M.B.B.CH. CREDIT HOURS
(5 + 2)
MODULE SPECIFICATION LEVEL III

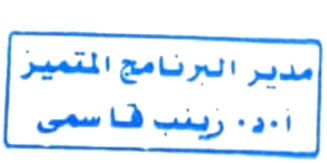
THE SPECIAL PROGRAM

LEVEL III

لجنة المعايير الاكاديمية و التوصيف بالبرنامج	منسق	مدير وحدة ضمان الجودة	عميد الكلية
د. أحمد حمدان	أ.د زينب عبدالعزيز قاسمي	ا.د/ أميرة فتحى عبد العاطى	أ.د/ محمد فهمي النعمانى

مدير البرنامج المتميز
أ.د. زينب قاسمى

Semester V


مدير البرنامج المتميز
أ.د. زينب قاسمى


MENOUFIA MBBCH
MMSP(5-21)
SPECIAL PROGRAM

Endocrine

University: Menoufia **Faculty: Medicine**

A-Administrative information

Module Title: Endocrine

Code No: ENDO 3101

Department offering the Module: Anatomy, Histology, Biochemistry, Physiology, Pathology, Pharmacology, and Microbiology

Program (s) on which the Module is given: Menoufia M.B.B. ChCredit- hour Program **(5+2)**

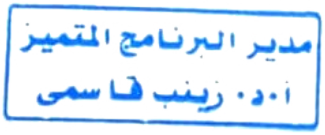
Academic year/level: Third level

Semester: Semester V

Date of specification: 2018.

Date of approval by Departmental Council: 2018.

Date of approval by Faculty Council: 2018.



Credit hours: 6 credit hours/ 5 weeks

	Teaching hours		
	Lectures	Practical	Activities
Anatomy	**6**	**9**	**18**
Histology	**3**	**4.5**	**9**
Physiology	**16.5**	**24.75**	**49.5**
Biochemistry	**3**	**4.5**	**9**
Pathology	**1.5**	**2.25**	**4.5**
Pharmacology	**6**	**9**	**18**
Total	**36**	**54**	**108**

- Professional Information

1 – Aim of Module:

This module aims to integrate knowledge and practical skills from various departments to enable students to comprehend the anatomical basics, histological characteristics, physiological processes, biochemical reactions, pathological conditions, and pharmacological interventions relevant to the endocrine system including pituitary, thyroid, and adrenal glands, and insulin secretion from the

pancreas. These knowledge and skills are essential for future clinical practice and patient care regarding assessment, diagnosis, and management of endocrine disorders effectively

II- Learning Outcomes of the Module:

Competency Area 3: The graduate as a professional.

Key competency		Module LOs
3.1	Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.	3.1.1 Demonstrate a professional. respectful attitude while dealing with colleagues, and staff members 3.1.2 Demonstrate commitment and integrity while preparing the coursework and assignments

Competency Area 4: The graduate as a scholar and scientist.

Key competency		Module LOs
4.1	Describe the normal structure of the body and its major organ systems and explain their functions.	4.1.1. Distinguish between endocrine and exocrine glands. 4.1.2. Identify the major endocrinal glands in the human body. 4.1.3. Identify the location of pituitary gland and its way of attachment to the brain. 4.1.4. Explain the division of the pituitary gland to lobes and the important relations and blood supply of each lobe. 4.1.5. Distinguish the embryonic origin of pituitary gland & hypothalamus. 4.1.6. Describe the shape and position of the thyroid and parathyroid glands. 4.1.7. Recognize the important relations of the thyroid and parathyroid glands. 4.1.8. Describe the blood supply and lymph drainage of the thyroid and parathyroid glands.

مدير البرنامج المتميز
أ.د. زينب قاسمى

4.1.9. Discuss the surgical importance of the thyroid and parathyroid glands.
4.1.10. Distinguish the embryonic origin of each gland of thyroid and parathyroid.
4.1.11. Describe the shape, position, and relations of the adrenal gland.
4.1.12. Describe the blood supply of the adrenal gland.
4.1.13. Recall the site, relations of the pineal gland.
4.1.14. Describe classification of hormones
4.1.15. Explain mechanism of hormonal action.
4.1.16. List different types of hormone receptors.
4.1.17. Describe the mechanism of action of type II hormones.
4.1.18. Demonstrate location of pituitary gland inside its boney bed and its relations to the surroundings.
4.1.19. Identify the insulin receptor and mechanism of insulin release.
4.1.20. Describe the physiological action of insulin hormone and the mechanism behind it.
4.1.21. Describe the pattern of insulin secretion and recognize factors stimulating and inhibits its secretion.
4.1.22. Explain the physiological action of glucagon and the control of its secretion.
4.1.23. Explain the physiological action and control of secretion of glucagon hormone.
4.1.24. Recognize the two ways of hypothalamohypophyseal connections.
4.1.25. Enumerate the anterior pituitary hormones and hypothalamic hormones affecting their release.
4.1.26. Describe the physiological action of growth hormone and prolactin and Explain the control of their secretion.
4.1.27. Describe the action of oxytocin hormone and control of its secretion.
4.1.28. Outline the hormones secreted from thyroid gland.
4.1.29. Describe the physiological effects of iodinated thyroid hormones.
4.1.30. Identify the control of iodinated thyroid hormones.
4.1.31. Explain the role of calcium in physiological processes and distribution of calcium in the body.
4.1.32. Explain the integrated role of the

endocrine glands in calcium homeostasis.

4.1.33. Describe the action of parathyroid hormone on bones, kidneys and intestine.

4.1.34. Define the role of thyrocalcitonin in calcium regulation.

4.1.35. Describe the action of vitamin D3 and its mechanism of action and control of its secretion.

4.1.36. Explain the physiological actions of mineralocorticoids and factors affecting their secretion.

4.1.37. Describe the action of corticosteroids.

4.1.38. Recognize the control of secretion of corticosteroids.

4.1.39. Describe the action of adrenal androgens.

4.1.40. Recognize the endocrine function of pineal gland

4.1.41. Explain the regulation system of melatonin secretion.

4.1.42. Identify the antioxidant activity of melatonin hormone and its role in immunity and reproductive function.

4.1.43. Describe the endocrine function of adipose tissue and thymus gland.

4.1.44. Distinguish between physiological and pathological performance of endocrinal pancreas.

4.1.45. Identify physiological scientific measurements used to test Glucose tolerance

4.1.46. Distinguish between physiological and pathological performance of pituitary gland.

4.1.47. Identify physiological scientific measurements used to test Pituitary gland functions

4.1.48. Distinguish between physiological and pathological performance of thyroid gland.

4.1.49. Identify physiological scientific measurements used to test Thyroid gland functions.

4.1.50. Distinguish between physiological and pathological performance of parathyroid gland.

4.1.51. Distinguish between physiological and pathological performance of suprarenal cortex.

4.1.52. Identify physiological scientific measurements used to test Adrenal functions

4.1.53. Integrate basic anatomical data with clinical data.

4.1.54. Correlate student's knowledge in embryology with clinical findings caused by errors in development.

4.1.55. Interpret the normal anatomical structures

		on radiographs 4.1.56. Outline endocrine hormones secreted from other glands or tissues
4.2	Explain the molecular, biochemical, and cellular mechanisms that are important in maintaining the body's homeostasis.	4.2.1. Differentiate between type I and II diabetes mellitus. 4.2.2. Compare between different preparations of insulin. Explain adverse effects of insulin 4.2.3. Describe the mechanism of insulin resistance List antidiabetic drugs. 4.2.4. Interpret biochemical causes of hypo and hyperthyroidism. 4.2.5. Interpret biochemical causes of hypo and hyper secretion of insulin and glucagon hormones. **4.2.6.** Interpret biochemical causes of hypo and hyper secretion of pituitary hormones.
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. List the congenital anomalies of hypothalamus and pituitary glands. 4.3.2. List the congenital anomalies of thyroid and parathyroid glands. 4.3.3. Discuss pituitary dwarfism. 4.3.4. Describe pituitary infantilism, cause and manifestations. 4.3.5. Identify causes of panhypopituitarism and its manifestations. 4.3.6. Describe adiposogenital syndrome. 4.3.7. Differentiate gigantism and acromegaly in terms of their causes and manifestations. 4.3.8. Describe secondary aldosteronism. 4.3.9. Outline the manifestations of Cushing's syndrome. 4.3.10. Describe Addison's disease. 4.3.11. Recognize adrenogenital syndrome.
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. List the causes of goiter 4.5.2. Differentiate between different types of thyroiditis 4.5.3. Enumerate and identify different types of thyroid tumors including predisposing factors, presentation, gross and microscopic picture 4.5.4. Outline the causes and classification of diabetes mellitus.

مدير البرنامج المتميز
أ.د. زينب قاسمى

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 pathogenesis, types, presentation, complications of diabetes mellitus. 4.6.2. Describe the manifestations and complications of diabetes mellitus. 4.6.3. Describe hypoglycemia and its management. 4.6.4. Identify some disorders of ADH secretion as diabetes insipidus. 4.6.5. Explain pathogenesis and presentation of different types of goiter including gross, microscopic picture and complications. 4.6.6. Describe the pathogenesis, gross picture, microscopic picture and complications of different types of thyroiditis 4.6.7. Describe active vitamin D3 deficiency. 4.6.8. Describe causes and manifestations of both primary and secondary hyperparathyroidism. 4.6.9. Outline different causes, types and manifestations of tetany. 4.6.10. Identify provocative tests for latent tetany. 4.6.11. Describe the biochemical bases of clinical manifestations of slected diseases due to hormonal dysfunction 4.6.12. Identify congenital thyroid abnormality as thyroglossal cyst. 4.6.13. Discuss pituitary dwarfism. 4.6.14. Describe pituitary infantilism, cause and manifestations. 4.6.15. Identify causes of panhypopituitarism and its manifestations. 4.6.16. Describe adiposogenital syndrome. 4.6.17. Differentiate gigantism and acromegaly in terms of their causes and manifestations. 4.6.18. Describe the manifestations of primary aldosteronism and its concept of treatment..

مدير البرنامج المتميز
أ.د. زينب قاسمى

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 the pharmacology of insulin secretagogues. 4.7.2. Describe the pharmacology of alpha-glucosidase inhibitors. 4.7.3. Describe the pharmacology of the new antidiabetic agents. 4.7.4. List drugs used in treatment of hypothyroidism 4.7.5. List drugs used in treatment of hyperthyroidism. 4.7.6. Describe the pharmacology of antithyroid drugs. 4.7.7. Classify corticosteroid preparations 4.7.8. Describe mechanism of action and therapeutic uses of corticosteroids 4.7.9. Describe pharmacology of vitamin D, parathyroid hormone and calcitonin Discuss the drugs used in treatment of osteoporosis 4.7.10. Identify the uses and side effects of different antidiabetic drugs and how to manage 4.7.11. Outline treatment of hyper or hypothyroid cases **4.7.12.** Identify treatment of Cushing's disease
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. Differentiate the normal anatomical structures on plane radiographs and ultrasonography. 4.8.2. Demonstrate thyroid and parathyroid glands on cadavers or plastic models with identification of their blood and nerve supply. 4.8.3. Interpret the results of tests for glucose tolerance 4.8.4. Interpret the results of tests for pituitary hormones. 4.8.5. Interpret the results of thyroid functions test 4.8.6. Interpret the results of free and ionized calcium levels. 4.8.7. Interpret the results of adrenal hormones tests 4.8.8. Examine and identify microscopic findings of colloid goiter, toxic goiter and papillary thyroid carcinoma.

