4.8.3. Recognize the normal and abnormal values of the hormonal profile.

Competency Area V: The graduate as a member of the health team and system

5.1 Recognize the important role played by other health care professions in patients' management.

5.1.1. Recognize the important role played by other health care professions in patients' management e.g urology, general surgery, oncology..., etc.

5.2 Respect colleagues and other health care professionals and work cooperatively with them, negotiating overlapping and shared responsibilities and engaging in shared decision-making for effective patient management.

5.2.1. Communicate effectively with other health care professionals to maximize patient benefits and minimize the risk of errors.

5.2.2. Cooperate with other colleagues to provide a full understanding of clinical cases.

5.3 Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports collaborative work.

5.3.1. Implement collaborative teamwork during small group teaching (SDL).

5.5 Communicate effectively using a written health record, electronic medical record, or other digital technology.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

5.5.1. Explain the importance of written health records, and electronic medical records in communication.

5.9 Use health informatics to improve the quality of patient care.

5.9.1 Clarify the importance of health information in improving the quality of patient care.

Competency Area VI: The graduate as a lifelong learner and researcher

6.3 Identify opportunities and use various resources for learning.

6.3.1. Use information technology effectively in the field of clinical pharmacology and search the internet for newly discovered drugs.

6.3.2. Recognize the importance of life-long self-learning and give a strong commitment to it.

6.7 Demonstrate an understanding of the scientific principles of research including its ethical aspects and scholarly inquiry and contribute to the work of a research study.

6.7.1. Critically appraise research studies and scientific papers in terms of integrity, reliability, and applicability.

6.7.2. Analyze and use numerical data including the use of basic statistical methods.

6.7.3. Summarize and present to professional and lay audiences the findings of relevant research and scholarly inquiry.

4- Module Contents

1. Theoretical lectures

| NO | TITLE | DEPARTMENT | HOURS |
|----|--|------------|-------|
| L1 | Applied anatomy and embryology of female genital tract | Anatomy | 1h |

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| | | | |
|-----|---|-------------------|----|
| L2 | Physiology of ovulation and menstrual cycle | Physiology | 1h |
| L3 | Amenorrhea and dysmenorrhea | Gynecology | 3h |
| L4 | Abnormal uterine bleeding | Gynecology | 3h |
| L5 | Puberty: normal and abnormal | Gynecology | 3h |
| L6 | Disorders of sexual development | Gynecology | 3h |
| L7 | Menopause | Gynecology | 3h |
| L8 | Sexually transmitted diseases | Pathology | 1h |
| L9 | Genital infections | Microbiology | 1h |
| L10 | Pelvic inflammatory disease and pyometra | Gynecology | 3h |
| L12 | TB of the genital tract | Microbiology | 1h |
| L13 | Hirsutism | Internal medicine | 1h |
| L14 | Infertility and anovulation | Gynecology | 3h |
| L15 | Male infertility and ART | UROLOGY | 1H |
| L16 | Endometriosis /adenomyosis | Gynecology | 3h |
| L17 | Chronic pelvic pain | Gynecology | 3h |
| L18 | Anatomy of the pelvic floor | Anatomy | 1h |
| L19 | Genitals prolapse | Gynecology | 3h |
| L20 | Genito-urinary fistula | Gynecology | 3h |
| L21 | Rectovaginal fistula | Surgery | 1h |
| L22 | Urinary incontinence | Urology | 1h |
| L23 | Retroverted uterus and uterine inversion | Gynecology | 3h |
| L24 | Vulval / vaginal swellings and cancer | Pathology | 1h |
| L25 | Management of malignant genital tumors | Gynecology | 3h |
| L26 | Fibroids of the uterus | Gynecology | 3h |
| L27 | Endometrial hyperplasia and cancer | Gynecology | 3h |
| L28 | CIN/ cancer cervix | Pathology | 1h |

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
العنوان: شارع الجيش، كفر الشيخ، جمهورية مصر العربية

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| | | | |
|-----|--|------------|----|
| L29 | Ovarian neoplasms | Oncology | 1h |
| L30 | Contraception (physiological and chemical) | Gynecology | 2h |
| L31 | Contraception (hormonal) | Gynecology | 3h |
| L32 | Contraception (intrauterine device) | Gynecology | 2h |
| L33 | Emergency contraception and female sterilization | Gynecology | 3h |
| L34 | Operative (D&C, myomectomy, hysterectomy & hysteroscopy) | Gynecology | 2h |
| 35 | Operative (laparoscopy) | Surgery | 1h |
| 36 | Vaginal cytology and colposcopy | Pathology | 1h |

2. Practical:

| No. | Title | Department | Hours |
|-----|---|--------------|-------|
| P1 | History taking, personal interaction and communication skills | GYNECOLOGY | 3h |
| P2 | Clinical examination, diagnosis, and management plan 1 | GYNECOLOGY | 3h |
| P3 | Clinical examination, diagnosis, and management plan 2 | GYNECOLOGY | 3h |
| P4 | Preventive care, health maintenance, Pap smear and cultures | Microbiology | 3h |
| P5 | Menstrual irregularities case scenario | Gynecology | 3h |
| P6 | Precocious puberty case scenario | GYNECOLOGY | 3h |
| P7 | Abnormal uterine bleeding case | Gynecology | 3h |

-301-

رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
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| | scenario | | |
|-----|--|------------|----|
| P8 | Dysmenorrhea case scenario | GYNECOLOGY | 3h |
| P9 | Polycystic ovarian syndrome | GYNECOLOGY | 3h |
| P10 | Hyperprolactinemia case scenario | GYNECOLOGY | 3h |
| P11 | Menopause case scenario | Gynecology | 3h |
| P12 | Genital infections (vaginal discharge) case scenario | Gynecology | 3h |
| P13 | PID case scenario | GYNECOLOGY | 3h |
| P14 | Chronic pelvic pain case scenario | GYNECOLOGY | 3h |
| P15 | Infertility case scenario (1) | GYNECOLOGY | 3h |
| P16 | Endometriosis / adenomyosis case scenario | Pathology | 3h |
| P17 | Genitals prolapse case scenario | GYNECOLOGY | 3h |
| P18 | Urinary incontinence case scenario | Urology | 3h |
| P19 | Case of vulval / vaginal swelling | Pathology | 3h |
| P20 | Uterine fibroids case scenario | GYNECOLOGY | 3h |
| P21 | Endometrial hyperplasia case scenario | GYNECOLOGY | 3h |
| P22 | Endometrial carcinoma case scenario | GYNECOLOGY | 3h |
| P23 | Cervical cancer case scenario | GYNECOLOGY | 3h |

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| | | | |
|-----|-------------------|------------|----|
| P24 | Ovarian cysts | GYNECOLOGY | 3h |
| P25 | Ovarian neoplasms | GYNECOLOGY | 3h |
| P26 | Contraception 1 | GYNECOLOGY | 3h |
| P27 | Contraception 2 | GYNECOLOGY | 3h |
| P28 | Instruments | GYNECOLOGY | 3h |

Teaching methods

Lectures:

Conducted by a Professor/assistant Professor and introduce the essential concepts and knowledge, the identification of scientific backgrounds, the explanation of complicated issues and topics and the potential for clinical application.

Tutorial classes

Conducted by an assistant Professor and lecturer in small teaching groups to emphasize complicated medical topics and clinical cases. They are held in the corresponding department and are included in the teaching plan. [Division of students into groups alternating between direct contact and online lectures.]

Practical classes: 5 groups of 100 students, each in the department.

Students' activities: for (90min) through distributing variety of training exercises to be solved in the small groups (15 students each). Students have to complete the logbook of the corresponding topic together with some of the training exercises under supervision of a tutor.

Assessment

- **Formative:** This form of assessment is designed to give you feedback to help you to identify areas for improvement. It includes a mixture of MCQs, short answer-questions (SAQs), extended matching questions (EMQs), case-solving exercises and independent learning activities in all subjects. These will be given during tutorial sessions and practical. The answers are presented and discussed immediately with you after the assessment. The results will be made available to you.

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- **Summative:** This type of assessment is used for judgment or decisions to be made about your performance. It serves as:
- Verification of achievement for the student satisfying requirement
 - Motivation of the student to maintain or improve performance
 - Certification of performance
 - Grades

| Assessment Method | Date | Marks | % of Total |
|----------------------------------|--------------|-------|------------|
| end module Continuous assessment | End module | 50 | 30% |
| End semester | End semester | 70 | 70% |
| Practical | | 55 | 100% |

- **Written Exams** will include multiple choice questions (MCQs) at the end of the module while at the end of the semester, short essays will be added too.
- **Practical examination:** Will be arranged by the departments.
- **SDL presentation:** Evaluation is done by a staff members committee that represents all the teaching departments according to the following rubric criteria.

STUDENT'S RESPONSIBILITY

Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.

If there is anything that the module coordinator can do to assist you during the course, please feel free to contact him.

Text books

Gary F Cunningham, Kenneth J. Leveno, Steven L. Bloom, Jodi S. Dashe, Barbara L. Hoffman, Brian M. Casey, Catherine Y. Spong. William's Gynecology. 4th Edition, USA.

McGraw Hill / Medical, 2020 • Louise C. Kenny, Jenny E. Myers. 2017, Gynaecology by Ten teachers. 20th Edition, USA Taylor and Francis

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SEMESTER 9- 5TH YEAR

| النهائية العظمى | الدرجات | | | الحزم الدراسية (Modules) | | | المستوى الخامس – الفصل التاسع |
|--------------------|------------------|--------------------------|------------------------|--|--------------|-----------------|-------------------------------|
| | التحريري % 40 | العملي (OSPE) % 30 | اعمال السنة % 30 | Name | Weeks | Credit hours | |
| 100 | 40 | 30 | 30 | Ear, Nose and throat | 4 | 4 | |
| 150 | 60 | 45 | 45 | Radiology and laboratory medicine | 5 | 6 | |
| 50 | 20 | 15 | 15 | Dermatology | 3 | 2 | |
| 150 | 60 | 45 | 45 | Family medicine and integrated management of common illness | 4 | 6 | |
| متطلب كلية | 50 | - | - | Elective (VI) | Longitudinal | 2 | |
| 450 | | | | | 16 | 20 | المجموع |

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YEAR 5- 9TH SEMESTER

THE EAR, NOSE, AND THROAT MODULE

MODULE (1)

1- Basic information:

Course specifications of:

- **Program on which the module is given** Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- **Module title:** Ear, nose, and throat module.
- **Academic year/level:** 5th level /9th semester.
- **Code:** S9M1/ENT
- **Credit hours for the module:** 4
- **Study weeks:** (4)
- **Departments offering the module:**
 - Department of Ear, nose and throat.

| | lectures | Practical (X3) | CBL | SDL (X3) |
|-------------------------------|----------|-------------------|-----|-------------|
| Ear, Nose and throat (E.N.T.) | 40 | 18 | -- | 2 |

2. Overall aim:

At the end of the Module the students will be able to:

- learn basics of otorhinolaryngology

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- Know appropriate foundation of knowledge covering ENT emergencies and common diseases in the ear, nose, throat and head & neck disease in children and adults.
- Recognize important clinical lesions and be familiar with recent methods of diagnosis and proper management.
- Acquire skills necessary for applying the scientific analytic methods in otorhinolaryngology using available resources and saving the environment.
- Recognize ethical principles related to the practice in this specialty.

3. learning outcomes (LOs)

By the end of this module the student will be able to:

Competency Area I: The graduate as a health care provider

1.1. Take and record a structured, patient centered history.

1.1.1. Apply and document a complete or focused otorhinolaryngological medical history in the outpatient, inpatient or emergency settings.

1.1.2. Recognize the principles of otorhinolaryngological clinical examination.

1.4. Perform appropriately timed physical examination of patients, as a general practitioner, appropriate to the age, gender, and clinical presentation of the patient while being culturally sensitive.

1.4.1 Construct patient's symptoms and physical signs in terms of anatomic, pathologic, and functional diagnostic significances

1.4.2 Recognize the principles of otorhinolaryngological clinical examination!

1.6. Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.

1.6.1. Select the most appropriate and cost-effective diagnostic laboratory investigations for common otorhinolaryngological disorders to reach the proper final diagnosis within short time.

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1.10. Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.

1.10.1. Explain the relationship between some general symptoms or illness and ENT diseases and the interaction between ENT and other specialties.

1.10.2. Analyze problems on anatomical, physiologic and pathologic backgrounds, develop a list of differential diagnosis with prioritization and propose a list of investigations in a cost-effective way.

1.13. Establish patient-centered management plans in partnership with the patient, his/her family and other health professionals as appropriate, using Evidence Based Medicine in management decisions.

1.13.1. Formulate a management plan for common otorhinolaryngological diseases and acute emergencies.

1.13.2 Define diseases beyond the capacities of general practitioner and determine when to refer them to specialist.

Competency Area II: The graduate as a health care promoter

2.1 Identify the basic determinants of health and principles of health improvement.

2.1.1. Define necessary information about the basic principles of health promotion, prevention and control of otorhinolaryngological diseases.

2.5. Describe the principles of disease prevention, and empower communities, specific groups or individuals by raising their awareness and building their capacity.

2.5.1 Establish and Improve different programs of health care and disease prophylaxis.

2.5.1 Share in public health care programs and raise public knowledge about disease prevention.

2.6 Recognize the epidemiology of common diseases within his/her community and apply the systematic approaches useful in reducing the incidence and prevalence of those diseases.

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2.6.1. Perform research and survey for common ear, nose and throat disease to determine epidemiology, etiology and risk factors for each disease.

2.7. Provide care for specific groups including pregnant women, newborns and infants, adolescents and the elderly.

2.7.1. Share in health care programs related to geriatric medicine.

2.7.2 Formulate appropriate management plans for certain patient groups especially pregnant women and pediatrics.

Competency Area III: The graduated as a professional

3.1 Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.

3.1.1 Recognize and effectively deal with unethical behavior of other members of healthcare team.

3.1.2 Adopt an empathic and holistic approach to the patients and their problems and provide care to patients who are unable to pay.

3.4. Treat all patients equally, and avoid stigmatizing any category regardless of their social, cultural, ethnic backgrounds, or their disabilities.

3.4.1 Demonstrate respect to all patients irrespective of their socioeconomic levels, culture or religious beliefs and use language appropriate to the patient's culture.

3.5. Ensure confidentiality and privacy of patients' information.

3.5.1 Show commitment to deal with patients in a compassionate and altruistic manner.

3.5.2 Perform privacy policies and programs that protect patient's data during and after the health service period.

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3.6. Recognize basics of medico-legal aspects of practice, malpractice and avoid common medical errors.

3.6.1 Establish workshops and training programs for younger doctors and health practitioners teaching them basics of medicolegal aspects of practice.

3.6.2 Define diseases, and interventional manoeuvres clearly in detailed consents approved by the patients and/or their guardians.

3.6.3 Work in the whole ENT Department according to approved guidelines accepted globally.

Competency Area IV: The graduate as a scholar and scientist

4.1. Describe the normal structure of the body and its major organ systems and explain their functions.

4.1.1. Describe the normal structure and function of the ear, nose, and throat.

4.1.2. Explain clinical data with integration of basic anatomical, biochemical, pathological, and physiological scientific facts.

4.1.3. Correlate between histological structure, blood supply and function of the ear, nose, and throat.

4.5. Identify various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of the common illness/disease and explain the ways in which they operate on the body (pathogenesis).

4.5.1. Recognize the etiology, pathogenesis, and complications of common otorhinolaryngological illnesses and diseases, with special emphasis on environmental and traumatic causes.

4.5.2. Identify the natural history of common otorhinolaryngological illnesses with understanding of the importance of risk factors, surveillance and screening for prevention and early detection of common otorhinolaryngological disorders.

4.5.3. Describe the principles of management of common otorhinolaryngological illnesses including medical and surgical intervention (invasive and non-invasive).

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العنوان: شارع الجيش، كفر الشيخ، جمهورية مصر العربية

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4.6. Describe altered structure and function of the body and its major organ systems that are seen in various diseases and conditions.

4.6.1. Identify the clinical features and principles of diagnosis of common otorhinolaryngological disease and the scientific basis of common diagnostic studies with emphasis on their prioritization in management plans.

Competency Area V: The graduate as a member of the health team and system

5.2. Respect colleagues and other health care professionals and work cooperatively with them, negotiating overlapping and shared responsibilities, and engaging in shared decision-making for effective patient management.

5.2.1. Communicate effectively with other health care professionals to maximize patient benefits and minimize the risk of errors.

5.2.2. Cooperate with other colleagues to provide a full understanding of clinical cases.

5.3. Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports collaborative work.

5.3.1 Implement collaborative teamwork during small group teaching (SDL).

Competency Area VI: The graduate as a lifelong learner and researcher

6.3. Identify opportunities and use various resources for learning.

6.3.1. Recognize the importance of life-long self-learning and give a strong commitment to it.

6.6. Effectively manage learning time and resources and set priorities.

6.6.1. Use the resources of biomedical information including the available electronic facilities and communication technology to update his/her knowledge, improve his/her medical practice and to manage and manipulate information effectively.

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3

– Module Contents

2.4.5 Theoretical lectures

| NO | TITLE | DEPARTMENT | HOURS |
|-----|---|-------------------------------|-------|
| L1 | Examination of the Ear, Nose and Throat | Ear, Nose and throat (E.N.T.) | 2h |
| L2 | Pain in the Ear | Ear, Nose and throat (E.N.T.) | 3h |
| L3 | Discharge from the Ear | Ear, Nose and throat (E.N.T.) | 2h |
| L4 | Otologic dysfunction | Ear, Nose and throat (E.N.T.) | 2h |
| L5 | Facial Palsy | Ear, Nose and throat (E.N.T.) | 2h |
| L6 | Paranasal Sinus Disease | Ear, Nose and throat (E.N.T.) | 3h |
| L7 | Nasal Discharge | Ear, Nose and throat (E.N.T.) | 2h |
| L8 | Epistaxis | Ear, Nose and throat (E.N.T.) | 2h |
| L9 | Nasal Obstruction and Smell Disorders | Ear, Nose and throat (E.N.T.) | 2h |
| L10 | Facial Plastics | Ear, Nose and throat (E.N.T.) | 2h |
| L11 | Throat Pain | Ear, Nose and throat (E.N.T.) | 2h |
| L12 | Airway Obstruction and Stridor | Ear, Nose and throat | 2h |

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| | | | |
|-----|--------------------------------------|----------------------------------|----|
| | | (E.N.T.) | |
| L13 | Hoarseness and Voice Disorders | Ear, Nose and throat (E.N.T.) | 2h |
| L14 | Snoring and Obstructive Sleep Apnoea | Ear, Nose and throat (E.N.T.) | 2h |
| L15 | Swallowing Problems | Ear, Nose and throat (E.N.T.) | 2h |
| L16 | Head and Neck Trauma | Ear, Nose and throat (E.N.T.) | 2h |
| L17 | Foreign Bodies | Ear, Nose and throat (E.N.T.) | 2h |
| L18 | Neck Swellings | Ear, Nose and throat (E.N.T.) | 2h |
| L19 | Head and Neck Cancer | Ear, Nose and throat (E.N.T.) | 2h |

2. Practical:

| No. | Title | Department | Hours |
|-----|--|----------------------------------|-------|
| P1 | Ear Symptomatology. Clinical Examination. | Ear, Nose and throat (E.N.T.) | 3h |
| P2 | Differential Diagnosis of Painful Ear. | Ear, Nose and throat (E.N.T.) | 3h |
| P3 | Differential Diagnosis of Discharging Ear. | Ear, Nose and throat (E.N.T.) | 3h |

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| | | | |
|------------|--|-------------------------------|----|
| P4 | Differential Diagnosis of Complicated Ear. | Ear, Nose and throat (E.N.T.) | 3h |
| P5 | Differential Diagnosis of Deaf Ear | Ear, Nose and throat (E.N.T.) | 3h |
| P6 | Ear Trauma. | Ear, Nose and throat (E.N.T.) | 3h |
| P7 | Facial palsy | Ear, Nose and throat (E.N.T.) | 3h |
| P8 | Nose Symptomatology. Clinical Examination. | Ear, Nose and throat (E.N.T.) | 3h |
| P9 | Differential Diagnosis of Nasal Obstruction | Ear, Nose and throat (E.N.T.) | 3h |
| P10 | Differential Diagnosis of Headache | Ear, Nose and throat (E.N.T.) | 3h |
| P11 | Differential Diagnosis of Nasal Discharge | Ear, Nose and throat (E.N.T.) | 3h |
| P12 | Pharynx Symptomatology. Clinical Examination. | Ear, Nose and throat (E.N.T.) | 3h |
| P13 | Differential Diagnosis of Sore Throat. | Ear, Nose and throat (E.N.T.) | 3h |
| P14 | Differential Diagnosis of Upper Dysphagia | Ear, Nose and throat (E.N.T.) | 3h |
| P15 | Differential Diagnosis of Oral Ulcers. Velopharyngeal Insufficiency. Sleep Disturbances. | Ear, Nose and throat (E.N.T.) | 3h |
| P16 | Larynx Symptomatology. Clinical Examination. | Ear, Nose and throat (E.N.T.) | 3h |

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| | | | |
|-----|---|-------------------------------|----|
| P17 | Differential Diagnosis of Stridor and Hoarseness of Voice | Ear, Nose and throat (E.N.T.) | 3h |
| P18 | Differential Diagnosis of dysphagia | Ear, Nose and throat (E.N.T.) | 3h |

- 1. Lectures:** Division of students into groups alternating between direct contact and online lectures.
- 2. Practical classes:** Small group teaching, problem based learning, data show presentations including pictures & video clips, live cases and surgeries with interactive discussions. Attendance with guidance in Outpatient clinic: once / week.
- 3. Students' activities:** Students will be divided into small groups. Each formed of 10 students. Each group is assigned for oral presentation on a specific topic. Topics are determined by staff member committee. Students will cooperate, prepare and present their projects in front of evaluation committee.

Assessment

- 1. Formative:** This form of assessment is designed to give you feedback to help you to identify areas for improvement. It includes a mixture of MCQs, short answer-questions (SAQs), extended matching questions (EMQs), case-solving exercises and independent learning activities in all subjects. These will be given during tutorial sessions and practical. The answers are presented and discussed immediately with you after the assessment. The results will be made available to you.
- 2. Summative:** This type of assessment is used for judgment or decisions to be made about your performance. It serves as:
 - a. Verification of achievement for the student satisfying requirement
 - b. Motivation of the student to maintain or improve performance
 - c. Certification of performance
 - d. Grades

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| Assessment Method | Date | Marks | % of Total |
|----------------------|--------------|-------|------------|
| end module | | | 30% |
| Continous assessment | End module | 30 | |
| End semester | End semester | 40 | 40% |
| Practical exam | End module | 30 | 30% |
| Total | | 100 | 100% |

- **Written Exams** will include multiple choice questions (MCQs) at the end of the module while at the end of the semester, short essays will be included.
- **Practical examination:** Will be arranged by the department.
- **SDL presentation:** Evaluation is done by a staff members committee that represents all the teaching departments according to the following rubric criteria.
- **Weight of Assessment:**

| | End Module | Practical | End semester | Activities |
|-------------------------------|------------|-----------|--------------|------------|
| Ear, Nose and throat (E.N.T.) | 25 | 30 | 40 | 5 |
| Total | 25 | 30 | 40 | 5 |

STUDENT'S RESPONSIBILITY

- Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.
- The minimum acceptable attendance is 75%, students who fail to meet their attendance requirements are deprived of their final practical exam.

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رسالة الكلية: نلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
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- If there is anything that the module coordinator can do to assist you during the course, please feel free to contact him.

Textbooks

Operative Otolaryngology: Head and Neck Surgery. (2017), by: Carl H. Snyderman MD Elsevier. 2- Cummings otolaryngology head and neck surgery. (2020), by: Paul Flint, Bruce Haughey, Valerie Lund, K. Robbins, J. Regan Thomas, Marci Lesperance, Howard W. Francis. Elsevier

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SEMESTER 9- 5TH YEAR

THE RADIOLOGY AND LABORATORY MEDICINE MODULE MODULE (2)

1- Basic information:

Course specifications of:

- Program on which the module is given Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- Module title: Radiology and laboratory medicine.
- Academic year/level: 5th level/9th semester.
- Code: S9M2/RL
- Credit hours for the module: 6
- Study weeks: (5)
- Departments offering the module:
 - Department of Clinical Pathology
 - Department of Radiology

Teaching Departments

| | lectures | Practical (X3) | SDL (X3) |
|---------------------|----------|----------------|----------|
| Laboratory Medicine | 30 | 10 | 5 |
| Radiology | 30 | 10 | 5 |
| Total | 60 | 20 | 10 |

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2. Overall aim:

At the end of the Module the students will be able to:

- Acquire basic knowledge and skills in Diagnostic Radiology.
- Acquire basic knowledge and skills in laboratory medicine including Clinical Hematology, Clinical Chemistry, Clinical Immunology and Clinical Microbiology.
- Provide undergraduate students with basic knowledge and skills necessary to make an essential radiologic framework of the general practitioner.
- Make the students capable of determining the essential radiological approaches to deal with common emergencies.
- Recognize ethical principles related to the practice in this specialty.
- Provide medical students with innovative tools and opportunities to acquire knowledge, skills and attitudes that will enable them to become effective and safe members of the health.
- Acquire basic knowledge, skills in Clinical Pathology including Clinical Hematology, Clinical Chemistry, Clinical Immunology and Clinical Microbiology.
- Interpret and integrate the results of history laboratory test findings into a meaningful diagnostic formulation.
- Acquire basic hygiene in infection control.