Competency Area 5: The graduate as a member of the health team and part of the health care system.

Key competency		Module LOs
5.2	Respect colleagues and other health care professionals and work cooperatively with them, negotiating overlapping and shared responsibilities and	5.2.1 Demonstrate respect towards colleagues. 5.2.2 Apply teamwork in educational and professional encounters

مدير البرنامج المتميز
ا.د. زينب قاسمى

	engaging in shared decision-making for effective patient management.

Competency Area 6: The graduate as a lifelong learner and researcher.

Key competency		Module ILOs	
6.2	Develop, implement, monitor, and revise a personal learning plan to enhance professional practice.	6.2.1 6.2.2	Formulate a learning plan for the module in focus. Apply the learning plan respecting emerging priorities and encounters
6.3	Identify opportunities and use various resources for learning.	6.3.1	Use information resources whether written or electronic efficiently for the educational process.
6.6	Effectively manage learning time and resources and set priorities.	6.6.1 6.6.2	Manage time and learning resources effectively. Apply priority setting in the learning process

Iii. Module Contents:

THEORETICAL		
TOPIC	TEACHING HOURS	DEPARTMENT
Anatomy and development of hypothalamus and pituitary gland	**1.5**	Anatomy
Anatomy of thyroid gland	**1.5**	Anatomy
Anatomy of parathyroid gland, development of thyroid and parathyroid glands	**1.5**	Anatomy
Anatomy and development of suprarenal gland and anatomy of pineal Body	**1.5**	Anatomy
Histology of pituitary gland and pineal body	**1.5**	Histology
Histology of thyroid,parathyroid and suprarenal glands	**1.5**	Histology
Classification and mechanism of action of hormones	**1.5**	Biochemistry
Biochemistry of thyroid and pancreatic hormones	**1.5**	Biochemistry
Insulin and glucagon hormones	**1.5**	Physiology
Somatostatin and disorders of endocrine pancreas	**1.5**	Physiology
Anterior pituitary	**1.5**	Physiology
Abnormalities of growth hormone secretion	**1.5**	Physiology
Posterior pituitary.	**1.5**	Physiology
Thyroid gland	**1.5**	Physiology
Calcium homeostasis	**1.5**	Physiology
Disorders of calcium regulation	**1.5**	Physiology
Adrenal hormones	**1.5**	Physiology
Disorders of adrenal functions	**1.5**	Physiology
Pineal gland and endocrine thymus & adipose tissue	**1.5**	Physiology
Antidiabetic drugs (Insulin)	**1**	Pharmacology

مدير البرنامج المتميز
أ.د. زينب قاسمى

Oral antidiabetic drugs	**1**	Pharmacology
Thyroid hormones and antithyroid drugs	**1.5**	Pharmacology
Corticosteroids	**1.5**	Pharmacology
Drugs affecting Calcium metabolism	**1**	Pharmacology
Thyroid gland and Diabetes Mellitus	**1.5**	Pathology
Total Hours	**36**	
PRACTICAL		
TOPIC	TEACHING HOURS	DEPARTMENT
Hypothalamus-pituitary gland	**3**	Anatomy
Thyroid and parathyroid	**1.5**	Anatomy
Adrenal gland and pineal body	**1.5**	Anatomy
Revision	**3**	Anatomy
Histology of pituitary gland	**1.5**	Histology
Histology of thyroid, parathyroid and suprarenal glands	**1.5**	Histology
Revision	**1.5**	Histology
Biochemical causes of hypo and hyper secretion of thyroid and pancreatic hormones	**1.5**	Biochemistry
Biochemical causes of hypo and hyper secretion of pituitary hormones	**1.5**	Biochemistry
Radioimmunoassay and Immunofloresence	**1.5**	Biochemistry
Diabetes mellitus and Tests for glucose tolerance	**6**	Physiology
Short stature and diabetes insipidus	**6**	Physiology
Thyroid functions test	**4.5**	Physiology
Calcium homeostasis	**4.25**	Physiology
Adrenal functions test	**4**	Physiology
Case of Diabetes	**2**	Pharmacology
case of hyper and hypothyroidism	**3**	Pharmacology
Case on corticosteroid use	**2**	Pharmacology
Case of osteoporosis	**2**	Pharmacology
Thyroid gland pathology	**2.25**	Pathology
Total	**54**	

IV– Teaching and learning Methods:

1. **Theoretical Teaching:**
   a) **Interactive lectures: using**
      - Brainstorming
      - Audiovisual aids through animations and diagrams
      - Interaction with the students through questions
      - Student engagement with discussion
   b) **Case Based learning**
2. **Practical Teaching: conducted using:**
      - Practical sessions
3. **Self-directed Learning**

مدير البرنامج المتميز
أ.د. زينب قاسمى

VI- Student Assessment:

A. Attendance criteria:

The minimum acceptable attendance is 75%, otherwise students failing to reach that percentage will be prevented from attending the final examination.

B. Types of Assessment:

- **Formative:** This form of assessment is designed to help the students to identify areas for improvement. It includes a multiple-choice questions, problems-solving exercises and independent learning activities in all subjects. These will be given during tutorial and practical sessions. The Answers are presented and discussed immediately with you after the assessment. The results will be made available to the students.
- **Summative** This type of assessment is used for judgment or decisions to be made about the students' performance. It serves as:

1. Verification of achievement for the student satisfying requirement
2. Motivation of the student to maintain or improve performance
3. Certification of performance
4. Grades

C- Summative Assessment Methods and Schedule:

Assessment Method	Percentage	Description	Timing
Regular Evaluation	30%	10% written at the end of and periodicals including problem solving, multiple choice questions, give reason, matching, extended matching, complete and compare.	At the end of the module
		20% Participation in the tutorials, TBL, Research.	During the module
Final practical exam	30%	OSPE Exam	At the end of the module
Final Written	40%	It Includes problem-solving, multiple choice questions, give a eason, matching, extended matching, complete and compare.	At the end of the semester

D- Weighing of Assessment:

Method of Assessment |	Marks	Percentage
Final Written exam.	**55**	**40%**
Final Practical exam.	**41.25**	**30%**
Activities	**41.25**	**30%**
Total	**137.5**	**100%**

مدير البرنامج المتميز
أ.د. زينب قاسمى

E- Grading by GPA System:

The Percentage	Symbol	Grade
> 85%	A	Excellent.
75-<85 %	B	Very Good
65 - < 75 %	C	Good.
60 - < 65 %	D	Passed.
< 60 %	F	Failed.
	W	Withdrawn

VI. List of references and resources:

Lecture Notes of Module Departments

References:

Anatomy:

- Gray's Anatomy for Students. 3rd Edition. By: Richard Drake, A. Wayne Vogl, Adam W. M. Mitchell. Churchill Livingstone; 2014
- Langman's Medical Embryology, 13th Edition. By: T.W. Sadler. Williams and Wilkins; 2016
- Grant's Atlas of Anatomy 14th Edition. By: Anne M. R. Agur, Arthur F. Dalley II. LWW; 2016

Physiology:

- Guyton and Hall Textbook of Medical Physiology (Guyton Physiology) 13th Edition. By: John E. Hall. Saunders, 2015.
- Ganong's Review of Medical Physiology 25th Edition. By: NA. McGraw-Hill Medical, 2015.
- Physiology (Lippincott's Illustrated Reviews Series) 1st Edition. By: Robin R Preston, Thad Wilson, Richard A. Harvey. Lippincott Williams & Wilkins, 2012.

Histology:

- Junqueira's Basic Histology: Text and Atlas, 15th Edition. By: Anthony L. Mescher. McGraw Hill / Medical, 2018.
- Wheater's Functional Histology, 6th Edition. By: Barbara Young, Geraldine O'Dowd, Phillip Woodford. Churchill Livingstone, 2014.
- diFiore's Atlas of Histology with Functional Correlations, 12th Edition. BY: Victor P. Eroschenko. Lippincott Williams & Wilkins, 2012.

Biochemistry:

- Harper's Illustrated Biochemistry 31st Edition. By: Victor W. Rodwell, David Bender, Kathleen M. Botham, Peter J. Kennelly, P. Anthony Weil. McGraw Hill / Medical, 2018.
- Lippincott's Illustrated Reviews Biochemistry, 7TH Edition. By: Denise Ferrier. LWW, 2017.
- Textbook of Biochemistry with Clinical Correlations 7th Edition. By: Thomas M. Devlin. John Wiley & Sons, 2010.

Pathology:

- Robbins Basic Pathology (Robbins Pathology) 10th Edition. By: Vinay Kumar, Abul K. Abbas, Jon C. Aster. Elsevier, 2017.
- Pathology Illustrated, 8th Edition. By: Peter S. Macfarlane, Robin Reid, Robin Callander. Churchill Livingstone, 2018.

مدير البرنامج المتميز
أ.د. زينب قاسمى

- Diagnostic histopathology of tumors, 4th Edition. By: Christopher D. M. Fletcher. Saunders/Elsevier, 2013

Pharmacology:

- Basic and Clinical Pharmacology 14th Edition 14th Edition. By: Bertram Katzung. McGraw Hill / Medical, 2017.
- Lippincott's Illustrated Reviews: Pharmacology, 5th edition. By: Michelle A. Clark, Richard Finkel, Jose A. Rey, Karen Whalen, Richard A. Harvey (Editor). Lippincott Williams & Wilkins, 2011.
- Essentials of Medical Pharmacology 7th Edition. By: Tripathi KD. Jaypee Brothers Medical Pub, 2013.

Microbiology:

- Review of medical microbiology and immunology, 13th Edition. By: Levinson, Warren. The McGraw-Hill Companies, 2016.
- Review of medical microbiology, 27th Edition. By: Jawetz EM, Adelberg IL. Lange, 2016.
- Manual of Practical Microbiology & Immunology, 10th edition. By: El mishad AM. El-Ahram Press, 2014.

Parasitology:

- Foundations of Parasitology. 10th Edition. By: Larry Roberts, John Janovy, Steven Adler. McGraw-Hill Education, 2015.
- Paniker's Textbook of Medical Parasitology, 8th Edition. By: C. K. Jayaram Paniker. JP Medical Ltd, 2017
- Clinical Parasitology, 2nd Edition. By: Elizabeth Zeibig. Saunders, 2012.