3. Learning outcomes (LOs)

By the end of this module the student will be able to:

Competency Area I: The graduate as a health care provider

1.6. Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.

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- 1.6.1. List the basic technical principles of the main radiologic equipment's: x-ray, fluoroscopy, US, CT, MRI.
- 1.6.2. Review different imaging modality indications as regards the patient's clinical problem.
- 1.6.3 Judge the radiologic appearance of different diseases.
- 1.6.4 Recognize etiology and pathogenesis of clinically important disease processes and understand the pathological processes that lead to hematological, chemical, and immunological changes.
- 1.6.5. Identify the role of laboratory investigations in the diagnosis and management of diseases.
- 1.6.6. Define the function of each organ, identify effects of the different diseases on function of each organ with its chemical changes, recognize chemical tests for diagnosis and follow up of diseases.

1.9. Retrieve, analyze, and evaluate relevant and current data from literature, using information technologies and library resources, in order to help solve a clinical problem based on evidence (EBM).

- 1.9.1 Use different sources of information to obtain data.

1.10. Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.

- 1.10.1 Recognize the indication for different imaging modalities (plain x ray, fluoroscopy, US, CT, MRI) and their role in diagnosis.
- 1.10.2 Discriminate normal and abnormal findings.
- 1.10.3 Demonstrate appropriate laboratory investigations for diagnosis, assessment of prognosis and monitoring of common diseases.
- 1.10.4 Analyze the principles of sterilization and infection control regulations.
- 1.10.5 Report and interpret laboratory results.

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1.10.6 Correlate the relation between the laboratory test results and the clinical case of the patient.

Competency Area IV: The graduate as a scholar and scientist

4.8 Demonstrate basic sciences specific practical skills and procedures relevant to future practice, recognizing their scientific basis, and interpret common diagnostic modalities, including: imaging, electrocardiograms, laboratory assays, pathologic studies, and functional assessment tests.

4.8.1 Enumerate the different imaging modalities and differentiate between general indication and clinical application.

4.8.2 Deal with emergency cases and select proper imaging modality.

Competency Area V: The graduate as a member of the health team and system

5.2 Respect colleagues and other health care professionals and work cooperatively with them, negotiating overlapping and shared responsibilities and engaging in shared decision-making for effective patient management.

5.2.1 Collaborate and respect among healthcare professionals to achieve optimal patient outcomes through joint decision-making and shared responsibilities.

5.2.1 Maintain a cooperative and respectful approach with colleagues and other healthcare professionals, working together to manage patients effectively through shared decision-making and responsible allocation of tasks.

5.5 Communicate effectively using a written health record, electronic medical record, or other digital technology.

5.5.1 Utilize written health records and electronic medical systems to accurately document patient information and facilitate effective communication among healthcare providers.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

5.5.2 Stay current with digital technology and incorporate it into patient communication to ensure accurate and efficient information exchange.

4- Module Contents

1. Theoretical lectures

| NO | TITLE | DEPARTMENT | HOURS |
|-----|---|--------------------|-------|
| L1 | General introduction diagnostic radiology interventional radiology & nuclear medicine | Radiology | 5 |
| L2 | Plain x ray fluoroscopy | Radiology | 5 |
| L3 | Ultrasound | Radiology | 5 |
| L4 | Computerized tomography (CT) | Radiology | 5 |
| L5 | Magnetic resonance imaging (MRI) | Radiology | 5 |
| L6 | Basics of intervention & revision | Radiology | 5 |
| L7 | Hematopoiesis, Red cell disorder, Anemias | Clinical pathology | 5 |
| L8 | White blood cell disorders, Leukemias | Clinical pathology | 5 |
| L9 | Hemostasis and bleeding disorders | Clinical pathology | 5 |
| L10 | Kidney function tests & Disorders of carbohydrate metabolism | Clinical pathology | 5 |
| L11 | Liver Diseases Endocrinal disorders clinical enzymology | Clinical pathology | 5 |
| L12 | Basic Clinical Microbiology | Clinical pathology | 5 |

2.4.6 Practical:

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملزمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
العنوان: شارع الجيش، كفر الشيخ، جمهورية مصر العربية

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| No | Title | Department | Hours |
|----|---|-----------------------|-------|
| P1 | Plain x ray and fluoroscopy part 1 | Radiology | 7h |
| P2 | Plain x ray and fluoroscopy part 2 | Radiology | 7h |
| P3 | Computerized Tomography part 1 | Radiology | 7h |
| P4 | Computerized Tomography part 2 | Radiology | 7h |
| P5 | Kidney Functions report – Urine report | Clinical pathology | 8h |
| P6 | Interpretation of hematology report | Clinical pathology | 8h |
| P7 | ABG – Cardiac markers – Electrolytes | Clinical pathology | 8h |
| P8 | Liver & Hormones report | Clinical pathology | 8h |

Teaching methods

Lectures:

Conducted by a Professor/assistant Professor and introduce the essential concepts and knowledge, the identification of scientific backgrounds, the explanation of complicated issues and topics and the potential for clinical application.

Tutorial classes

Conducted by an assistant Professor and lecturer in small teaching groups to emphasize complicated medical topics and clinical cases. They are held in the corresponding department and are included in the teaching plan. [Division of students into groups alternating between direct contact and online lectures.]

Practical classes: 5 groups of 100 students, each in a teaching room at the department.

Students' activities: for (90min) through distributing variety of training exercises to be solved in the small groups (15 students each). Students have to complete the logbook of the corresponding topic together with some of the training exercises under supervision of a tutor.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

Assessment

- **Formative:** This form of assessment is designed to give you feedback to help you to identify areas for improvement. It includes a mixture of MCQs, short answer-questions (SAQs), extended matching questions (EMQs), case-solving exercises and independent learning activities in all subjects. These will be given during tutorial sessions and practical. The answers are presented and discussed immediately with you after the assessment. The results will be made available to you.
- **Summative:** This type of assessment is used for judgment or decisions to be made about your performance. It serves as:
 - Verification of achievement for the student satisfying requirement
 - Motivation of the student to maintain or improve performance
 - Certification of performance
 - Grades

| Assessment Method | Date | Marks | % of Total |
|-------------------------------------|--------------|-------|------------|
| g. end module Continuous assessment | End module | 25 | 30% |
| 8. End semester | End semester | 50 | 70% |
| Total | | 75 | 100% |

- **Written Exams** will include multiple choice questions (MCQs) at the end of the module while at the end of the semester, short essays will be added too.
- **Practical examination:** Will be arranged by the departments.
- **SDL presentation:** Evaluation is done by a staff members committee that represents all the teaching departments according to the following rubric criteria.

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➤ **Weight of Assessment:**

| | End Module | Practical | End semester |
|------------------------|------------|-----------|--------------|
| Radiology | 22.5 | 22.5 | 30 |
| Laboratory Medicine | 22.5 | 22.5 | 30 |
| Total | 45 | 45 | 60 |

STUDENT'S RESPONSIBILITY

Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.

If there is anything that the module coordinator can do to assist you during the course, please feel free to contact him.

Text books

Kawthalkar, Shirish M. Essentials of clinical pathology. JP Medical Ltd, 2018
Introduction to Medical Physics (pp. 95-142). CRC Press. • - Grant, L. A., & Griffin, N. (2018). Grainger & Allison's

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

YEAR 5- 9TH SEMESTER

THE DERMATOLOGY MODULE

MODULE (3)

1- Basic information:

Course specifications of:

- **Program on which the module is given** Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- **Module title:** Dermatology.
- **Academic year/level:** 5th level /9th semester.
- **Code:** S9M3/D
- **Credit hours for the module:** 2
- **Study weeks:** (3)
- **Departments offering the module:**
 - Department of Dermatology

| Course Title | Contact Hours | | | Credit hours |
|--------------|---------------|----------------|----------|--------------|
| | Lecture | Practical (X3) | SDL (X3) | |
| Derma | 22 | 6 | 2 | 2 |

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2. Overall aim:

At the end of the Module the students will be able to:

- Improve knowledge and skills to recognize common skin and sexually transmitted diseases.
- Recognize ethical principles related to the practice in this specialty.
- Access active participation in community needs assessment.
- Provide medical students with innovative tools and opportunities to acquire knowledge, skills and attitudes that will enable them to become effective and safe members of the health.
- Acquire basic hygiene in infection control.

3. learning outcomes (LOs)

By the end of this module the student will be able to:

Competency Area I: The graduate as a health care provider

1.1. Take and record a structured, patient centered history.

1.1.1 Retell the basic structure and function of the skin and its appendages including Dermatological terminology including primary and secondary lesions.

1.1.2 Take dermatological history.

1.4 Perform appropriately timed full physical examination of patients appropriate to the age, gender, and clinical presentation of the patient while being culturally sensitive.

1.4.1 Perform full general examination and local examination of dermatological lesions (site, size, color, distribution.)

1.6 Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.

1.6.1 Identify the suitable investigations (laboratory or skin biopsy) for diagnosis

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العنوان: شارع الجيش، كفر الشيخ، جمهورية مصر العربية

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

of different dermatological and sexual diseases.

1.6.2 Recognize and how to read semen analysis in andrology problems.

1.10. Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.

1.10.1 Use clinical data and investigation results to reach correct dermatological diagnosis.

1.12. Adopt strategies and apply measures that promote patient safety.

1.12.1 wear mask and gloves.

1.12.2 Use alcohol for disinfections.

1.12.3 Use sterile instruments.

1.14. Respect patients' rights and involve them and /or their families/carers in management decisions.

1.14.1 Perform procedure or investigation after writing consent from the patient.

1.15. Provide the appropriate care in cases of emergency, including basic first aid procedures.

1.15.1 Perform the first aid in dermatological emergency cases such as angioedema and steven Johnson syndrome.

1.16 Apply the appropriate pharmacological and nonpharmacological approaches to alleviate pain and provide palliative care for seriously ill people, aiming to relieve their suffering and improve their quality of life.

1.16.1 List the basic pharmacological and nonpharmacological approaches for dermatological diseases.

Competency Area II: The graduate as a health care promoter

2.2 Recognize the economic, psychological, social, and cultural factors that interfere with wellbeing.

2.2.1. Recognize the economic, psychological, social, and cultural factors that

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affect every dermatological disease.

2.4 Identify the major health risks in his/her community, including demographic, occupational and environmental risks; endemic diseases, and prevalent chronic diseases.

2.4.1 Identify the sources and epidemiology of parasitic infections.

2.5 Describe the principles of disease prevention, and empower communities, specific groups or individuals by raising their awareness and building their capacity.

2.5.1 Outline different methods of sterilization and disinfection; their role in controlling and prevention of infections.

2.5.2 Distinguish the danger of handling and use of infectious agents on community and environment as a part of their ethical heritage.

2.5.3 Plan for progress in the diagnosis, treatment and prevention of infectious disease and its application for community development.

2.6 Recognize the epidemiology of common diseases within his/her community and apply the systematic approaches useful in reducing the incidence and prevalence of those diseases.

2.6.1 Appraise the epidemiology of infectious diseases and how to reduce the prevalence of these diseases.

Competency Area III: The graduated as a professional

3.1. Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.

3.1.1 Present regular reflection on and assess his/her performance using various performance indicators and information sources.

3.1.2 Acquire the skills of good listening and self-learning.

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3.1.3 Practice the value of teamwork by acting in small groups with adequate cooperation with his/her colleagues.

3.1.4 Integrate in inter-professional activities and collaborative learning to continuously improve personal practice and contribute to collective improvements in practice.