VII- Facilities required for teaching and learning:

1- Faculty Lecture halls
2- Equipped labs with microscopes, slides, boxes and jars..
3- Faculty library for textbooks & electronic library for web search.
4- Audiovisual aids as boards, data show and computers
5- Dissecting room including cadavers, bones and plastic models
6- Museum specimens
7- Pharmacology labs with equipment and materials

مدير البرنامج المتميز
أ.د. زينب قاسمى

Key Competencies & Module LOs *vs* Teaching and Assessment Methods Matrix

Key Competencies	Module Learning Outcomes	Teaching Methods				Assessment Methods						
						Formative Assessment		Summative Assessment				
		Interactive Lectures	Case Based Learning	Practical sessions	Self-directed study	Theoretical	practical	Written	OSPE	Assignments	quizzes	participation
3.1	3.1.1 to 3.1.2	x	x	x						x		x
4.1	4.1.1 to 4.1.56	x	x		x	x		x		x	x	x
4.2	4.2.1 to 4.2.6	x	x		x	x		x		x	x	x
4.3	4.3.1 to 4.3.11	x	x		x	x		x		x	x	x
4.5	4.5.1 to 4.5.4	x	x		x	x		x		x	x	x
4.6	4.6.1 to 4.6.18	x	x		x	x		x		x	x	x
4.7	4.7.1 to 4.7.8	x	x		x	x		x		x	x	x
4.8	4.8.1 to 4.8.8			x			x		x	x		x
5.2	5.2.1, 5.2.2	x	x	x						x		x
6.2	6.2.1, 6.2.2				x	x	x	x	x	x	x	x
6.3	6.3.1				x	x	x	x	x	x	x	x
6.6	6.6.1, 6.6.2				x	x	x	x	x	x	x	x

Module Coordinator:	**Program Coordinator:**
Name: **Dr. Mona Abdelhamied Kora**	**Name: Prof. Dr. Zeinab Kasemy**

مدير البرنامج المتميز
أ.د. زينب قاسمى

CNS & Special Senses (I)

University: Menoufia **Faculty: Medicine**

A-Administrative information

Module Title: CNS& Special Senses (1)

Code No: CNS/SPI3102

Department offering the course: Anatomy, Physiology, Pharmacology and Microbiology

Program on which the course is given: Menoufia M.B.B.Ch Credit- hour Program **(5+2)**

Academic year: Third year

Semester: V

Date of specification: 2018

Date of approval by departmentscouncil:2018

Date of approval by faculty council: 2018

Total hours: 5 credit hours / 5 weeks.

	Teaching hours		
	Lectures	Practical	Activities
Anatomy	**15**	**22.5**	**45**
Physiology	**9**	**13.5**	**27**
Pharmacology	**5.1**	**7.65**	**15.3**
Microbiology	**0.9**	**1.35**	**2.7**
Total	**30**	**45**	**90**

B- Professional Information

I- Aim of the Module:

This multidisciplinary module aims to integrate knowledge and practical skills from various departments to enable students to comprehend the anatomical basics, physiological processes, pharmacological interventions, and microbial infections relevant to the central nervous system and special vision as a special sense. These knowledge and skills are essential for future clinical practice and patient care regarding assessment, diagnosis, and management of CNS, vision, and hearing disorders

مدير البرنامج المتميز
أ.د. زينب قاسمى

II- Learning Outcomes of the Module:

Competency Area 3: The graduate as a professional.

Key competency		Module LOs
3.1	Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.	3.1.1 Demonstrate a professional. respectful attitude while dealing with colleagues, and staff members 3.1.2 Demonstrate commitment and integrity while preparing the coursework and assignments

Competency Area 4: The graduate as a scholar and scientist.

Key competency		Module LOs
4.1	Describe the normal structure of the body and its major organ systems and explain their functions.	4.1.1. Identify the anatomical landmarks of the cranial cavity 4.1.2. Describe the anatomy of the cerebral cortex including white and grey matter. 4.1.3. Identify the anatomical details of the basal Gang., diencephalon & limbic system 4.1.4. Describe the anatomy of the cerebellum 4.1.5. Identify the divisions of the brain stems and its included nuclei and tracts 4.1.6. Outline the ventricular system including CSF formation and drainage 4.1.7. Identify different meningeal coverings of the brain. 4.1.8. Describe the anatomy of the spinal cord and its included tracts 4.1.9. Outline the blood supply of the brain and spinal cord Bl. supply of brain 4.1.10. Determine the normal development of CNS, ear and eyeball and their congenital anomalies 4.1.11. Describe the anatomy and development of the ear 4.1.12. Describe the anatomy of the orbit and development of the eye 4.1.13. Classify receptors according to their location, function, morphology, and adequate stimulus. 4.1.14. Describe the physiology of the optical system of the eye and the mechanism of vision 4.1.15. Interpret the anatomical and physiological knowledge with clinical signs seen in cases of Parkinsonism, ataxia, and strokes. 4.1.16. Explain and describe the image formation by the eye.

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 most important microorganisms causing meningitis, and encephalitis.
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. Classify disorders of visual acuity 4.6.2. Identify different disorders of color vision.
4.6	Describe altered structure and function of the body and its major organ systems that are seen in various diseases and conditions.	4.6.3. Identify pathogenesis, types, presentation, complications of diabetes mellitus. 4.6.4. Describe the manifestations and complications of diabetes mellitus. 4.6.5. Describe hypoglycemia and its management. 4.6.6. Identify some disorders of ADH secretion as diabetes insipidus. 4.6.7. Explain pathogenesis and presentation of different types of goiter including gross, microscopic picture and complications. 4.6.8. Describe the pathogenesis, gross picture, microscopic picture and complications of different types of thyroiditis 4.6.9. Describe active vitamin D3 deficiency. 4.6.10. Describe causes and manifestations of both primary and secondary hyperparathyroidism. 4.6.11. Outline different causes, types and manifestations of tetany. 4.6.12. Identify provocative tests for latent tetany. 4.6.13. Describe the biochemical bases of clinical manifestations of selected diseases due to hormonal dysfunction 4.6.14. Identify congenital thyroid abnormality as thyroglossal cyst. 4.6.15. Discuss pituitary dwarfism. 4.6.16. Describe pituitary infantilism, cause and manifestations. 4.6.17. Identify causes of panhypopituitarism and its manifestations. 4.6.18. Describe adiposogenital syndrome. 4.6.19. Differentiate gigantism and acromegaly in terms of their causes and manifestations. 4.6.20. Describe the manifestations of primary aldosteronism and its concept of treatment.

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. 4.7.2. 4.7.3. 4.7.4. 4.7.5. 4.7.6.	Explain pharmacology of drugs used in treatment of various diseases of CNS and drugs acting on the eye. Explain the main pharmacokinetics & adverse effects of carbamazepine, phenytoin & valproate. List the adverse effects of chlorpromazine, clozapine, haloperidol, thioridazine, and ziprasidone Explain characteristics of commonly used antidepressants in terms of pharmacokinetics, mechanisms of action, pharmacologic effects, clinical uses, toxic effects with chronic therapy or acute overdose and drug interactions. Design the clinical uses & identify adverse effects of major antiparkinsonian agents. Design for plane of management of status epilepticus.
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. 4.8.2. 4.8.3. 4.8.4. 4.8.5. 4.8.6. 4.8.7.	Identify dissected specimens or plastic models of the cerebral cortex, cerebellum, brain stem, and spinal cord. Sketch diagrams for different parts of the central nervous system. Demonstrate testing color vision. Demonstrate uses of ophthalmoscope. Examine the visual field. Identify causative micro-organisms of CNS infections by microscopic examination, Culture character and Biochemical reaction. Interpret brain angiography to recognize the anatomical landmarks, common diseases related to the central nervous system.

Competency Area 5: The graduate as a member of the health team and part of the health care system.

Key competency		Module LOs	
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 5.2.2	Demonstrate respect towards colleagues. Apply teamwork in educational and professional encounters

مدير البرنامج المتميز
أ.د. زينب قاسمى

Competency Area 6: The graduate as a lifelong learner and researcher.

Key competency		Module ILOs	
6.2	Develop, implement, monitor, and revise a personal learning plan to enhance professional practice.	6.2.1 6.2.2	Formulate a learning plan for the module in focus. Apply the learning plan respecting emerging priorities and encounters
6.3	Identify opportunities and use various resources for learning.	6.3.1	Use information resources whether written or electronic efficiently for the educational process.
6.6	Effectively manage learning time and resources and set priorities.	6.6.1 6.6.2	Manage time and learning resources effectively. Apply priority setting in the learning process

III. Module Contents:

Theoretical		
Topic	**Teaching hours**	**Department**
Cranial cavity and cerebral cortex1	1.5	**Anatomy**
Cerebral cortex 1,2& white mater	1.5	**Anatomy**
Basal Gang., diencephalon & limbic system	1.5	**Anatomy**
Anatomy of the cerebellum	1.5	**Anatomy**
Anatomy of brain stem 1&2	1.5	**Anatomy**
Brain stem 2, ventricular syst., CSF & meninges	1.5	**Anatomy**
Spinal cord & Bl. supply of brain	1.5	**Anatomy**
Bl. supp. and CNS development	1.5	**Anatomy**
Anatomy and development of the ear	1.5	**Anatomy**
Anatomy of the orbit and development of the eye	1.5	**Anatomy**
Receptors & general classification of sensation & nerve physiology	1.5	**Physiology**
Fluid & optical system of the eye	1.5	**Physiology**
Cornea & lens	1.5	**Physiology**
Uveal tract & retina	1.5	**Physiology**
Mechanism of vision	1.5	**Physiology**
Visual pathway & visual cortex	1.5	**Physiology**
Sedative hypnotics	1.1	**Pharmacology**
Opioid analgesics	0.75	**Pharmacology**
Antiepileptics	1	**Pharmacology**
Antidepressants and antipsychotics	0.75	**Pharmacology**
Anti-parkinsonian Drugs	0.75	**Pharmacology**
Local anesthetics	0.75	**Pharmacology**
CNS infections	0.9	**Microbiology**
Total	**30**	
Practical		
Topic	**Teaching hours**	**Department**
Anatomy of norma basalis externa	1.5	**Anatomy**
Anatomy of norma basalis interna	1.5	**Anatomy**
Anatomy of cranial cavity	1.5	**Anatomy**

مدير البرنامج المتميز
أ.د. زينب قاسمى

Anatomy of cerebral cortex (1)	1.5	**Anatomy**
Anatomy of cerebral cortex (2)	1.5	**Anatomy**
Basal ganglia	1.5	**Anatomy**
Diencephalon	1.5	**Anatomy**
Cerebellum	1.5	**Anatomy**
Anatomy of brain stem (1)	1.5	**Anatomy**
Anatomy of brain stem (2)	1.5	**Anatomy**
Anatomy of ventricular system, CSF	1.5	**Anatomy**
Anatomy of spinal cord	1.5	**Anatomy**
Blood supply and radiology	1.5	**Anatomy**
Anatomy of ear.	1.5	**Anatomy**
Anatomy of the orbit	1.5	**Anatomy**
Visual acuity & astigmatism & near point	2.7	**Physiology**
Blind spot & fundus examination with ophthalmoscope	2.7	**Physiology**
Colour vision	2.7	**Physiology**
Near response & light reflex	2.7	**Physiology**
Visual field & Revision	2.7	**Physiology**
Drugs acting on the eye	1.5	**Pharmacology**
Epilepsy	1.5	**Pharmacology**
Headache	1.5	**Pharmacology**
Parkinsonism	1.5	**Pharmacology**
Meningitis	1.65	**Pharmacology**
Practical cases on infections of CNS	1.35	**Microbiology**
Total	**45**	

IV– Teaching and learning Methods:

1. **Theoretical Teaching:**
   a) **Interactive lectures: using**
      - Brainstorming
      - Audiovisual aids through animations and diagrams
      - Interaction with the students through questions
      - Student engagement with discussion

   b) **Case Based learning**
2. **Practical Teaching: conducted using:**
   - Practical sessions
3. **Self-directed Learning**

مدير البرنامج المتميز
أ.د. زينب قاسمى

VI- Student Assessment:

A. Attendance criteria:

The minimum acceptable attendance is 75%, otherwise students failing to reach that percentage will be prevented from attending the final examination.