3.3. Respect the different cultural beliefs and values in the community they serve.

3.3.1 Acquire knowledge about cultural beliefs and values in the community and respect them.

3.4. Treat all patients equally, and avoid stigmatizing any category regardless of their social, cultural, ethnic backgrounds, or their disabilities.

3.4.1 Deal with all patients equally without stigmatizing any category.

3.5. Ensure confidentiality and privacy of patients' information.

3.5.1 keep all information of the patients secret and respect them.

Competency Area IV: The graduate as a scholar and scientist

4.1 Describe the normal structure of the body and its major organ systems and explain their functions.

4.1.1 Describe the normal structure of skin and its layers and cells.

4.1.2 Describe the functions of the skin as a whole and its each structure.

4.5 Identify various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of illness/disease and explain the ways in which they operate on the body (pathogenesis).

4.5.1 Discuss causes of cell injury and the different cellular responses to injury.

4.5.2 Identify causes and different types of inflammation and inflammatory cells with signs and symptoms of acute inflammation.

4.5.3 Describe the different types of causative organisms of different infectious

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dermatological diseases and immunological pathogenesis.

4.6 Describe altered structure and function of the body and its major organ systems that are seen in various diseases and conditions.

4.6.1 Describe altered structure and function of the skin in different diseases.

4.7 Describe drug actions: therapeutics and pharmacokinetics; side effects and interactions, including multiple treatments, long term conditions and non-prescribed medication; and effects on the population.

4.7.1 Describe actions of drugs used in different dermatological diseases.

4.8 Demonstrate basic sciences specific practical skills and procedures relevant to future practice, recognizing their scientific basis, and interpret common diagnostic modalities, including: imaging, electrocardiograms, laboratory assays, pathologic studies, and functional assessment tests.

4.8.1 Identify common diagnostic modalities.

4.8.2 Discuss basic and further procedures used in the treatment.

Competency Area V: The graduate as a member of the health team and system

5.3 Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports collaborative work.

5.3.1 Implement collaborative teamwork during small group teaching (SDL).

Competency Area VI: The graduate as a lifelong learner and researcher

6.3 Identify opportunities and use various resources for learning.

6.3.1 Interacts positively with colleagues, peers, and professors on web pages.

6.3.2 Use various resources in collecting information (Web-based learning, SDL).

6.6 Effectively manage learning time and resources and set priorities (PBL and Assignment)

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6.6.1 Achieve and perform the required duties from him on time (assignments).

6- Module Contents

2.4.7 Theoretical lectures

| | Lectures | Departments | HOURS |
|-----|---|-------------|-------|
| L1 | Introduction about the skin | Dermatology | 2 |
| L2 | Bacterial and parasitic skin diseases | Dermatology | 2 |
| L3 | viral skin diseases | Dermatology | 2 |
| L4 | Fungal skin diseases | Dermatology | 2 |
| L5 | Mycobacterial skin diseases (leprosy) | Dermatology | 2 |
| L6 | Eczyma and hypersensitivity skin conditions | Dermatology | 2 |
| L7 | Papulosquamous diseases | Dermatology | 2 |
| L8 | Disorders of pilo-sebaceous unit | Dermatology | 2 |
| L9 | pigmentary and hair disorders | Dermatology | 2 |
| L10 | sexually transmitted diseases | Dermatology | 2 |
| L11 | Introduction to andrology | Dermatology | 2 |

2-Practical: Timetable

| No | Title | Department | Hours |
|----|-------|------------|-------|
|----|-------|------------|-------|

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
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| | | | |
|----|---|-------------|---|
| P1 | Introduction about the skin and Bacterial skin diseases | Dermatology | 1 |
| P2 | Mycobacterial skin diseases (leprosy) and parasitic skin diseases | Dermatology | 1 |
| P3 | viral skin diseases and fungal skin diseases | Dermatology | 1 |
| P4 | Eczema and hypersensitivity skin conditions | Dermatology | 1 |
| P5 | Papulosquamous diseases, disorders of pilo-sebaceous unit and pigmentary and hair disorders | Dermatology | 1 |
| P6 | sexually transmitted diseases Introduction to andrology | Dermatology | 1 |

Teaching methods

Lectures:

Conducted by a Professor/assistant Professor and introduce the essential concepts and knowledge, the identification of scientific backgrounds, the explanation of complicated issues and topics and the potential for clinical application.

Tutorial classes

Conducted by an assistant Professor and lecturer in small teaching groups to emphasize complicated medical topics and clinical cases. They are held in the corresponding department and are included in the teaching plan. [Division of students into groups alternating between direct contact and online lectures.]

Practical classes: 5 groups of 100 students, each in a teaching room at the department.

Students' activities: for (90min) through distributing variety of training exercises to be solved in the small groups (15 students each) using a white board for each subgroup. Students have to complete the logbook of the

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corresponding topic together with some of the training exercises under supervision of a tutor.

Assessment

- **Formative:** This form of assessment is designed to give you feedback to help you to identify areas for improvement. It includes a mixture of MCQs, short answer-questions (SAQs), extended matching questions (EMQs), case-solving exercises and independent learning activities in all subjects. These will be given during tutorial sessions and practical. The answers are presented and discussed immediately with you after the assessment. The results will be made available to you.
- **Summative:** This type of assessment is used for judgment or decisions to be made about your performance. It serves as:
 - Verification of achievement for the student satisfying requirement
 - Motivation of the student to maintain or improve performance
 - Certification of performance
 - Grades

| Assessment Method | Date | Marks | % of Total |
|-------------------------------------|--------------|-------|------------|
| h. end module Continuous assessment | End module | 25 | 30% |
| 9. End semester | End semester | 50 | 70% |
| Total | | 75 | 100% |

- **Written Exams** will include multiple choice questions (MCQs) at the end of the module while at the end of the semester, short essays will be added too.
- **Practical examination:** Will be arranged by the departments.
- **SDL presentation:** Evaluation is done by a staff members committee that represents all the teaching departments according to the following rubric criteria.
- **Weight of Assessment:**

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| Assessment Method | Date | Marks | % of Total |
|-------------------------------------|--------------|-------|------------|
| 3. end module Continuous assessment | End module | 15 | 30% |
| 4. End semester | End semester | 20 | 40% |
| 5. Practical exam | End module | 15 | 30% |
| Total | | | 100% |

STUDENT'S RESPONSIBILITY

Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.

If there is anything that the module coordinator can do to assist you during the course, please feel free to contact him.

Text book

Kumar A, Sharma M. Basic of Human Andrology: A Textbook 1st ed.
Springer;2017

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YEAR 5- 9TH SEMESTER

THE FAMILY MEDICINE AND INTEGRATED MANAGEMENT OF COMMON ILLNESS MODULE

MODULE (4)

1- Basic information:

Course specifications of:

- Program on which the module is given Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- Module title: Family medicine and integrated management of common illness module.
- Academic year/level: 5th level /9th semester.
- Code: S9M4/FM
- Credit hours for the module: 6
- Study weeks: (4)
- Departments offering the module:
 - Department of Public health and Community medicine

| | Lectures | Practical (X3) | CBL | SDL | Credit hours |
|---|----------|----------------|-----|-----|--------------|
| Family medicine and integrated management of common illness | 60 | 30 | - | - | 6 |

2 Overall aim:

At the end of the Module the students will be able to:

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
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رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

- Adopt a healthy lifestyle & sound behavior to become role models for the individuals, families, & communities they will serve in the future.
- Are Community-oriented, capable of anticipating & responding to family health needs within the primary health care (PHC) setting according to the policies, regulations, & guidelines of the Ministry of Health & population (MOHP) with respect to medical ethics.

3. Learning outcomes (LOs)

By the end of this module the student will be able to:

Competency Area II: The graduate as a health care promoter

2.4 Identify the major health risks in his/her family, including Mental health problems , geriatrics health problem and prevalent chronic diseases.

2.4.1. Identify the prevalent health problems in a community.

2.4.2. Identify Health care system, rural health, Child health, Occupational disease, School and adolescence disease.

2.4.3. Apply risk assessment methods to health problems to determine strategies for appropriate response.

2.6 Recognize the epidemiology common diseases within his/her family and apply the systematic approaches useful in reducing the incidence and prevalence of those diseases.

2.6.1 Identify Basic terms and concept of family planning.

2.6.2. Identify reproductive health problems in Egypt.

Competency Area III: The graduated as a professional

3.5. Ensure confidentiality and privacy of patients' information.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

3.5.1. Decide about Health care system, rural health, Child health, Occupational disease Environmental health.

3.5.2. Enumerate behavioral & social variables impacting health & disease.

3.8. Refer patients to appropriate health facility at the appropriate stage.

3.8.1. Discuss principles of disease prevention & early detection of common community health problems including occupational & environmental health-related problems.

3.8.2. Apply suitable measures for prevention & control of school and childhood health problems.

3.8.3. Ensure the cost effectiveness of health care management.

Competency Area IV: The graduate as a scholar and scientist

4.3 Recognize and describe main developmental changes in humans and the effect of growth, development and aging on the individual and his family.

4.3.1 Definition the geriatric age

4.3.2 Discuss mental health problems, child health problems, school health problems, adolescence health, maternal health, reproductive health.

4.8 Demonstrate basic sciences specific practical skills and procedures relevant to future practice, recognizing their scientific basis, and interpret common diagnostic modalities, including: imaging, electrocardiograms, laboratory assays, pathologic studies, and functional assessment tests.

4.8.1. Use data / information for situation analysis.

4.8.2. Utilize communication skills & health education messages in caring of patients & apply appropriate infection prevention practices.

Competency Area V: The graduate as a member of the health team and system

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

5.2 Respect colleagues and other health care professionals and work cooperatively with them, negotiating overlapping and shared responsibilities and engaging in shared decision-making for effective patient management.

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

5.2.2. Cope with situations where communication is difficult including breaking bad news.

5.2.3. Apply methods of assessment of different types of vaccination

Competency Area VI: The graduate as a lifelong learner and researcher

6.3 Identify opportunities and use various resources for learning.

6.3.1 Interacts confidently with colleagues, peers and professors on web pages.

6.3.2 Use various properties in collecting information (Web-based learning, SDL).

6.3.3. Conduct a health education session.

6.3.4. Adopt principles of the lifelong learning needs of the medical profession

4 – Course/ Course Contents

1. Theoretical lectures and practical and field training hours

| NO | Lecture | Hours |
|----|---------------------------|-------|
| L1 | The Health System | 3 |
| L2 | Primary Health Care (PHC) | 3 |
| L3 | Family Practice | 2 |
| L4 | Reproductive health | 3 |
| L5 | Maternal health problems | 3 |

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
العنوان: شارع الجيش، كفر الشيخ، جمهورية مصر العربية

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| | | |
|-----|--|---|
| L6 | Health care for the mothers-premarital care | 2 |
| L7 | Health care for the mothers -Antenatal care | 2 |
| L8 | Health care for the mothers -Natal care | 2 |
| L9 | Health care for the mothers -post-natal care | 2 |
| L10 | Outcome of pregnancy | 2 |
| L11 | Child health problems | 3 |
| L12 | Integrated Management of Childhood Illness (IMCI) | 2 |
| L13 | Child Health Program | 3 |
| L14 | Growth monitoring | 2 |
| L15 | Evaluation of the maternal & child health program | 3 |
| L16 | Health problems of school children | 3 |
| L17 | School Health Program (SHP) | 3 |
| L18 | Adolescent Health | 3 |
| L19 | Health service and activities for adolescents | 2 |
| L20 | Health of the Elderly | 2 |
| L21 | Health problems of the elderly | 2 |
| L22 | The elderly health care program | 2 |
| L23 | Mental Health | 3 |

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| | | |
|--------------|------------------------------|-----------|
| L24 | Prevention of Mental Illness | 3 |
| Total | | 60 |

2. practical

| NO | Practical lecture | Hours |
|-----|--|-------|
| P1 | Practical lecture | 5h |
| P2 | Egypt Population Problem | 5h |
| P3 | The National Population Policy | 5h |
| P4 | Fertility and Over Population | 5h |
| P5 | Family Planning Program | 5h |
| P6 | Contraceptives methods | 5h |
| P7 | The growth chart | 5h |
| P8 | Expanded program of immunization | 5h |
| P9 | Cold chain | 5h |
| P10 | Integrated management of childhood illnesses | 5h |
| P11 | Basic benefit package | 5h |
| P12 | Family health model | 5h |

Teaching methods

Lectures: in the lecture hall at Public Health & Community Medicine Department using data show & blackboard. live lecture on Microsoft teams

Small group teaching: 5 groups of 100 students, each in a teaching room at the department.