B. Types of Assessment:

- **Formative:** This form of assessment is designed to help the students to identify areas for improvement. It includes a multiple-choice questions, problems-solving exercises and independent learning activities in all subjects. These will be given during tutorial and

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

- **Summative** This type of assessment is used for judgment or decisions to be made about the students' performance. It serves as:

1. Verification of achievement for the student satisfying requirement
2. Motivation of the student to maintain or improve performance
3. Certification of performance
4. Grades

C- Summative Assessment methods and schedule:

Assessment Method	Percentage	Description	Timing
Regular Evaluation	30%	10% written at the end of and periodicals including problem-solving, multiple-choice questions, give reason, matching, extended matching, complete and compare.	At the end of the module
		20% Participation in the tutorials, TBL, Research.	During the module
Final practical exam	30%	OSPE Exam	At the end of the module
Final Written	40%	It Includes problem-solving, multiple choice questions, give a eason, matching, extended matching, complete and compare.	At the end of the semester

D- Weighing of Assessment:

Method of Assessment |	Marks	Percentage
Final Written exam.	**55**	**40%**
Final Practical exam.	**41.25**	**30%**
Activities	**41.25**	**30%**
Total	**137.5**	**100%**

E- Grading by GPA System:

The Percentage	Symbol	Grade
> 85%	A	**Excellent.**
75-<85 %	B	**Very Good**
65 - < 75 %	C	**Good.**
60 - < 65 %	D	**Passed.**
< 60 %	F	**Failed.**
	W	**Withdrawn**

VI. List of references and resources:

مدير البرنامج المتميز
أ.د. زينب قاسمى

- **Lecture Notes of Module Departments**
- **Essential Books:**

Anatomy:

- Gray's Anatomy for Students. 3rd Edition. By: Richard Drake, A. Wayne Vogl, Adam W. M. Mitchell. Churchill Livingstone; 2014
- Langman's Medical Embryology, 13th Edition. By: T.W. Sadler. Williams and Wilkins; 2016
- Grant's Atlas of Anatomy 14th Edition. By: Anne M. R. Agur, Arthur F. Dalley II. LWW; 2016

Physiology:

- Guyton and Hall Textbook of Medical Physiology (Guyton Physiology) 13th Edition. By: John E. Hall. Saunders, 2015.
- Ganong's Review of Medical Physiology 25th Edition. By: NA. McGraw-Hill Medical, 2015.
- Physiology (Lippincott's Illustrated Reviews Series) 1st Edition. By: Robin R Preston, Thad Wilson, Richard A. Harvey. Lippincott Williams & Wilkins, 2012.

Pharmacology:

- Basic and Clinical Pharmacology 14th Edition 14th Edition. By: Bertram Katzung. McGraw Hill / Medical, 2017.
- Lippincott's Illustrated Reviews: Pharmacology, 5th edition. By: Michelle A. Clark, Richard Finkel, Jose A. Rey, Karen Whalen, Richard A. Harvey (Editor). Lippincott Williams & Wilkins, 2011.
- Essentials of Medical Pharmacology 7th Edition. By: Tripathi KD. Jaypee Brothers Medical Pub, 2013.

Microbiology:

- Review of medical microbiology and immunology, 13th Edition. By: Levinson, Warren. The McGraw-Hill Companies, 2016.
- Review of medical microbiology, 27th Edition. By: Jawetz EM, Adelberg IL. Lange, 2016.
- Manual of Practical Microbiology & Immunology, 10th edition. By: El mishad AM. El-Ahram Press, 2014.

VII- Facilities required for teaching and learning:

1- Faculty Lecture halls
2- Equipped labs with microscopes, slides, boxes and jars..
3- Faculty library for textbooks & electronic library for web search.
4- Audiovisual aids as boards, data show and computers
5- Dissecting room including cadavers, bones and plastic models
6- Museum specimens
7- Pharmacology labs with equipment and materials

مدير البرنامج المتميز
أ.د. زينب قاسمى

Key Competencies & Module LOs *vs* Teaching and Assessment Methods Matrix

Key Competencies	Module Learning Outcomes	Teaching Methods				Assessment Methods						
						Formative Assessment		Summative Assessment				
		Interactive Lectures	Case Based Learning	Practical sessions	Self-directed study	Theoretical	practical	Written	OSPE	Assignments	quizzes	participation
3.1	3.1.1 to 3.1.2	x	x	x						x		x
4.1	4.1.1 to 4.1.16	x	x		x	x		x		x	x	x
4.5	4.5.1	x	x		x	x		x		x	x	x
4.6	4.6.1 to 4.6.2	x	x		x	x		x		x	x	x
4.7	4.8.1 to 4.7.6	x	x		x	x		x		x	x	x
4.8	4.8.1 to 4.8.7			x			x		x	x		x
5.2	5.2.1, 5.2.2	x	x	x						x		x
6.2	6.2.1, 6.2.2				x	x	x	x	x	x	x	x
6.3	6.3.1				x	x	x	x	x	x	x	x
6.6	6.6.1, 6.6.2				x	x	x	x	x	x	x	x

Module Coordinator:	**Program Coordinator:**
Name: **Dr. Fatma Hamed Shailan**	**Name: Prof. Dr. Zeinab Kasemy**

مدير البرنامج المتميز
ا.د. زينب قاسمى

Central nervous system and special senses II

University: Menoufia **Faculty: Medicine**

A-Administrative information

Module Title: Central nervous system and special senses II

Code No: CNS/SPII 3103

Department offering the Module: Histology, Physiology, Biochemistry, Pathology, and Parasitology

Program on which the Module is given: Menoufia M.B.B. Ch Credit- hour Program **(5+2)**

Academic year/level: Third level

Semester: Semester V

Date of specification: 2018.

Date of approval by Departmental Council: 2018

Date of approval by faculty council: 2018

Total ours: 5 credit hours./ 5 weeks

	Teaching hours		
	Lectures	Practical	Activities
Histology	2.1	3.15	6.3
Physiology	18	27	54
Biochemistry	5.4	8.1	16.2
Pathology	2.1	3.15	6.3
Parasitology	2.4	3.6	7.2
Total	30	45	90

B- Professional Information

I. Aim of the Module:

This multidisciplinary module aims to integrate knowledge and practical skills from various departments to enable students to comprehend the physiological processes, histological structure, microscopic and macroscopic pathological alterations and parasitic infections relevant to the central nervous system with its motor and sensory functions, and special senses including hearing, smell, and taste. The module also provides the students with basics of molecular biology. These knowledge and skills are essential for future clinical practice and patient care regarding assessment, diagnosis, and management of motor and sensory disorders

مدير البرنامج المتميز
أ.د. زينب قاسمى

II. Learning Outcomes of the Module:

Competency Area 3: The graduate as a professional.

Key competency	Module LOs
3.1 Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.	3.1.1 Demonstrate a professional. respectful attitude while dealing with colleagues, and staff members 3.1.2 Demonstrate commitment and integrity while preparing the coursework and assignments

Competency Area 4: The graduate as a scholar and scientist.

Key competency	Learning Outcomes
4.1 Describe the normal structure of the body and its major organ systems and explain their functions.	4.1.1. Recognize the basic histological structure and characteristics of each eye coat. 4.1.2. Identify the basic histological structure of lens, aqueous humor & vitreous humor. 4.1.3. Identify the basic histological structure of eyelid & lacrimal gland. 4.1.4. Describe the functional capabilities of each component & tissue type of the eye and relate them to their structure. 4.1.5. Identify the basic histological structure of the external ear. 4.1.6. Recognize the basic histological structure of the middle ear. 4.1.7. Identify the basic histological structure of the inner ear. 4.1.8. Describe the functional capabilities of each component & tissue type of the ear and relate

مدير البرنامج المتميز
أ.د. زينب قاسمى

them to their structure.

4.1.9. Identify the components of the labyrinth innervated by the eighth cranial nerve.
4.1.10. Recognize the functional basis of the vestibular apparatus and its role in maintaining equilibrium.
4.1.11. Describe the function of the outer, middle and inner ear structures in the mechano-electrical transduction process of sound energy into nerve impulses.
4.1.12. Recognize the location and structure of thermo-receptors.
4.1.13. Describe afferent pathways of temperature.
4.1.14. Recognize the cutaneous and proprioceptive mechanoreceptors.
4.1.15. Identify cutaneous and proprioceptive mechanoreceptors.
4.1.16. pathways and functions.
4.1.17. Recognize the location and structure of pain receptors.
4.1.18. Describe afferent pathways of pain sensation.
4.1.19. Describe coding for sensations.
4.1.20. Recognize the somatic sensations from the head and their pathways.
4.1.21. Identify the location and functions of different areas of sensory cortex.
4.1.22. Identify the functional basis of lower motor neurons in the spinal cord and brainstem.
4.1.23. Describe the anatomical location, function, and afferent neurotransmission of muscle spindle and Golgi tendon organs.
4.1.24. Identify the function and pathways of the pyramidal and extrapyramidal tracts to its lesion.
4.1.25. Relate the function and location of the basal ganglia to its lesion.
4.1.26. Describe the functions and location of the cerebellum and relate it to its lesions.
4.1.27. Describe the intellectual function of the brain as memory learning and language.
4.1.28. Outline its integration with the ANS.
4.1.29. Integrate basic histological, physiological, biochemical, pathological and parasitological data with clinical data.
4.1.30. Relate the histological structure of eye and ear to its specific functions and employ these data with clinical cases whenever possible.
4.1.31. Integrate the physiological functions of CNS and special sense organs with other basic and

		clinical sciences. 4.1.32. Interpret the electrical activity of the brain. 4.1.33. Relate the functions of hypothalamus to body homeostasis.
4.2	Explain the molecular, biochemical, and cellular mechanisms that are important in maintaining the body's homeostasis.	4.2.1. Describe the biochemical functions of nucleotides. 4.2.2. Recognize purines and pyrimidine bases and their nucleotides. 4.2.3. Define syn and anti-conformers. 4.2.4. Identify the structure of DNA. 4.2.5. Describe the structure, function and types of RNA. 4.2.6. Differentiate between DNA and RNA structure. 4.2.7. Define replication. 4.2.8. Identify replication steps. 4.2.9. Identify the components of replication fork. 4.2.10. Describe the different techniques of DNA repair. 4.2.11. Identify defects in repair system. 4.2.12. Define transcription. 4.2.13. Distinguish differences between replication and transcription. 4.2.14. Identify steps of transcription. 4.2.15. Recognize post-transcriptional modifications. 4.2.16. Define genetic code. 4.2.17. Recognize the characteristics of genetic code. 4.2.18. Describe mechanism of amino acyl tRNA binding. 4.2.19. Interpret the results of DNA products after gel electrophoresis.
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 brain trauma and injury of CNS. 4.5.2. Recognize the geographical distribution, morphology of different stages and life cycle of polymorphic and monomorphic trypanosomes. 4.5.3. Describe the mode of infection and the pathogenesis of trypanosomes. 4.5.4. Relate the pathogenesis of trypanosomiasis to different parasitic stages. 4.5.5. Distinguish clinical symptoms and signs of trypanosomiasis. 4.5.6. Describe diagnostic methods of trypanosomiasis. 4.5.7. Outline treatment of trypanosomiasis. 4.5.8. Identify methods of prevention and control of trypanosomiasis. 4.5.9. Identify the geographical distribution,

morphology of different stages and life cycle of free-living amoebae.

4.5.10. Describe the mode of infection and the pathogenesis of free-living amoebae.
4.5.11. Distinguish clinical symptoms and signs of free-living amoebae infections.
4.5.12. Describe diagnostic methods of free-living amoebae infections.
4.5.13. Outline treatment of free-living amoebae infections.
4.5.14. Conclude methods of prevention and control of free-living amoebae infections.
4.5.15. Identify the geographical distribution, morphology of different stages and life cycle of Loa loa, Onchocercus volvulous and Dracunculus medinensis.
4.5.16. Describe the mode of infection and pathogenesis of these worms.
4.5.17. Relate the pathogenesis of Loa loa, Onchocercus volvulous and Dracunculus medinensis to different parasitic stages.
4.5.18. Describe clinical symptoms and signs of Loa loa, Onchocercus volvulous and Dracunculus medinensis infections.
4.5.19. Describe diagnostic methods of Loa loa, Onchocercus volvulous and Dracunculus medinensis infections.
4.5.20. Outline treatment of Loa loa, Onchocercus volvulous and Dracunculus medinensis infections.
4.5.21. Conclude methods of prevention and control of Loa loa, Onchocercus volvulous and Dracunculus medinensis infections.
4.5.22. Describe the etiology of meningitis, manifestations, fate, and complications
4.5.23. Identify the etiology of brain abscess, manifestations, fate, and complications
4.5.24. Describe the etiology of encephalitis, manifestations, fate, and complications

مدير البرنامج المتميز
أ.د. زينب قاسمى

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. Recognize unique characteristics of CNS tumors including its classification, and WHO grading system. 4.6.2. Recognize Gliomas. its gross and microscopic picture, and behavior 4.6.3. Identify medulloblastoma, its gross and microscopic picture, and behavior 4.6.4. Recognize meningioma, its gross and microscopic picture, and behavior 4.6.5. Describe peripheral nerve sheath tumors. 4.6.6. Analyze theoretical information to select the most appropriate diagnosis from differential diagnosis. 4.6.7. Solve problems through case study of certain CNS and special senses diseases. 4.6.8. Discover the outcome of disturbed function of the CNS and special senses. 4.6.9. Correlate defects in DNA repair system and clinical diseases. 4.6.10. Evaluate the applications of DNA transcription and replication in the medical field.

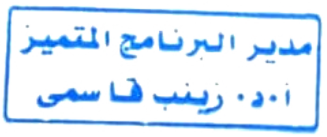
مدير البرنامج المتميز
أ.د. زينب قاسمى

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 the light microscope efficiently to identify the histological structure of cornea, retina & eyelid. 4.8.2. Use the light microscope efficiently to differentiate between layers of the cornea, retina & eyelid. 4.8.3. Use the light microscope efficiently to identify the histological structure of cochlea, cochlear duct & organ of Corti. 4.8.4. Illustrate the structures they have seen under light microscope during practical classes. 4.8.5. Examine the hearing receptors. 4.8.6. Perform a systematic examination of vibration. 4.8.7. Examine smell and taste receptors 4.8.8. Perform a systematic examination of the crude touch receptors. 4.8.9. Examine different types of fine touch. 4.8.10. Evaluate the cutaneous pain receptors. 4.8.11. Examine the pain receptors in the deep pain sensation. 4.8.12. Perform a systematic examination of the temperature receptors. 4.8.13. Assess the muscle state and tonicity. 4.8.14. Evaluate the state of muscle power. 4.8.15. Assess the superficial reflexes. 4.8.16. Perform a systematic examination of the tendons jerk. 4.8.17. Evaluate sense of position. 4.8.18. Perform different coordination tests. 4.8.19. Differentiate gait disorders and the causing disease. 4.8.20. Identify how to use PCR instruments and describe the principal of them. 4.8.21. Perform pipetting technique. 4.8.22. Examine and identify gross and microscopic findings of meningioma. 4.8.23. Identify microscopic findings of plexiform neurofibroma and schwannoma. 4.8.24. Recognize microscopic findings of Glioblastoma and brain metastatic carcinoma. 4.8.25. Examine different microscopic slides of parasites affecting CNS and special sense organs. 4.8.26. Illustrate different parasitic stages mainly the diagnostic and infective stages. 4.8.27. Perform thin and thick blood films. 4.8.28. Illustrate diagnostic parts of flies' larvae. 4.8.29. Use swabs to take samples of free-living

	amoebae. 4.8.30. Interpret a pathology report of some CNS diseases. 4.8.31. Predict the diagnosis of different diseases of CNS based on the underlying gross and microscopic pictures.

Competency Area 5: The graduate as a member of the health team and part of the health care system.

Key competency	Module Los
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 towards colleagues. 5.2.2 Apply teamwork in educational and professional encounters



Competency Area 6: The graduate as a lifelong learner and researcher.

Key competency	Module ILOs
6.2 Develop, implement, monitor, and revise a personal learning plan to enhance professional practice.	6.2.1 Formulate a learning plan for the module in focus. 6.2.2 Apply the learning plan respecting emerging priorities and encounters
6.3 Identify opportunities and use various resources for learning.	6.3.1 Use information resources whether written or electronic efficiently for the educational process.
6.6 Effectively manage learning time and resources and set priorities.	6.6.1 Manage time and learning resources effectively. 6.6.2 Apply priority setting in the learning process

III. Module Contents:

THEORETICAL		
TOPIC	TEACHING HOURS	DEPARTMENT
Nucleotide chemistry and DNA structure	1.5	Biochemistry
DNA replication	1.5	**Biochemistry**
DNA repair and transcription	1.5	**Biochemistry**
Genetic code and protein synthesis	0.9	**Biochemistry**
Histology of the eye	1	Histology

Histology of the ear	1.1	**Histology**
Trypanosomes, CLM, and *Dracunculus*	1.4	**Parasitology**
Free living amoebae, *Loa loa*, and *Onchocercus*	1	**Parasitology**
Inflammatory and vascular CNS diseases	1.1	**Pathology**
Tumours of CNS	1	**Pathology**
Motor function of spinal cord.	1.5	Physiology
Motor cortex.	1.5	**Physiology**
Pyramidal and extrapyramidal & internal capsule.	1.5	**Physiology**
Brain stem, posture, and equilibrium	1.5	Physiology
Sensory cortex	1.5	Physiology
Pain sensation	1.5	**Physiology**
Coding of sensation & head Sensation	1.5	**Physiology**
Mechano- and thermos-receptive sensations	1.5	**Physiology**
Hearing, smell, and taste	1.5	**Physiology**
Memory and learning	1.5	**Physiology**
Sleep and speech	1.5	**Physiology**
Basal ganglion and cerebellum.	1.5	**Physiology**
Total	**30**	
PRACTICAL		
TOPIC	**TEACHING HOURS**	**DEPARTMENT**
DNA extraction	2	Biochemistry
PCR	2	**Biochemistry**
Cloning	2	**Biochemistry**
Gel electrophoresis	2.1	**Biochemistry**
Eyeball	1.5	Histology
Organ of Corti	1.65	**Histology**
Trypanosoma and Coenurosis	2	**Parasitology**
Myasis and free-living amoebae	1.6	**Parasitology**
CNS tumours	1.5	**Pathology**
Peripheral nerve sheath tumours, Meningioma, and metastatic tumours	1.65	**Pathology**
Hearing tests	3	Physiology
Smell and Taste examination	3	Physiology
Crude mechanoreceptive sensation	3	**Physiology**
Fine mechanoreceptive sensation and thermal sensation	3	**Physiology**
Pain	3	**Physiology**
Revision	1.5	**Physiology**
Examination of muscle tone, power, and state	3	**Physiology**
Superficial and deep reflexes	3	**Physiology**
Gait and muscle coordination	3	**Physiology**
Revision	1.5	**Physiology**
Total	**45**	

مدير البرنامج المتميز
أ.د. زينب قاسمى

IV– Teaching and learning Methods:

1. **Theoretical Teaching:**
   a) **Interactive lectures: using**
      - Brain storming
      - Audiovisual aids through animations and diagrams
      - Interaction with the students through questions
      - Student engagement with discussion
   b) **Case Based learning**
2. **Practical Teaching: conducted using:**
      - Practical sessions
3. **Self-directed Learning**

VI- Student Assessment:

A. Attendance criteria:

The minimum acceptable attendance is 75%, otherwise students failing to reach that percentage will be prevented from attending the final examination.