Training exercises: for (90min) through distributing variety of training exercises to be solved in the small groups (15 students each) using a white board for each subgroup. Students have to complete the logbook of the corresponding topic together with some of the training exercises under supervision of a tutor.

Self-learning & peer education: students are divided into 30 groups (10 students each); each group is issued a topic for working as a team.

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Assessment

Attendance criteria: Faculty laws the minimum acceptable attendance is 75%, Students who fail to meet their attendance requirements are deprived of their final practical exams.

Weighing of assessments

| Evaluation | Type | Marks | % |
|--------------|--------------------|-------|-----|
| Assessment 1 | Logbook completion | 45 | 30 |
| Assessment 2 | OSCE | 45 | 30 |
| Assessment 3 | Final Written exam | 60 | 40 |
| Total | | 150 | 100 |

1. **Written Exams** will include multiple choice questions (MCQs).
2. **Practical examination:** Will be arranged by the departments.
3. **SDL presentation:** Evaluation is done by a staff members committee that represents all the teaching departments according to the following rubric criteria.

STUDENT'S RESPONSIBILITY

Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.

If there is anything that the module coordinator can do to assist you during the course, please feel free to contact him.

Textbooks and References for System Modules:

Swanson's Family Medicine Review (2021), Alfred Tallia, Joseph Scherger, Nancy Dickey (9th ed). Elsevier.

Taylor's Manual of Family Medicine. (2015), by Paul M. Paulman MD, Audrey A. Paulman MD, MMM, Kimberly J. Jarzynka , Nathan P. Falk M.D. 4th Edition. Lippincott Williams & Wilkin

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

YEAR 5- 9TH SEMESTER THE ELECTIVE COURSE MODULE MODULE (5)

1- Basic information:

Course specifications of:

- **Program on which the module is given** Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- **Module title:** Elective course (Communication skills).
- **Academic year/level:** 5th level /9th semester.
- **Code:** S9M5/E6CS
- **Credit hours for the module:** 2
- **Study weeks:** Longitudinal.
- **Departments offering the module:**
 - Department of Medical Education

| Communication skills | Lectures | Practical | SDL | Credit hours |
|----------------------|----------|-----------|-----|--------------|
| | 30 | - | - | 2 |

2-Overall aim:

At the end of the Module the students will be able to:

- Communicate effectively with his colleagues.

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
العنوان: شارع الجيش، كفر الشيخ، جمهورية مصر العربية

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- Respect his colleagues and the patients.
- Choose the suitable protocol while dealing in different situations.

3. Learning outcomes (LOs)

By the end of this module the student will be able to:

Competency Area I: The graduate as a health care provider

1.1 Take and record a structured, patient centered history.

1.1.1 Analyze and integrate the results of historical taking, physical examinations and investigations to identify, prioritize and assess management strategies for various surgical diseases, emergencies as well as life threatening conditions.

1.1.2 Summarise of patient's illness and present information in an organized clear manner.

1.2 Adopt an empathic and holistic approach to the patients and their problems.

1.2.1 Conduct sincere and effective patient interviews (regardless of their social or cultural backgrounds), properly explain their condition and plan of management, obtain consents and convey bad news in a professional way.

1.5. Prioritize issues to be addressed in a patient encounter.

1.5.1 prioritize the top issues to address at a given visit that could provide a novel approach to the problem of patient complexity.

1.9. Respect patients' rights and involve them and or their families/careers in management decisions.

1.9.1 Recognize the ethical principles that govern decision-making in surgical practice.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

1.9.2 Interpret decisions according to medico-legal aspects and different situations of uncertainty in surgical practice and cope with by proper counseling, consultation, and referral.

Competency Area III: The graduated as a professional

3.1. Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, & respect:

3.1.3 Explain and describe effective and non-effective communication techniques.

3.1.4 Differentiate between verbal and non-verbal communication.

3.1.4. Identify behaviors that interfere with effective communication.

1.4.1 List elements of active listening and benefits of professional communication.

3.3. Respect the different cultural beliefs and values in the community they serve.

3.3.1. Deal appropriately with different cultural beliefs and values in the community they serve.

3.4. Treat all patients equally, and avoid stigmatizing any category regardless of their social, cultural, ethnic backgrounds, or their disabilities.

3.4.1 provide equity and disapprove social stigma.

3.5. Ensure confidentiality and privacy of patients' information.

3.5.1. Demonstrate professional behavior attributes of patient respect, autonomy, consent, non-maleficence, and confidentiality while taking history and conducting physical examination of patients.

3.5.2. Maintain confidentiality in patient care and give due respect to patient privacy.

3.5.3. Adhere to the professional standards and laws governing the practice and abide by the national code of ethics issued by the Egyptian Medical Syndicate.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

3.6 Recognize basics of medico legal aspects of practice, malpractice and avoid common medical errors.

3.6.1 Identify and discuss the medicolegal and ethical issues as it pertains to abortion, medical termination of pregnancy, organ transplantation.

3.7. Recognize and manage conflicts of interest.

3.7.1. Demonstrate a sound grasp of the theories and principles governing ethical decision-making, major ethical dilemmas in medicine and an approach toward resolving them.

Competency Area V: The graduate as a member of the health team and system

5.2. Respect colleagues and other health care professionals and work cooperatively with them, negotiating overlapping and shared responsibilities, and engaging in shared decision-making for effective patient management.

5.2.1. Utilize appropriate communication skills to obtain a history, diagnosis, discuss and deliver an effective treatment plan to patients in an emphatic and holistic approach including breaking up bad news.

5.3 Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports collaborative work.

5.3.1 Communicate ideas and arguments effectively with peers and tutors.

5.3.2 Communicate effectively with patients, families, colleagues, and other healthcare professionals.

5.3.3 Perform interview techniques and demonstrate or explain appropriate patient education practices and use the best negotiation and delegation skills.

5.4 Apply leadership skills to enhance team functioning, the learning environment, and/or the health care delivery system.

5.4.1 List different personality types and leadership styles.

5.5 Communicate effectively using a written health electronic medical record, or other digital technology.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

5.5.1 Demonstrate proper grammar and writing skills.

5.6 Evaluate his/her work and that of others using constructive feedback.

5.6.1 Appreciate and respect everyone's personality.

5.7 Recognize own personal and professional limits and seek help from colleagues and supervisors when necessary.

5.7.1 Appraise concepts of weakness and strength points.

5.9 Use health informatics to improve the quality of patient care.

5.7.2 Practice the communication skills and data collection which are needed to analyze problems and get results to achieve the different aims.

5.10 Document clinical encounters in an accurate, complete, timely, and accessible manner, in compliance with regulatory and legal requirements.

5.10.1. Discuss the aspects of electronic communication methods.

Competency Area VI: The graduate as a lifelong learner and researcher

6.1. Regularly reflect on and assess his/her and information sources.

6.1.1. Participate actively in learning by assuming accountability in preparing for each class.

2 – Module Contents

1. Theoretical lectures

| NO | TITLE | HOURS |
|----|---|-------|
| L1 | History of human communication. | 2h |
| L2 | Definition and purposes of communication. Principles of effective communication. | 2h |
| L3 | Difficult conversations | 2h |
| L4 | Process of communication. Communication channels | 2h |
| L5 | Types of communications | 2h |

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملزمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
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| | | |
|------|--|----|
| L6 | Characteristics of effective communicator | 2h |
| L7 | Personality types Leadership style | 2h |
| L8 | DISC theory and driving forces | 2h |
| L9 | Negotiation | 2h |
| L10 | Delegation | 2h |
| L11 | Five Key Steps for Clinical Interviews | 2h |
| L12 | Breaking bad news | 2h |
| L13 | The C-O-N-E-S Protocol The E-V-E Protocol | 2h |
| L 14 | Dealing with angry patient | 2h |
| L15 | Revision | 2h |

5- Teaching and learning methods

| Course | Lecture | Web based L |
|----------------------|---------|----------------|
| Communication skills | √ | √ |

6. COURSE ASSESSMENT:

Written Exams short questions or / and multiple choice questions (MCQs).

STUDENT'S RESPONSIBILITY

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
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- If there is anything that the module coordinator can do to assist you during the course, please feel free to contact him.

Sites

| Activity | Site |
|-------------------|------------------|
| Final module exam | Examination Hall |

Textbooks and References for System Modules

A Practical Guide for Medical Teachers, John Dent, Ronald M. Harden, Dan Hunt. 6th edition 2021.

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YEAR 5- 9TH SEMESTER

THE ELECTIVE COURSE MODULE (SPORTPHYSIOLOGY)

MODULE (5)

1- Basic information:

Course specifications of:

- **Program on which the module is given** Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- **Module title:** Elective course (sport physiology).
- **Academic year/level:** 5th level /9th semester.
- **Code:** S9M5/E6SP
- **Credit hours for the module:** 2
- **Study weeks:** Longitudinal.
- **Departments offering the module:**
 - Department of Physiology

2. Overall aim:

At the end of the Module the students will be able to:

- Study effect of exercise in detail and in application perspective.
- Measure the changes and interpret them in the context of sports.
- Gain an overall understanding of human body functioning during exercise and thus provide appropriate nutrition/fuel.
- Measure the changes and interpret them in the context of sports.
- Determine the aerobic and anaerobic threshold of athletes

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

3. Learning outcomes (LOs)

By the end of this module the student will be able to:

Competency Area I: The graduate as a health care provider

1.1 Take and record a structured, patient centered history.

1.1.1 Communicate effectively with individuals regardless of their social, cultural, ethnic backgrounds, or their disabilities.

1.6 Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.

1.6.1 Interpret results of Lab. Investigation for nutritional assessment

1.8 Apply knowledge of the clinical and biomedical sciences relevant to The clinical problem at hand.

1.8.1 Diagnose & differentiate between types of nutritional anemias

1.9 Retrieve, analyze, and evaluate relevant and current data from literature, using information technologies and library resources, in order to help solve a clinical problem based on evidence (EBM)

1.9.1 Manage learning resources effectively to reach to a clinical decision based on evidence.

1.10 Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.

1.10.1 Construct different knowledge and analyze given information to help in solving difficult problem.

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
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1.11 Perform diagnostic and intervention procedures in a skillful and safe manner, adapting to unanticipated findings or changing clinical circumstances.

1.11.1 Take anthropometric measurement (Weight, height, skin fold thickness).

1.11.2 Calculate BMI and classify body weight according to it.

1.11.3 Take different body circumferences (waist, hip, waist/hip ratio, wrist, mid-arm, chest, head).

Competency Area II: The graduate as a health care promoter

2.1 Identify the basic determinants of health and principles of health improvement.

2.1.1 Identify the daily requirements of proteins, lipids and carbohydrates.

2.1.2 Describe rules and methods of diet planning.

Competency Area III: The graduated as a professional

3.1 Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.

3.1.1 Know his/her own personal and professional limits and consult other colleagues and supervisors when necessary.

3.5 Ensure confidentiality and privacy of patients' information.

3.5.1 Respect and follow the institutional code of conduct.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

3.5.2 Maintain professional image in manner, dress speech and interpersonal relationships that is consistent with the medical profession's accepted contemporary standards in the community.

Competency Area V: The graduate as a member of the health team and system

5.2 Respect colleagues and other health care professionals and work cooperatively with them, negotiating overlapping and shared responsibilities and engaging in shared decision-making for effective patient management.

5.2.1 Demonstrate respect, appropriate professional behavior and establish good relations in all aspects of his/her practice.

5.2.2 Know his/her own personal and professional limits and consult other colleagues and supervisors when necessary.

Competency Area VI: The graduate as a lifelong learner and researcher

6.2 Develop, implement, monitor, and revise a personal learning plan to enhance professional practice.

6.2.1 Utilize information technology to improve his/her professional practice.

6.2.2 Perform self-appraisal & seek continuous learning.

4- Module Contents

1. Theoretical lectures

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| NO | TITLE | HOURS |
|----|---|-------|
| L1 | Structure and Types of muscles, Action potential, excitation-contraction coupling. | 4h |
| L2 | Remodeling of muscle fibers for strength and conditioning; Muscle hypertrophy and atrophy; Muscle tone and fatigue. | 6h |
| L3 | Internal and Cellular respiration; Pulmonary ventilation; Principles of gaseous exchange, effects of exercise on respiratory system | 4h |
| L4 | Cardiac cycle; Cardiac output and Blood Pressure | 6h |
| L5 | Estimation of energy intake, respiratory quotient, metabolic rate, o ₂ debt | 4h |
| L6 | Different endocrine glands and their hormones; Major functions, Ca homeostasis | 6h |

5- Teaching and learning methods

| Course | Lecture | Web based L |
|------------------|---------|-------------|
| Sport physiology | √ | √ |

6. COURSE ASSESSMENT:

Written Exams short questions or / and multiple choice questions (MCQs).