B. Types of Assessment:

- **Formative:** This form of assessment is designed to help the students to identify areas for improvement. It includes a multiple-choice questions, problems-solving exercises and independent learning activities in all subjects. These will be given during tutorial and practical sessions. The Answers are presented and discussed immediately with you after the assessment. The results will be made available to the students.
- **Summative** This type of assessment is used for judgment or decisions to be made about the students' performance. It serves as:
  1. Verification of achievement for the student satisfying requirement
  2. Motivation of the student to maintain or improve performance
  3. Certification of performance
  4. Grades

C- Summative Assessment methods and schedule:

Assessment Method	Percentage	Description	Timing
Regular Evaluation	30%	10% written at the end of and periodicals including problem solving, multiple choice questions, give reason, matching, extended matching, complete and compare.	At the end of the module
		20% Participation in the tutorials, TBL, Research.	During the module
Final practical exam	30%	OSPE Exam	At the end of the module
Final Written	40%	It Includes problem-solving, multiple choice questions, give a eason, matching, extended matching, complete and compare.	At the end of the semester

مدير البرنامج المتميز
أ.د. زينب قاسمى

مدير البرنامج المتميز
أ.د. زينب قاسمى

D- Weighing of Assessment:

Method of Assessment |	Marks	Percentage
Final Written exam.	**55**	**40%**
Final Practical exam.	**41.25**	**30%**
Activities	**41.25**	**30%**
Total	**137.5**	**100%**

E- Grading by GPA System:

The Percentage	Symbol	Grade
> 85%	A	**Excellent.**
75-<85 %	B	**Very Good**
65 - < 75 %	C	**Good.**
60 - < 65 %	D	**Passed.**
< 60 %	F	**Failed.**
	W	**Withdrawn**

VI. List of references and resources:

- **Lecture Notes of Module Departments**
- **Essential Books:**

Physiology:

- Guyton and Hall Textbook of Medical Physiology (Guyton Physiology) 13th Edition. By: John E. Hall. Saunders, 2015.
- Ganong's Review of Medical Physiology 25th Edition. By: NA. McGraw-Hill Medical, 2015.
- Physiology (Lippincott's Illustrated Reviews Series) 1st Edition. By: Robin R Preston, Thad Wilson, Richard A. Harvey. Lippincott Williams & Wilkins, 2012.

Histology:

- Junqueira's Basic Histology: Text and Atlas, 15th Edition. By: Anthony L. Mescher. McGraw Hill / Medical, 2018.
- Wheater's Functional Histology, 6th Edition. By: Barbara Young, Geraldine O'Dowd, Phillip Woodford. Churchill Livingstone, 2014.
- diFiore's Atlas of Histology with Functional Correlations, 12th Edition. BY: Victor P. Eroschenko. Lippincott Williams & Wilkins, 2012.

Biochemistry:

- Harper's Illustrated Biochemistry 31st Edition. By: Victor W. Rodwell, David Bender, Kathleen M. Botham, Peter J. Kennelly, P. Anthony Weil. McGraw Hill / Medical, 2018.
- Lippincott's Illustrated Reviews Biochemistry, 7TH Edition. By: Denise Ferrier. LWW, 2017.
- Textbook of Biochemistry with Clinical Correlations 7th Edition. By: Thomas M. Devlin. John Wiley & Sons, 2010.

مدير البرنامج المتميز
أ.د. زينب قاسمى

Pathology:

- Robbins Basic Pathology (Robbins Pathology) 10th Edition. By: Vinay Kumar, Abul K. Abbas, Jon C. Aster. Elsevier, 2017.
- Pathology Illustrated, 8th Edition. By: Peter S. Macfarlane, Robin Reid, Robin Callander. Churchill Livingstone, 2018.
- Diagnostic histopathology of tumors, 4th Edition. By: Christopher D. M. Fletcher. Saunders/Elsevier, 2013

Parasitology:

- Foundations of Parasitology. 10th Edition. By: Larry Roberts, John Janovy, Steven Adler. McGraw-Hill Education, 2015.
- Paniker's Textbook of Medical Parasitology, 8th Edition. By: C. K. Jayaram Paniker. JP Medical Ltd, 2017
- Clinical Parasitology, 2nd Edition. By: Elizabeth Zeibig. Saunders, 2012.

VII- Facilities required for teaching and learning:

1- Faculty Lecture halls
2- Equipped labs with microscopes, slides, boxes and jars.
3- Faculty library for textbooks & electronic library for web search.
4- Audiovisual aids as boards, data show and computers

Key Competencies & Module LOs *vs* Teaching and Assessment Methods Matrix

Key Competencies	Module Learning Outcomes	Teaching Methods				Assessment Methods						
						Formative Assessment		Summative Assessment				
		Interactive Lectures	Case Based Learning	Practical sessions	Self-directed study	Theoretical	practical	Written	OSPE	Assignments	quizzes	participation
3.1	3.1.1 to 3.1.2	x	x	x						x		x
4.1	4.1.1 to 4.1.33	x	x		x	x		x		x	x	x
4.2	4.2.1, 4.2.19	x	x		x	x		x		x	x	x
4.5	4.5.1 -4.5.24	x	x		x	x		x		x	x	x
4.6	4.6.1 to 4.6.10	x	x		x	x		x		x	x	x
4.8	4.8.1 to 4.8.31			x			x		x	x		x
5.2	5.2.1, 5.2.2	x	x	x						x		x
6.2	6.2.1, 6.2.2				x	x	x	x	x	x	x	x
6.3	6.3.1				x	x	x	x	x	x	x	x
6.6	6.6.1, 6.6.2				x	x	x	x	x	x	x	x

Module Coordinator: Dr. Noha Ahmed AboKhalil	Program Coordinator: Prof. Dr. Zeinab Kasemy

مدير البرنامج المتميز
أ.د. زينب قاسمي

Basic life support Module

University: Menoufia **Faculty: Medicine**

A-Administrative information

Code Title: basic life support Module

Code No: BLS 3104

Department offering the Module : Emergency Medicine Unit - General Surgery Department

Program (s) on which the Module is given: Menoufia M.B.B.Ch Credit- hour Program (5+2)

Academic year/level: Third level

Semester: Semester V

Date of specification: 2018

Date of approval by Department Council: 2018

Date of approval by Faculty Council: 2018

Credit hours: 1 credit hour

	Teaching hours		
	Lectures	Practical	Activities
Emergency Department	6	9	18

B- Professional Information

I. Aim of the Module:

To provide the students with knowledge and skills and hands-on experience to act when a cardiac arrest occurs.

II – Learning Outcomes of the Module:

مدير البرنامج المتميز
أ.د. زينب قاسمى

Competency Area 1: The graduate as a health care provider.

Key competency		Module LOs
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 Identity the meaning of s cardiopulmonary resuscitation 1.15.2 Outline the basic life support guidelines 1.15.3. Recognize cardiac arrest 1.15.4. Identify the Automated External Defibrillator device (AED) 1.15.5. Outline the differences in pediatric basic life support 1.15.6. Interpret the significance of vital signs of the patient 1.15.7. Analyze the clinical situation to reach the cause of cardiac arrest 1.15.8. Formulate a management plan for a collapsed patient. 1.15.9. Check the response of the collapsed patient 1.15.10. Put the patient in the recovery position 1.15.11. Check the safety of him and the patient 1.15.12. Apply Open the airway technique 1.15.13. Apply Look, listen & feel technique 1.15.14. Perform CPR technique 1.15.15. Apply the AED 1.15.16. Apply the principles of continuous medical education. 1.15.17. Work in a systematic approach. 1.15.18. Work with other healthcare providers (EMS) in the management of cardiac arrest cases.

مدير البرنامج المتميز
أ.د. زينب قاسمى

III- Module Contents:

Theoretical	
Topic	**Teaching hours**
Basic life support- Be a lifesaver- The ability to recognize cardiac arrest	2
Getting help from the emergency medical service (EMS)	1
How to apply high-quality chest compressions	1
How to apply rescue breaths	1
Automated External Defibrillator device (AED)	1
Total	6
Clinical Rounds	
Topic	**Teaching Hours**
Basic life support workshop 1	1
Basic life support workshop 2	2
Basic life support workshop 3	2
Basic life support workshop 4	2
Basic life support workshop 5	2
Total	9

IV– Teaching and learning methods:

1. Theoretical Teaching:

- **Interactive lectures**
- **The lecturers are conducted using:**
  a. Brainstorming
  b. Audiovisual aids through animations and diagrams
  c. Interaction with the students through questions
  d. Student engagement with discussion
  e. Case based Learning

2. Practical Teaching: conducted using:

- Practical workshops in skill lab

مدير البرنامج المتميز
أ.د. زينب قاسمى

V- Student Assessment:

A. Attendance criteria:

The minimally acceptable attendance is 75% (mixed online and face-to-face) Students who fail to attend that percentage of activities will not be allowed to sit for the final written examination.

B. Types of Assessment:

1-Formative assessment exams: Held usually at regular intervals

2-Summative examination: at the end of the module and the end of the semester logbook for activities

C- Summative Assessment methods and schedule:

Assessment Method	Percentage	Description	Timing
Regular Evaluation	30%	10% written at the end of periodicals including problem-solving, multiple-choice questions, give a reason, matching, extended matching, complete and compare.	At the end of the module
		20% Participation in the tutorials, TBL, and Research.	During the module
Final practical exam	30%	OSPE Exam	At the end of the module
Final Written	40%	It Includes problem-solving, multiple-choice questions, giving a reason, matching, extended matching, completing and comparing.	At the end of the semester

D- Weighing of Assessment:

Method of Assessment |	Marks	Percentage
Final Written exam.	10	**40%**
Final Practical exam.	7.5	**30%**
Activities	7.5	**30%**
Total	**25**	**100%**

E- Grading for by GPA System:

The Percentage	Symbol	Grade
> 85%	A	**Excellent.**
75-<85 %	B	**Very Good**
65 - < 75 %	C	**Good.**
60 - < 65 %	D	**Passed.**
< 60 %	F	**Failed.**
	W	**Withdrawn**

مدير البرنامج المتميز
أ.د. زينب قاسمى

VI. List of references and resources:

- **Module handout**.
- **Essential Books:**

American Heart Association- Basic Life Support (BLS) Provider Manual

VII- Facilities required for teaching and learning:

1- Faculty Lecture halls
2- Skill lab.
3- Audiovisual aids as boards, data show and computers

Module Coordinator: Dr Eman Hegazy	**Program Coordinator: Prof. Dr. Zeinab Kasemy**

مدير البرنامج المتميز
أ.د. زينب قاسمى

Vertical Integration Module (5)

University: Menoufia **Faculty: Medicine**

A - Administrative Information

Module Title : Vertical Integration Module (5)

Department offering the Module: Anatomy department

Program on which the Module is given: Menoufia M.B.B. Ch Credit- hour Program **(5+2)**

Academic year : 3rd Year

Semester: V

Date of specification: 2018

Date of approval by Departments Council: 2018

Date of approval by Faculty Council: **2018**

Credit hours 1/2 credit hours.

Teaching hours: 7.5 hours/ Lectures

- Professional Information

I– Aim of Module:

This module aims to provide the students with an early clinical exposure o to common health problems,applying a holistic approach in clinical management with emphasis ondisease prevention, health promotion and health education.

II – Learning Outcomes:

Competency Area 1: The graduate as a health care provider.

Key competency		Module LOs
1.8	Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand.	1.8.1. Illustrate the approach of studying clinical cases of the thyroid gland, pituitary gland, basal ganglia,and meninge identify the significant data and interpret these data. 1.8.2. Identify new medical terms in the context of case study activities. 1.8.3. Illustrate the main ethical principles in dealing with patientsand colleagues.