STUDENT'S RESPONSIBILITY

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
العنوان: شارع الجيش، كفر الشيخ، جمهورية مصر العربية

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- Class attendance and participation are extremely important for each student. This will be considered in the evaluation of the course grade.
- If there is anything that the module coordinator can do to assist you during the course, please feel free to contact him.

Sites

| Activity | Site |
|-------------------|------------------|
| Final module exam | Examination Hall |

Textbooks and references

Seaton A, Seaton D and Leitch AG (eds): Crofton and Douglas's Respiratory Diseases. Fifth edition (Textbook), Blackwell Science Ltd, 2018.

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YEAR 5- 10TH SEMESTER

| النهاية العظمى | الدرجات | | | الحزم الدراسية (Modules) | | | |
|-------------------|------------------|--------------------------|------------------------|---|--------------|-----------------|-------------------------------|
| | التحريري % 40 | العملي (OSPE) % 30 | اعمال السنة % 30 | Name | Weeks | Credit hours | المستوى الخامس – الفصل العاشر |
| 250 | 100 | 75 | 75 | Chest, Cardiovascular diseases, Cardiovascular surgery, anesthesia Pediatric, vascular, plastic surgeries | 9 | 10 | |
| 250 | 100 | 75 | 75 | Immunology, Intensive care, Medical, surgical emergency, critical care and patient safety | 9 | 10 | |
| متطلب كلية | 50 | - | - | Elective (VII) | Longitudinal | 2 | |
| 500 | | | | | 18 | 22 | المجموع |

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YEAR 5- 10TH SEMESTER

CHEST, CARDIOVASCULAR DISEASES, CARDIOVASCULAR SURGERY, ANESTHESIA PEDIATRIC, VASCULAR, PLASTIC SURGERIES

MODULE

MODULE (1)

1- Basic information:

Course specifications of:

- Program on which the module is given Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- Module title: Surgery (IV) Anesthesia
- Emergency medicine module.
- Academic year/level: 5th level /10th semester.
- Code: S10M1/CCS
- Credit hours for the module: 10
- Study weeks: (9)
- Departments offering the module:
 - Department of Anesthesiology.
 - Department of Plastic Surgery.
 - Department of Cardiology.
 - Department of Chest.
 - Department of Cardiothoracic surgery.
 - Department of Vascular Surgery.

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
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- Department of Pediatric Surgery.

Teaching departments

| | lectures | Practical (X3) | SDL (X3) | Credit hours |
|------------------------|------------|----------------|----------|--------------|
| Cardiothoracic surgery | 15 | 7 | 5 | 10 |
| Anesthesia | 15 | 6 | | |
| Plastic surgery | 10 | 4 | | |
| Pediatric surgery | 15 | 6 | 5 | |
| Vascular surgery | 15 | 4 | | |
| Cardiology | 15 | 9 | | |
| Chest | 15 | 9 | | |
| Total | 100 | 45 | 5 | |

3. Overall aim:

At the end of the Module the students will be able to:

- Know basic information about vascular surgically health related disorders.
- Apply medical information and use it to solve clinical problems of patients.
- Integrate different branches of medicine to prepare an efficient graduate.
- Urge students to be lifelong learners.

3. Learning outcomes (LOs)

By the end of this module the student will be able to:

Competency Area I: The graduate as a health care provider

1.1. Take and record a structured, patient centered history.

1.1.1. Communicate effectively with individuals regardless of their social, cultural, ethnic backgrounds, or their disabilities.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

1.6. Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.

1.6.1. Select appropriate surgical, chest and cardiological investigations.

1.10. Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.

1.10.1. Construct appropriate management plans for patients with common and important surgical chest and cardiological diseases.

1.10.2. Take and record a structured patient-centered history in acute and chronic chest, cardiological and surgical conditions.

Competency Area II: The graduate as a health care promoter

2.4 Identify the major health risks in his/her community, including demographic, occupational and environmental risks, endemic diseases, and prevalent chronic diseases.

2.4.1. Describe the clinical picture, investigations and differential diagnosis of the various common and important chest, cardiological and surgical diseases and disorders.

2.6 Recognize the epidemiology of common diseases within his/her community and apply the systematic approaches useful in reducing the incidence and prevalence of those diseases.

2.6.1 Describe the principles of operative intervention including indications for intervention, preoperative preparation, and postoperative care and complications.

Competency Area III: The graduated as a professional

3.5. Ensure confidentiality and privacy of patients' information.

3.5.1. Perform a full confidential physical examination appropriate to age and gender in acute and chronic clinical chest, cardiological and surgical conditions.

3.8. Refer patients to appropriate health facility at the appropriate stage.

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3.8.1. Respect the patient's right to know and share in decision making as well as dignity, privacy, information confidentiality and autonomy.

Competency Area IV: The graduate as a scholar and scientist

4.1 Describe the normal structure of the body and its major organ systems and explain their functions.

4.1.1. Demonstrate the anatomy of chest, cardiological and surgical important structures, organs and regions.

4.5 Identify various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of illness/disease and explain the ways in which they operate on the body (pathogenesis).

4.5.1. Explain the prophylaxis and treatment of the various common and important chest, cardiological and surgical diseases and disorders.

4.5.2. List the procedures and minimally invasive techniques used in the treatment of chest, cardiological and surgical diseases.

4.8 Demonstrate basic sciences specific practical skills and procedures relevant to future practice, recognizing their scientific basis, and interpret common diagnostic modalities, including: imaging, electrocardiograms, laboratory assays, pathologic studies, and functional assessment tests.

4.8.1. Perform an emergency-directed examination for patients with common chest, cardiological and surgical emergencies.

4.8.2. Know palliative care for untreatable chest, cardiological and surgical conditions.

Competency Area V: The graduate as a member of the health team and system

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5.2 Respect colleagues and other health care professionals and work cooperatively with them, negotiating overlapping and shared responsibilities and engaging in shared decision-making for effective patient management.

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

5.2.2. Write safe prescriptions of different types of drugs.

Competency Area VI: The graduate as a lifelong learner and researcher

6.3 Identify opportunities and use various resources for learning.

6.3.1 Interacts confidently with colleagues, peers, and professors on web pages.

6.3.2 Use various properties in collecting information (Web-based learning, SDL).

6.6 Effectively manage learning time and resources and set priorities (PBL and Assignment)

6.6.1 Perform the required duties from him on time (assignments).

4- Module Contents

1. Theoretical lectures

| No | Title | Department | Hours |
|-----|---|------------------------|-------|
| L1 | Introduction to thoracic surgery part 1 | Cardiothoracic surgery | 5h |
| L2 | Introduction to thoracic surgery part 2 | | 5h |
| L3 | Introduction to cardiac surgery part 1 | | 5h |
| L4 | General anesthesia | Anesthesia | 3h |
| L5 | Peripheral N block | | 3h |
| L6 | Pain management, Neuraxial blocks | | 3h |
| L7 | Blood transfusion and CPR | | 3h |
| L8 | Inhalation and IV anesthesia | | 3h |
| L9 | Shock | Plastic surgery | 2h |
| L10 | Burn | | 2h |
| L11 | Flap | | 2h |

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
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| | | | |
|-----|---|-------------------|------------|
| L12 | Wound healing | Pediatric surgery | 2h |
| L13 | Hypertrophic and keloid scars | | 2h |
| L14 | Neonatal intestinal obstruction | | 3h |
| L15 | Pyloric stenosis & intussusception | | 3h |
| L16 | Abdominal wall defects | | 3h |
| L17 | Constipation & Hirschsprung disease | | 3h |
| L18 | Anorectal malformations and Hypospadias | Vascular surgery | 3h |
| L19 | Varicose veins and lymphedema | | 2h |
| L20 | Deep venous thrombosis | | 2h |
| L21 | Chronic venous insufficiency | | 2h |
| L22 | Acute and chronic ischemia | | 2h |
| L23 | Aneurysms | | 2h |
| L24 | Dialysis access | | 1h |
| L25 | Lower limb swelling | | 2h |
| L26 | Diabetic foot | | 2h |
| L27 | Heart failure | | Cardiology |
| L28 | Atrial fibrillation | 1h | |
| L29 | Tachyarrhythmias | 1h | |
| L30 | Bradyarrhythmia | 1h | |
| L31 | Pulmonary embolism | 1h | |
| L32 | Pulmonary hypertension | 1h | |
| L33 | Valvular Heart Disease 1 | 1h | |
| L34 | Valvular Heart Disease 2 | 1h | |
| L35 | Rheumatic fever | 1h | |
| L36 | Infective endocarditis | 1h | |
| L37 | Congenital heart disease | 2h | |
| L38 | Pericardial effusion | 1h | |
| L39 | Aortic diseases | 1h | |
| L40 | Chronic obstructive pulmonary disease | Chest | 1h |

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| | | | |
|-----|--|--|----|
| L41 | Bronchial asthma | | 2h |
| L42 | Lower respiratory tract infection (part 1) | | 1h |
| L43 | Lower respiratory tract infection (part 2) | | 1h |
| L44 | Tuberculosis | | 1h |
| L45 | Suppurative lung diseases | | 1h |
| L46 | Lung cancer | | 1h |
| L47 | Interstitial lung disease | | 1h |
| L48 | Sarcoidosis | | 1h |
| L49 | Pulmonary vascular disease | | 1h |
| L50 | Pleural diseases (part 1) | | 1h |
| L51 | Pleural diseases (part 2) | | 1h |
| L52 | Sleep related disorder | | 1h |
| L53 | Respiratory failure | | 1h |

2. Practical

| No | Title | Department | Hours |
|-----|---|------------------------|-------|
| P1 | Thoracic surgery | Cardiothoracic surgery | 12h |
| P2 | Cardiac surgery | | 9h |
| P3 | General anesthesia Peripheral N block | Anesthesia | 3h |
| P4 | Pain management | | 3h |
| P5 | Neuraxial blocks, Inhalation and IV anesthesia, CPR | | 3h |
| P6 | Burn, wound healing | Plastic surgery | 3h |
| P7 | Flap, hypertrophic and keloid scars | | 3h |
| P8 | Grafts | | 3h |
| P9 | Neonatal intestinal obstruction | Pediatric surgery | 3h |
| P10 | Pyloric stenosis & intussusception | | 3h |
| P11 | Abdominal wall defects | | 3h |
| P12 | Constipation & Hirschsprung disease | | 3h |

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| | | | |
|-----|---|------------------|----|
| P13 | Anorectal malformations | | 3h |
| P14 | Hypospadias | | 3h |
| P15 | Varicose veins and lymphoedema | Vascular surgery | 3h |
| P16 | Acute and chronic ischemia | | 3h |
| P17 | Dialysis access | | 3h |
| P18 | Lower limb swelling Diabetic foot | | 3h |
| P19 | Heart failure Atrial fibrillation | | 3h |
| P20 | Tachyarrhythmias Bradyarrhythmia | Cardiology | 3h |
| P21 | Pulmonary embolism Pulmonary hypertension | | 3h |
| P22 | Valvular Heart Disease | | 3h |
| P23 | Rheumatic fever and infective endocarditis | | 3h |
| P24 | Congenital heart disease | | 6h |
| P25 | Pericardial effusion | | 3h |
| P26 | Aortic diseases | | 3h |
| P27 | Chronic obstructive pulmonary disease | Chest | 3h |
| P28 | Bronchial asthma | | 3h |
| P29 | Lower respiratory tract infection | | 3h |
| P30 | Tuberculosis and suppurative lung diseases | | 3h |
| P31 | Lung cancer | | 3h |
| P32 | Interstitial lung disease and sarcoidosis | | 3h |
| P33 | Pulmonary vascular disease and Pleural diseases | | 3h |
| P34 | Sleep related disorder | | 3h |
| P35 | Respiratory failure | | 3h |

-Teaching methods and learning strategies

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
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Central lectures

Conducted by a Professor/assistant Professor and introduce the essential concepts and knowledge, the identification of scientific backgrounds, the explanation of complicated issues and topics and the potential for clinical application.

Tutorial classes and local lectures

Conducted by an assistant Professor and lecturer in small teaching groups to emphasize complicated medical topics and clinical cases. They are held in the corresponding department and are included in the teaching plan.

Clinical rounds

In the clinical stage students are divided in three groups and distributed in a rotatory manner over different clinical departments each for several weeks according to the study plan. They are presented with clinical cases, perform clinical examinations, discuss the differential diagnosis, learn, and develop critical thinking, communication skills and teamwork.

Self-learning

Method for assessment in relation to LOs

The examinations include mid-rotations, end -rotations and end of year examinations in the form of:

1. Written examinations: to evaluate - It includes a mixture of MCQs, case-solving exercises and independent learning activities in all subjects.
2. Oral examinations: -
- 3-Practical and clinical examination (OSCE):

| Course code | Course Title | Marks | | | Total marks | Credit hours |
|-------------|--------------|------------|-----------|--------------|-------------|--------------|
| | | End module | Practical | End semester | | |
| S10M1/S4AE | Module IV | 75 | 75 | 100 | 250 | 10 |

Textbooks

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملزمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
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Kim H, Shin S, Han D. Review of History of Basic Principles of Burn Wound Management. *Medicina (Kaunas)*. 2022 Mar 7;58(3):400. doi: 10.3390/medicina58030400. PMID: 35334576; PMCID: PMC8954035.
Puri, P. (2019). *Encyclopedia of Pediatric Surgery*. (2nd Edition). Berlin: Springer Berlin.

Cuschieri, A., & Hanna, G. (2015). *Essential surgical practice: higher surgical training in general surgery*. CRC press.

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YEAR 5- 10TH SEMESTER

IMMUNOLOGY, INTENSIVE CARE, MEDICAL, SURGICAL EMERGENCY, CRITICAL CARE AND PATIENT SAFETY MODULE

MODULE (2)

1- Basic information:

Course specifications of:

- Program on which the module is given Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- Module title: Immunology, Intensive care, Medical, surgical emergency, critical care and patient safety module.
- Academic year/level: 5th level /10th semester.
- Code: S10M2/IIE
- Credit hours for the module: 10
- Study weeks: (9)
- Departments offering the module:
 - Department of Internal Medicine.
 - Department of Intensive Care.

| | lectures | Practical (X3) | SDL (X3) | Credit hours |
|-----------------------|----------|-------------------|-------------|--------------|
| Medical Emergency | 30 | 20 | 6 | 10 |
| Surgical emergency | 30 | 20 | | |

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
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| | | | |
|-------------------|----|----|---|
| Internal Medicine | 16 | 10 | |
| Intensive care | 14 | 10 | |
| Total | 90 | 50 | 6 |

2- Overall aim:

At the end of the Module the students will be able to:

- Master the scientific knowledge, skills, and attitudes essential for the practice of medicine.
- Acquires the essential up to date knowledge and skills required for diagnosing and managing common cardiac, chest and immunological diseases and will recognize the basic techniques and different modalities used in surgical department.
- Apply diagnostic, problem solving and decision-making skills necessary for proper evaluation and management of common diseases and emergencies.
- Participate in the social and community aspects of national health care system.
- Acquire ethical and professional attitudes necessary for establishment of excellent communication with patients, relatives,
- staff and colleagues.
- Understand the nature of most common diseases and will recall their knowledge of anatomy, physiology, and pathology of it.

3. Learning outcomes (LOs)

By the end of this module the student will be able to:

Competency Area I: The graduate as a health care provider

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

1.1 Take and record a structured, patient centered history.

1.1.1. Provide excellent educational programs to bring the highest levels of students and to attain high levels of learning outcomes. This includes objective structural clinical examination (OSCE).

1.1.2. Develop teaching skills through an academic environment that encourages creativity and allows continuous progress.

1.1.3. This structural practical examination is often conducted by the medicine and surgery department of the faculty.

1.3. Assess the mental state of the patient.

1.3.1 Use clinical assessment tools to evaluate the patient's mental status.

1.4. Perform appropriately timed full physical examination of patients appropriate to the age, gender, and clinical presentation of the patient while being culturally sensitive.

1.4.1. Perform full Physical examination.

1.6. Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.

1.6.1. Order the appropriate investigations for each case.

1.10. Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.

1.10.1 Judge the results of history, examination and laboratory tests to reach efficient diagnosis.

1.11. Perform diagnostic and intervention procedures² in a skillful and safe manner, adapting to unanticipated findings or changing clinical circumstances.

1.11.1. Perform and interpret ECG.

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1.11.2. Use a nebulizer for administration of inhalation therapy and administering basic oxygen therapy with the patient in chest ward.

1.11.3. Insert a nasogastric tube.

1.11.4. Perform Wound care and basic wound dressing.

1.11.5. Perform cardiopulmonary resuscitation and basic life-support through the critical care and patient safety curriculum.

1.11.6. Insert peripheral intravenous access and setting up an infusion; use of infusion devices during ICU course.

Competency Area II: The graduate as a health care promoter

2.1 Identify the basic determinants of health and principles of health improvement.

2.1.1. Use the simple and effective teach-back method to check student understanding. Also adopt an early interventional approach ensuring that health literacy promotion is fully integrated into early years and educational curriculum.

2.1.2. Discuss actively in tutorials and clinical rounds limit health literacy and predicts independent risk factors including nutrition, smoking and lack of physical activity.

2.3 Discuss the role of nutrition and physical activity in health.

2.3.1. Summarize the Systematic approach to provide high quality nutritional care especially for comorbid patients.

2.3.2. Plan on assessment, diagnosis, treat and monitor a patient's nutritional progress.

2.4 Identify the major health risks in his/her community, including demographic, occupational and environmental risks, endemic diseases, and prevalent chronic diseases.

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2.4.1. Identify and screening of population groups most at risk as old people m, people with long term health conditions and disable.

22.4.2. Demonstrate care for specific groups including diabetics, depression, heart, kidney, and musculoskeletal disease through trained community students.

2.7 Provide care for specific groups including pregnant women, newborns and infants, adolescents, and the elderly.

2.7.1. Deal with an aging patient population has a substantial impact through providing a means of increasing the breadth and depth of geriatric content in the curriculum.

2.7.2. Teach their collaegues in the out clinic, inpatient and home care the palliative medicine of geriatric.

2.9 Adopt suitable measures for infection control.

2.9.1. Retell the diverse of infectious disease including their diagnosis, treatment, control, and epidemiology.

Competency Area III: The graduated as a professional

3.1. Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.

3.1.1. Respect the hospital team from the doctor, nurse, and technicians.

3.1.2. Treat patients without discrimination based on race, color, national origin gender sexual orientation, mental disability, religion, ethnicity, or ability to pay.

3.3.3. Ask for and be provided with a chaperone during exams, tests, or procedures.

3.5. Ensure confidentiality and privacy of patients' information.

3.5.1. Respect patients' cfedentiality during history taking and clinical examination are expected to observe fully confidentiality of subjects and should

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not discuss the personal details of the consultation outside the examination area at any time with any person.

3.8. Refer patients to appropriate health facility at the appropriate stage.

3.8.1. Assess scores to categorize the patient stage during admission.

Competency Area IV: The graduate as a scholar and scientist

4.1 Describe the normal structure of the body and its major organ systems and explain their functions.

4.1.1. Identify surface anatomy of each organ during clinical examination.

4.3 Recognize and describe main developmental changes in humans and the effect of growth, development and aging on the individual and his family.

4.3.1. Identify common diseases according to age, gender, race.

4.5 Identify various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of illness/disease and explain the ways in which they operate on the body (pathogenesis).

4.5.1 Discuss pathophysiology and pathogenesis of various diseases.

4.5.2 Identify causes and different types of inflammatory diseases.

4.5.3 Describe the mode of inheritance of different genetic disorders.

Competency Area V: The graduate as a member of the health team and system

5.2 Respect colleagues and other health care professionals and work cooperatively with them, negotiating overlapping and shared responsibilities and engaging in shared decision-making for effective patient management.

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

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5.2.2. Write safe prescriptions of different types of drugs.

Competency Area VI: The graduate as a lifelong learner and researcher

6.3 Identify opportunities and use various resources for learning.

6.3.1 Interacts confidently with colleagues, peers, and professors on web pages.

6.3.2 Use various properties in collecting information (Web-based learning, SDL).

6.6 Effectively manage learning time and resources and set priorities (PBL and Assignment)

6.6.1 Perform the required duties from him on time (assignments).

4- Module Contents

Theoretical lectures

Theoretical lectures

| No | Title | Department | Hours |
|-----|-------------------------------------|-------------------|-------|
| L28 | Rheumatoid arthritis | Immunology | 2h |
| L29 | Systemic lupus Erythrocytes | | 2h |
| L30 | Vasculitis | | 2h |
| L31 | Scleroderma | | 2h |
| L32 | Autoimmune liver disease | | 2h |
| L33 | IBD | | 2h |
| L34 | Celiac disease | | 2h |
| L35 | Cardiopulmonary resuscitation | Medical emergency | 2h |
| L36 | GIT bleeding | | 2h |
| L37 | Acute abdomen | | 2h |
| L38 | Shock | | 2h |
| L39 | Acid base balance | | 2h |
| L40 | Emergency in cardiovascular disease | | 2h |
| L41 | Emergency in chest disease | | 2h |
| L42 | Coma and its type | | 2h |
| L43 | Surgical emergency | | 20h |

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
العنوان: شارع الجيش، كفر الشيخ، جمهورية مصر العربية

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

| | | |
|-----|----------------|-----|
| L44 | Intensive care | 10h |
|-----|----------------|-----|

3. Practical

| No | Title | Department | Hours |
|-----|-------------------------------------|-------------------|-------|
| L28 | Rheumatoid arthritis | Immunology | 7h |
| L29 | Systemic lupus Erythrocytes | | 7h |
| L30 | Vasculitis | | 7h |
| L31 | Scleroderma | | 7h |
| L32 | Autoimmune liver disease | | 7h |
| L33 | IBD | | 8h |
| L34 | Celiac disease | | 8h |
| L35 | Cardiopulmonary resuscitation | Medical emergency | 7h |
| L36 | GIT bleeding | | 7h |
| L37 | Acute abdomen | | 7h |
| L38 | Shock | | 7h |
| L39 | Acid base balance | | 7h |
| L40 | Emergency in cardiovascular disease | | 8h |
| L41 | Emergency in chest disease | | 8h |
| L42 | Coma and its type | | 7h |
| L43 | Surgical emergency | | 30h |
| L44 | Intensive care | | 30h |

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
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5-Teaching methods and learning strategies

- Central lectures

Conducted by a Professor/assistant Professor and introduce the essential concepts and knowledge, the identification of scientific backgrounds, the explanation of complicated issues and topics and the potential for clinical application.

- Tutorial classes and local lectures

Conducted by an assistant Professor and lecturer in small teaching groups to emphasize complicated medical topics and clinical cases. They are held in the corresponding department and are included in the teaching plan.

- Clinical rounds

In the clinical stage students are divided in three groups and distributed in a rotatory manner over different clinical departments each for several weeks according to the study plan. They are presented with clinical cases, perform clinical examinations, discuss the differential diagnosis, learn, and develop critical thinking, communication skills and teamwork.

- Self-learning

6-Method for assessment in relation to ILOs

The examinations include mid-rotations, end -rotations and end of year examinations in the form of:

1. Written examinations: It includes a mixture of MCQs, case-solving exercises and independent learning activities in all subjects.
2. Oral examinations: -
- 3-Practical and clinical examination (OSCE)

| Course code | Course Title | Marks | | | Total marks | Credit hours |
|-------------|---|------------|-----------|--------------|-------------|--------------|
| | | End module | Practical | End semester | | |
| S10M2/M4CS | Medicine (IV), critical care and patient safety module. | 75 | 75 | 100 | 250 | 10 |

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملزمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
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Textbooks

Lichtman, M. A., Kaushansky, K., Kipps, T. J., Prchal, J. T., & Levi, M. M. (2011). Williams Manual of Hematology. McGraw-Hill.

Walker, B. R., & Colledge, N. R. (2013). Davidson's principles and practice of medicine e-book. Elsevier Health Sciences.