مدير البرنامج المتميز
أ.د. زينب قاسمى

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 Retrieve the use of the recent information and communications technologies. 1.9.2 Design a management plan based on evidence-based medicine.
1.10	Integrate the results of history, physical examination and laboratory test findings into a meaningful diagnostic formulation.	1.10.1. Interpret the clinical and laboratory data in the clinical scenarios to formulate a differential diagnosis.

Competency Area 5: The graduate as a member of the health team and part of the health care system.

Key competency		Module LOs
5.1	Recognize the important role played by other health care professionals in patients' management.	5.1.1 Demonstrate respect the roles of other colleagues in patient care.
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. Work in a team evaluating his own and others work through constructive feedback. 5.2.2. Communicate respectively and effectively with other colleagues

Competency Area 3: The graduate as a professional.

Key competency		Module LOs
3.1	Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.	3.1.1 Demonstrate a professional. respectful attitude while dealing with colleagues, and staff members 3.1.2 Demonstrate commitment and integrity while preparing the coursework and assignments
3.4	Treat all patients equally, and avoid stigmatizing any category regardless of their social, cultural or ethnic backgrounds, or their disabilities.	3.4.1 Demonstrate respect to social, culture, and ethnic difference of patients treating them equally.
3.8	Refer patients to the appropriate health facility at the appropriate stage.	3.8.1 Identify the rules of referral for complex and undiagnosed cases

مدير البرنامج المتميز
أ.د. زينب قاسمى

Competency Area 5: The graduate as a member of the health team and part of the health care system.

Key competency		Module LOs
5.1	Recognize the important role played by other health care professionals in patients' management.	5.1.1 Demonstrate Respect the roles of other colleagues in patient care.
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. Work in a team evaluating his own and others workthrough constructive feedback. 5.2.2. Communicate respectively and effectively with other colleagues

Competency Area 6: The graduate as a lifelong learner and researcher.

Key competency		Module LOs
6.2	Develop, implement, monitor, and revise a personal learning plan to enhance professional practice.	6.2.1 Formulate a learning plan for the module in focus 6.2.2 Apply the learning plan respecting emerging priorities and encounters
6.3	Identify opportunities and use various resources for learning.	6.3.1 Use information resources either written or electronic efficiently for the educational process.
6.6	Effectively manage learning time and resources and set priorities.	6.6.1 Manage time and learning resources effectively. 6.6.2 Apply priority setting in the learning process

III- Module Contents:

مدير البرنامج المتميز
أ.د. زينب قاسمى

Lectures:

Topic	Teaching Hours
Thyroid gland integrated lecture	1.5
Pituitary gland integrated lecture	1.5
Ocular muscles and their nerve supply	1.5
Meninges and CSF	1.5
Basal ganglia	1.5
Total	**7.5**

IV– Teaching and learning methods

The following teaching / learning methods are used to promote better Explaining:

- **Interactive Lectures/online**
- **Self-directed learning**

- **Interactive lectures:** In large group, the lecturer introduces a topic or common clinical conditions and explains the underlying topic through questions, pictures, videos of patients' interviews, exercises, etc. Students are actively involved in the learning process.
- **Self-directed learning**: Students assume responsibilities of their own learning through individual study, sharing and discussing with peers, seeking information from Learning Resource Center, teachers and resource persons within and outside the college. Students can utilize the time within the college scheduled hours of self-study.

V- Student Assessment:

A. Attendance criteria:

The minimum acceptable attendance is 75%, otherwise students failing toreach that percentage will be prevented from attending the final examination.

B- Assessment methods

- Formative assessment: Through predesigned checklist and assignment with assessment of student participation in the lecture
- Summative Written: MCQ, EMQs, complete, true false and problemsolving

C- Assessment schedule: Final examination: Final-term assessment at the end of the semester by written examination.

D- Weighting of assessments: Final-term examination: 100 % (12.5 marks)

VI. List of references and resources:

- Lecture notes
- Case Files Family Medicine, Fourth Edition. By: Eugene Toy, Donald Briscoe, Bruce Britton, Joel John Heidelbaugh. McGraw Hill / Medical, 2016.

Anatomy:

- Gray's Anatomy for Students. 3rd Edition. By: Richard Drake, A. Wayne Vogl, Adam W. M. Mitchell. Churchill Livingstone; 2014
- Langman's Medical Embryology, 13th Edition. By: T.W. Sadler. Williams and Wilkins; 2016
- Grant's Atlas of Anatomy 14th Edition. By: Anne M. R. Agur, Arthur F. Dalley II. LWW; 2016

Pharmacology:

- Basic and Clinical Pharmacology 14th Edition 14th Edition. By: Bertram Katzung. McGraw Hill / Medical, 2017.
- Lippincott's Illustrated Reviews: Pharmacology, 5th edition. By: Michelle A. Clark, Richard Finkel, Jose A. Rey, Karen Whalen, Richard A. Harvey (Editor). Lippincott Williams & Wilkins, 2011.
- Essentials of Medical Pharmacology 7th Edition. By: Tripathi KD. Jaypee Brothers Medical Pub, 2013.

Microbiology:

مدير البرنامج المتميز
ا.د. زينب قاسمى

- Review of medical microbiology and immunology, 13th Edition. By: Levinson, Warren. The McGraw-Hill Companies, 2016.
- Review of medical microbiology, 27th Edition. By: Jawetz EM, Adelberg IL. Lange, 2016.
- Manual of Practical Microbiology & Immunology, 10th edition. By: El mishad AM. El-Ahram Press, 2014.

VII- Facilities required for teaching and learning:

1- Faculty Lecture halls
2- Faculty library for textbooks & electronic library for web search.
3- Audiovisual aids as boards, data show and computers.

Program Coordinator:Prof. Zeinab Kasemy

مدير البرنامج المتميز
أ.د. زينب قاسمى

MENOUFIA MBBCH
MMSP(5.2)
SPECIAL PROGRAM

Semester VI

Basic Clinical Examination

University: Menoufia **Faculty: Medicine**

A-Administrative information

Module Title: Basic Clinical Examination

Code No: BME 3201

Department offering the Module: Internal medicine, family medicine and general surgery departments

Program on which the Module is given: Menoufia M.B.B.Ch Credit- hour Program **(5+2)**

Academic year: 3rd Year

Semester: VI

Date of specification: 2018

Date of approval by Departments Council: 2018

Date of approval by Faculty Council: **2018**

Credit hours: 2.5 hours/ 2 weeks

	Teaching hours		
	Lectures	**Practical**	**Activities**
Internal Medicine	**6**	**9**	**18**
General Surgery	**6**	**9**	**18**
Family Medicine	**3**	**4.5**	**9**
Total	**15**	**22.5**	**45**

B- Professional information

I- Aim of the Module

This module aims to enable the students to obtain an accurate, basic history from the patient and perform a rational, thorough physical examination for medical and surgical case while demonstrating communication skills such as active listening and acknowledgement, building rapport, information gathering, and appropriate use of open and closed questions.

مدير البرنامج المتميز
أ.د. زينب قاسمى

II- Learning Outcomes of the Module:

Competency Area 1: The graduate as a health care provider.

Key competency		Module LOs
1.1	Take and record a structured, patient-centered history.	1.1.1. Conduct history taking including social and psychological history 1.1.2. Apply proper communication skills with patient through different steps of the interview. 1.1.3. Practice patient education during interview with the patient 1.1.4. Demonstrate appropriate basic behavior for a clinical medical student. 1.1.5. Record and present a basic history from a patient with symptoms referable to cardiovascular, respiratory, gastrointestinal, renal and neurological systems enough for entry to the third year of the Module. 1.1.6. Demonstrate and apply knowledge of the presentation/s to support inclusion in a differential diagnosis. 1.1.7. Practice genogram drawing 1.1.8. Demonstrate respect to patient's rights throughout the interview 1.1.9. Practice fulfilling data of family health record 1.1.10. Apply professional attire, general looking and hygiene 1.1.11. Establish patients' trust and confidentiality 1.1.12. Interpret family health record 1.1.13. Analyze ethical dilemmas in relation to the principles of medical ethics.
1.2	Adopt an empathic and holistic approach to the patients and their problems.	1.2.1. Demonstrate empathy in patient consultation 1.2.2. Communicate effectively with patients regardless of their social, cultural backgrounds or their disabilities. 1.2.3. Apply the ethics of medical practice when dealing with patients and colleagues. 1.2.4. a professional image in manner, dress, speech and interpersonal relationships that is consistent with the medical professions accepted contemporary standards in the community. 1.2.5. Demonstrate in history taking, the integration of physical, social and psychological factors both in the causation and effects of disease.

مدير البرنامج المتميز
أ.د. زينب قاسمى

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 proper general examination 1.4.2. Interpret common physical signs in a clinical encounter 1.4.3. Examine a swelling and an ulcer in a surgical patient. 1.4.4. Perform clinical abdominal examination. 1.4.5. Examine different groups of lymph nodes in a patient 1.4.6. Relate clinical findings to common surgical diseases such as swelling and ulcers 1.4.7. Demonstrate how to examine an ulcer in general. 1.4.8. Apply proper infection control when dealing with patients
1.5	Prioritize issues to be addressed in a patient encounter.	1.5.1 Apply priority setting while formulating a differential diagnosis for a clinical case.
1.7	Recognize and respond to the complexity, uncertainty, and ambiguity inherent in medical practice.	1.7.1. Use information from the history, physical examination to create a problem list 1.7.2. Analyze common presentations of medical and surgical diseases as pain, fever, edema, jaundice, dyspepsia, vomiting, diarrhea and constipation. 1.7.3. Work with other healthcare professionals in management of undiagnosed cases. 1.7.4. Apply the rules of consultation for urgent and undiagnosed cases. 1.7.5. Communicate effectively through feedback to help evaluate his own and others work.
1.8	Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand.	1.8.1. Define and outline basic categories of history taking 1.8.2. Identify steps of general and systemic clinical examination 1.8.3. Describe basic settings of clinical interview in surgical practice. 1.8.4. Identify steps of clinical abdominal examination. 1.8.5. Differentiate common causes of generalized lymphadenopathy.

مدير البرنامج المتميز
أ.د. زينب قاسمى

1.10	Integrate the results of history, physical examination and laboratory test findings into a meaningful diagnostic formulation.	1.10.1. Interpret findings from history and examination to recognize the presentation 1.10.2. Interpret common patients' presentations in surgical practice.
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. Retrieve information and be able to use the recent evidence-based information and communications technologies 1.13.2. Apply continuous medical education and research to keep up to date with the international advancement in medicine and surgery. 1.13.3. Use of information technology to improve the quality of patient care through proper. 1.13.4. Share patients or their caregivers in decision making regarding management plans. 1.13.5. Gather and organize material from various sources (including library, electronic and online resources). 1.13.6. Apply the principles of using international guidelines and multidisciplinary team MDT. 1.13.7. Apply basics of scientific research (collection, analysis and interpretation of data).

Competency Area 2: The graduate as a health promoter.