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YEAR 5- 10TH SEMESTER

THE ELECTIVE VII (MEDICAL STATISTICS) MODULE MODULE (3)

Basic information:

Course specifications of:

- Program on which the module is given Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- Module title: Medical Statistics module.
- Academic year/level: 5th level /10th semester.
- Code: S10M3/E7MS
- Credit hours for the module: 2
- Study weeks: Longitudinal.
- Departments offering the module:
 - Department of Public health and Community Medicine.

| Total | Lectures | SDL | Credit hours |
|--------------------|----------|-----|--------------|
| Medical Statistics | 25 | 5 | 2 |

Module Contents

1. Theoretical lectures

| NO | Topic | HOURS |
|----|----------------------------|-------|
| 1. | Introduction to the course | 1 |

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
العنوان: شارع الجيش، كفر الشيخ، جمهورية مصر العربية

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| | | |
|--------------------|--|-----------|
| 2. | Variables, Measures of central tendency, Measures of dispersion. | 2 |
| 3. | Normal distribution, Hypothesis. | 2 |
| 4. | Data Entry using excel | 1 |
| 5. | Importation of data to SPSS Coding, coding versus scoring | 2 |
| 6. | Probability theory part 1& 2 | 1 |
| 7. | Calculation of simple stat for quantitative data using SPSS | 2 |
| 8. | Calculation of simple stat for qualitative data using SPSS | 2 |
| 9. | Inferential statistics and confidence interval, Types of errors | 2 |
| 10. | Parametric (t-test, paired t-test, ANOVA, Repeated measure ANOVA). | 2 |
| 11. | Non-parametric (Wilcoxon signed rank test, Mann-Whitney U-test). | 3 |
| 12. | Chi square test. | 1 |
| 13. | Measures of risk. | 1 |
| 14. | Correlation and Regression analysis. | 2 |
| 15. | Tabular and graphical presentation of data | 2 |
| Total hours | | 25 |

6. COURSE ASSESSMENT:

Written Exams short questions or / and multiple choice questions (MCQs).

STUDENT'S RESPONSIBILITY

- Class attendance and participation are extremely important for each student.

This will be considered in the evaluation of the course grade.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

- If there is anything that the module coordinator can do to assist you during the course, please feel free to contact him.

Sites

| Activity | | Site |
|-------------------|--|------------------|
| Final module exam | | Examination Hall |

Textbooks and References for System Modules

Mishra, Dr. Shanti Bhushan & Alok, Dr. Shashi. (2017). HANDBOOK OF research methodology.

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THE ELECTIVE VII (APPLIED NEUROANATOMY STROKE BY STROKE) MODULE. MODULE (3)

1- Basic information:

Course specifications of:

- Program on which the module is given Bachelor of Medicine (M.B, B.CH.) for undergraduate.
- Module title: Applied neuroanatomy (stroke by stroke) module.
- Academic year/level: 5th level /10th semester.
- Code: S10M3/E7AN
- Credit hours for the module: 2
- Study weeks: Longitudinal.
- Departments offering the module:
 - Department of Neuropsychiatry.

1- Overall course aim

At the end of the Module the students will be able to:

- Recognize the parts of the central nervous system.
- Recognize the areas of cerebral cortex and their functions.
- Recognize the stages of normal speech and its disorders.
- Recognize the blood supply of the brain.
- Describe the etiology and risk factors of stroke.
- Recognize how to localize the site of lesion in stroke.

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
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- Recognize the clinical presentation of stroke
- Recognize how to manage a case of stroke regarding important investigations and urgent treatment

3. Learning outcomes (LOs)

By the end of this module the student will be able to:

Competency Area I: The graduate as a health care provider

1.1. Take and record a structured, patient centered history.

1.1.1 Take and record a detailed neurological history.

1.1.2 Diagnosis of cerebro-vascular diseases

1.3 Assess the mental state of the patient.

1.3.1 Assess Glasgow coma scale (GCS) of the patient

1.4 Perform appropriately timed full physical examination of patients appropriate to the age, gender, and clinical presentation of the patient while being culturally sensitive

1.4.1 Examine motor, sensory and cerebellar system and cranial nerves.

1.6 Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.

1.6.1 order for CT, MRI brain and laboratory investigation according to examination and history

1.10. Integrate the results of history, physical and laboratory test findings into a meaningful diagnostic formulation.

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رسالة الكلية: تلتزم كلية الطب جامعة كفر الشيخ بإعداد كوادر طبية متميزة ملزمة بالأسس العلمية والمعرفية والمهارات التقنية وفقاً للمعايير القومية الأكاديمية المرجعية لقطاع العلوم الطبية، وقادرة على تشخيص وعلاج الأمراض المختلفة وإجراء الأبحاث العلمية التطبيقية، وتقديم المشورة العلمية والطبية التي تساهم في تنمية البيئة وخدمة المجتمع المحلي.
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1.10.1 Correlate the results of history, physical and laboratory test to reach a meaningful diagnosis.

1.11. Perform diagnostic and intervention procedures in a skillful and safe manner, adapting to unanticipated findings or changing clinical circumstances.

1.11.1 Perform Thrombolytic therapy (tTPA) at first 3-4.5 hours of the onset of stroke.

1.15. Provide the appropriate care in cases of emergency, including CPR , immediate life support measures and basic first aid procedures.

1.15.1 Provide CPR, immediate life support in emergency cases, Airway, breathing and circulation (ABC) management.

1.16. Apply the appropriate pharmacological and nonpharmacological approaches to alleviate pain and provide palliative care for seriously ill people, aiming to relieve their suffering and improve their quality of life.

1.16.1 Prescribe secondary prevention treatment.

Competency Area II: The graduate as a health care promoter

2.1 Identify the basic determinants of health and principles of health improvement.

2.1.1 take detailed history and correlated nature of patient lifestyle with medical condition.

2.1.2 Manipulate rapidly with stroke patient (Time is brain)

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2.2 Recognize the economic, psychological, social, and cultural factors that interfere with wellbeing.

2.2.1 Determine in details risk factors to help in welling and overcoming of obstacles.

2.2.2 Disscuss burden of stroke

Competency Area III: The graduated as a professional

3.4. Treat all patients equally, and avoid stigmatizing any category regardless of their social, cultural, ethnic backgrounds, or their disabilities.

3.1.1 provide equal opportunities for clinical examination and management for all patients

3.5. Ensure confidentiality and privacy of patients' information.

3.5.1 communicate effectively and sensitively with patients and relatives

Competency Area IV: The graduate as a scholar and scientist

4.1 Describe the normal structure of the body and its major organ systems and explain their functions.

4.1.1 Descibe anatomy of brain and determine areas of the brain and their related function.

4.1.2 Determine action and nerve supply of different muscles.

4.5. Identify various causes (genetic, developmental, metabolic , toxic , microbiologic , autoimmune , neoplastic , degenerative , and traumatic) of

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illness / disease and explain the ways in which they operate on the body pathogenesis).

4.5.1 Discuss fewer common causes of stroke as genetic causes.

4 Module Contents

1. Theoretical lectures

| NO | TITLE | HOURS |
|----|---|-------|
| L1 | Parts of the central nervous system | 2h |
| L2 | The motor and sensory systems and pathways | 2h |
| L3 | Areas of cerebral cortex, their functions and lesions Speech disorders | 4h |
| L4 | The cranial nerves | 4h |
| L5 | Blood supply of the brain” the carotid and the vetebrobasilar system” | 4h |
| L6 | Vascular occlusive syndrome | 4h |
| L7 | Ischemic Cerebral stroke | 4h |
| L8 | Hemorrhagic stroke | 4h |
| L9 | Revision | 2h |

6. COURSE ASSESSMENT:

Written Exams short questions or / and multiple-choice questions (MCQs).

STUDENT’S RESPONSIBILITY

- Class attendance and participation are extremely important for each student.

This will be considered in the evaluation of the course grade.

رؤية الكلية: أن تكون كلية الطب جامعة كفر الشيخ مركزاً للتميز في التعليم الطبي والبحث العلمي وخدمة المجتمع، وشريكاً فعالاً في الارتقاء بالخدمات الصحية محلياً وإقليمياً ودولياً.

- If there is anything that the module coordinator can do to assist you during the course, please feel free to contact him.

Sites

| Activity | Site |
|-------------------|------------------|
| Final module exam | Examination Hall |

Textbooks and References for System Modules

Brust J.M. (2019). CURRENT Diagnosis & Treatment: Neurology (3rd Edition). New York : McGrawHill.

Daroff, R. B., In Jankovic, J., In Mazziotta, J. C., In Pomeroy, S. L., & Bradley, W. G. (2016). Bradley's neurology in clinical practice. London : Elsevier



جامعة كفر الشيخ - كلية الطب البشري
وحدة ضمان الجودة



كشف تسليم وثيقة توصيف البرنامج التكاملية وتوصيف مقرراته لائحة (2020) - (الدورة الدراسية
2021 / 2020 - 2029 / 2028)

| | |
|----------|---|
| الوثيقة: | كشف تسليم وثيقة توصيف البرنامج التكاملية وتوصيف مقرراته لائحة (2020) - (الدورة الدراسية 2021 / 2020 - 2029 / 2028) |
| التاريخ: | 2020/10/20 الفئات المستهدفة: أعضاء هيئة التدريس والهيئة المعاونة |

- التوقيع بالإستلام:

| م | الاسم | الوظيفة | التوقيع |
|----|---------------------|--------------------------------|---------------------|
| 1 | سارة جمال عبده | مدرسة الطفليات الصحية | سارة جمال عبده |
| 2 | أميرة عثمان | مدرسة الميكروبيولوجيا | أميرة عثمان |
| 3 | مروة كرم منة | مدرسة الكيمياء الحيوية | منة |
| 4 | د. محمد الدين كرجاد | أ.د.م. جراحة العظام | د. محمد الدين كرجاد |
| 5 | منة عبدالعاطم | مدرسة التشريخ | منة عبدالعاطم |
| 6 | محمد ياسين | أ.د.م. العجافة العامة | محمد ياسين |
| 7 | هانى مرسى | أ.د.م. الفسيولوجيا | هانى مرسى |
| 8 | منة الخولى | مدرسة الفسيولوجيا | منة الخولى |
| 9 | هبة عبدك | مدرسة التمريض والتمريض | هبة عبدك |
| 10 | أميرة كرم مرسى | مدرسة التشريخ | أميرة كرم مرسى |
| 11 | هانى مرسى | أ.د.م. الأراضى العذرية | هانى مرسى |
| 12 | أ.د.م. منة زهير | استاذة الباثولوجيا الإكلينيكية | منة زهير |
| 13 | رشا السيد | مدرسة التشريخ | رشا السيد |
| 14 | سمر أحمد | مدرسة الميكروبيولوجيا | سمر أحمد |
| 15 | مروة كرم منة | مدرسة الطفليات الصحية | منة |

الإعتماد:

مسؤول معيار المعايير الأكاديمية والبرامج

د/ مروة محمد غلاب
د. مروة محمد غلاب

وحدة ضمان الجودة
(نموذج النشر الورقي للوثائق)



جامعة كفر الشيخ - كلية الطب البشري
وحدة ضمان الجودة



طلب نشر وثيقة على الموقع الإلكتروني للكلية

=====

- الجزء الاول: يستوفى بواسطة الجهة الطالبة للنشر

| | |
|--------------------------|---|
| اسم الوثيقة: | توصيف البرنامج الأكاديمي (لائحة ٢٠٢٠) |
| تاريخ الاعتماد: | ٢٠٢٠/١٠/١٢ |
| اسم الجهة الطالبة للنشر: | وحدة ضمان الجودة |
| اسم وتوقيع الجهة: | - الاسم: أ.د/ هاني حسين محمد - الوصف: مدير وحدة ضمان الجودة - التوقيع: ٢٠٢٠/١٠/١٢ |
| تاريخ الطلب: | ٢٠٢٠/١٠/١٢ |

- الجزء الثاني: يستوفى بواسطة إدارة الموقع:

| | |
|--------------------------------------|---|
| التأكد من صلاحية الوثيقة: | |
| - الوثيقة صالحة للنشر دون تعديل: | <input checked="" type="checkbox"/> |
| - الوثيقة تحتاج إلى تعديل: | <input type="checkbox"/> |
| - الوثيقة غير صالحة للنشر: | <input type="checkbox"/> |
| تاريخ النشر (في حالة تاكد الصلاحية): | ٢٠٢٠/١٠/١٤ |
| اسم وتوقيع المسئول عن النشر: | - الاسم: مهندسة/ سهام صبحي صابر - الوصف: مسئول it - التوقيع: ٢٠٢٠/١٠/١٤ |
| قرار عميد الكلية | |
| الاسم: | أ.د/ طه أحمد اسماعيل |
| التوقيع: | |