Key competency		Module LOs
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 the importance and principles of patient education. 2.5.2 List the role of physician in infection control. 2.5.3 Recognize the principles of effective patient physician communication
2.9	Adopt suitable measures for infection control.	2.9.1 Apply infection control measures while dealing with patients

مدير البرنامج المتميز
أ.د. زينب قاسمى

Competency Area 3: The graduate as a professional.

Key competency		Module LOs
3.1	Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.	3.1.1 Demonstrate a professional. respectful attitude while dealing with colleagues, and staff members 3.1.2 Demonstrate commitment and integrity while preparing the coursework and assignments
3.4	Treat all patients equally, and avoid stigmatizing any category regardless of their social, cultural or ethnic backgrounds, or their disabilities.	3.4.1 Demonstrate respect to social, culture, and ethnic difference of patients treating them equally.
3.8	Refer patients to the appropriate health facility at the appropriate stage.	3.8.1 Identify the rules of referral for complex and undiagnosed cases

Competency Area 5: The graduate as a member of the health team and part of the health care system.

Key competency		Module LOs
5.2	Respect colleagues and other health care professionals and work cooperatively with them, negotiating overlapping and shared re-sponsibilities and engaging in shared decision-making for effective patient management.	5.2.1 Demonstrate respect towards colleagues. 5.2.2 Apply teamwork in educational and professional encounters
5.10	Document clinical encounters in an accurate, complete, timely, and accessible manner, in compliance with regulatory and legal requirements.	5.10.1 Recognize the importance of family health record and list their types. 5.10.2 Identify elements of family genogram 5.10.3 Describe the definition and principles of biomedical ethics

Competency Area 6: The graduate as a lifelong learner and researcher.

Key competency		Module ILOs
6.2	Develop, implement, monitor, and revise a personal learning plan to enhance professional	6.2.1 Formulate a learning plan for the module in focus 6.2.2 Apply the learning plan respecting emerging

مدير البرنامج المتميز
أ.د. زينب قاسمى

	practice.	priorities and encounters
6.3	Identify opportunities and use various resources for learning.	6.3.1 Use information resources either written or electronic efficiently for the educational process.
6.6	Effectively manage learning time and resources and set priorities.	6.6.1 Manage time and learning resources effectively. 6.6.2 Apply priority setting in the learning process

III. Module Contents:

Theoretical		
Topic	**Teaching Hours**	**Department**
General Examination: -	3.5	Internal Medicine
Local (systemic) examination	0.5	Internal Medicine
Reporting History and Examination	2	Internal Medicine
History taking	1	Family Medicine
Patient education	0.5	**Family Medicine**
Patient compliance	0.5	**Family Medicine**
Infection control measures	0.5	**Family Medicine**
Medical ethics	0.5	**Family Medicine**
Introduction to clinical practice in surgery	**1**	**General Surgery**
History taking of common surgical presentations	**1**	**General Surgery**
Swellings surgical practice	**1**	**General Surgery**
Ulcers in surgical practice	**1**	**General Surgery**
Principles of abdominal examination	**1**	**General Surgery**
Lymphadenopathy	**1**	**General Surgery**
Total	**15**	
Practical		
Topic	**Teaching Hour**	**Department**
General physical examination concepts.	1	**Internal Medicine**
General appearance.	1	**Internal Medicine**
Decubitus	1	**Internal Medicine**
Body built	1	**Internal Medicine**
Special color (pallor, jaundice, cyanosis)	1	**Internal Medicine**
vital signs including blood pressure, pulse, respirations, and temperature	1	**Internal Medicine**
head examination (including eye, face, mouth, nose)	1	**Internal Medicine**
neck examination (neck vessels, trachea, thyroid, LN)	1	**Internal Medicine**
detailed upper and lower examination)	1	**Internal Medicine**
History taking (Concepts, Personal history taking, Complaint, Present history, Past history, Drug history, Social history , Family history)	**1.5**	**Family Medicine**
Patient interview (Conduct interview, History taking,	1	**Family Medicine**

مدير البرنامج المتميز
أ.د. زينب قاسمى

Infection control measures)		
Family health record	1	**Family Medicine**
Genogram	1	**Family Medicine**
Introduction to clinical practice in surgery	**1**	**General Surgery**
History taking of common surgical presentations	**1**	**General Surgery**
Swellings surgical practice	**1**	**General Surgery**
Ulcers in surgical practice	**1**	**General Surgery**
Principles of abdominal examination	**1**	**General Surgery**
Lymphadenopathy	**1**	**General Surgery**
Total	**22.5**	

IV– Teaching and Learning Methods:

1. **Theoretical Teaching:**
   a) **Interactive lectures: using**
      - Brainstorming
      - Audiovisual aids through animations and diagrams
      - Interaction with the students through questions
      - Student engagement with discussion
   b) **Case Based learning**
   c) **Team Based Learning**
2. **Clinical Teaching:**
   a) **Clinical rounds: using**
      - Simulated patients
      - Web based video and Multimedia applications
      - Problem solving
3. **Self-directed Learning**

V- Student Assessment:

A. Attendance criteria:

The minimum acceptable attendance is 75%, otherwise students failing toreach that percentage will be prevented from attending the final examination.

B. Types of Assessment:

- **Formative:** This form of assessment is designed to help the students to identify areas for improvement. It includes a multiple-choice questions, problems-solving exercises and independent learning activities in all subjects. These will be given during tutorial and practical sessions. The Answers are presented and discussed immediately with you after the assessment. The results will be made available to the students.
- **Summative** This type of assessment is used for judgment or decisions to be made about the students' performance. It serves as:
  1. Verification of achievement for the student satisfying requirement
  2. Motivation of the student to maintain or improve performance
  3. Certification of performance
  4. Grades

مدير البرنامج المتميز
أ.د. زينب قاسمى

C- Summative Assessment methods and Schedule

Assessment Method	Percentage	Description	Timing
Regular Evaluation	30%	10% written at the end of and periodicals including problem solving, multiple choice questions, give reason, matching, extended matching, complete and compare.	At the end of the module
		20% Participation in the tutorials, TBL, Research.	During the module
Final practical exam	30%	OSCE Exam	At the end of the module
Final Written	40%	It Includes problem-solving, multiple choice questions, give a eason, matching, extended matching, complete and compare.	At the end of the semester

D- Weighing of Assessment:

Method of Assessment |	Marks	Percentage
Final Written exam.	25	**40%**
Final Practical exam.	18.75	**30%**
Activities	18.75	**30%**
Total	**62.5**	**100%**

E- Grading for by GPA System:

The Percentage	Symbol	Grade
> 85%	A	**Excellent.**
75-<85 %	B	**Very Good**
65 - < 75 %	C	**Good.**
60 - < 65 %	D	**Passed.**
< 60 %	F	**Failed.**
	W	**Withdrawn**

VI. List of references and resources:

- **Lecture Notes.**
- **Textbooks:**
  - Macleod's Clinical Examination, 13th Edition. By: Graham Douglas , Fiona Nicol , Colin Robertson. Churchill Livingstone; 2013
  - Bates' Guide To Physical Examination and History Taking (Lippincott Connect) 11th Edition. By: Lynn S. Bickley, Peter G. Szilagyi. Lippincott Williams & Wilkins; 2012
  - Oxford Handbook of Clinical Surgery (Oxford Medical Handbooks) 4th Edition. By: Greg McLatchie, Neil Borley, Joanna Chikwe. Oxford University Press, 2013.

VII- Facilities required for teaching and learning:

مدير البرنامج المتميز
أ.د. زينب قاسمى

1- Faculty Lecture halls
2- Faculty library for textbooks & electronic library for web search.
3- Audiovisual aids as boards, data show and computers.
4- Skill lab and patient simulators
5- Clinical round teaching rooms.

Key Competencies & Module LOs *vs* Teaching and Assessment Methods Matrix

Key Competencies	Module Learning Outcomes	Teaching Methods						Assessment Methods						
								Formative Assessment		Summative Assessment				
		Recorded Lecture	Inverted Lectures	Case Based Learning	Team based Learning	Clinical Rounds	Self-directed study	Theoretical	Clinical	Written	OSCE	Assignments	quizzes	participation
1.1	1.1.1 to 1,1,13					x			x		x	x		x
1.2	1.2.1 to 1.2.5			x		x			x		x			x
1.4	1.4.1 to 1.4.8					x			x		x	x		x
1.5	1.5.1	x	x	x	x	x	x	x	x	X	x		x	x
1.7	1.7.1 to 1.7.5			x		x		x		X				
1.8	1.8.1 to 1.8.5	x	x	x	x		x	x		X		x	x	x
1.10	1.10.1, 1.10.2			x	x	x	x	x	x	X	x		x	x
1.13	1.13.1 to 1.13.7			x		x	x	x	x	X	x		x	
2.5	2.5.1 to 2.5.3	x	x	x		x		x	x	X	x	x		x
2.9	2.9.1					x			x		x			x
3.1	3.1.1 to 3.1.2					x			x		x			x
3.4	3.4.1					x			x		x			x
3.8	3.8.1					x			x		x			x
5.2	5.2.1, 5.2.2	x	x	x		x						x		x
5.10	5.10.1 to 5.10.3					x			x		x	x		x
6.2	6.2.1, 6.2.2						x	x	x	X	x	x	x	x
6.3	6.3.1						x	x	x	X	x	x	x	x
6.6	6.6.1, 6.6.2						x	x	x	x	x	x	x	x

Module Coordinator: Dr Ahmes Saied ElKelany	**Program Coordinator:** Prof. Dr. Zeinab Kasemy

مدير البرنامج المتميز
أ.د. زينب قاسمى

Dermatology

University: Menoufia **Faculty:** Medicine

A-Administrative information

Module Title: Dermatology

Code No: DERMA 3202

Department offering the Module: Dermatology

Program on which the Module is given: Menoufia M.B.B.Ch Credit- hour Program **(5+2)**

Academic year/level: Third level

Semester: Semester VI

Date of specification: 2018.

Date of approval by Departmental Council: 2018

Date of approval by faculty council: 2018

Total hours: 2 credit hours/ 2 weeks

	Teaching hours		
	Lectures	**Practical**	**Activities**
Dermatology	**12**	**18**	**36**

B- Professional Information

I. Aim of the Module:

Too provide the students with basic knowledge and clinical skills regarding the common dermatological diseases and their management with emphasis on disease prevention and cost effectiveness .

مدير البرنامج المتميز
أ.د. زينب قاسمى

II- Learning outcomes of the module:

Competency Area 1: The graduate as a health care provider.

Key competency		Module LOs
1.1	Take and record a structured, patient-centered history.	1.1.1. Conduct a comprehensive history taking. 1.1.2. Practice patient education during interview with the patient 1.1.3. Demonstrate appropriate basic behavior for a clinical medical student. 1.1.4. Record and present a basic history from a patient. 1.1.5. Demonstrate and apply knowledge of the presentation/s to support inclusion in a differential diagnosis.
1.2	Adopt an empathic and holistic approach to the patients and their problems.	1.2.1. Demonstrate empathy in patient consultation 1.2.2. Communicate effectively with patients regardless of their social, cultural backgrounds or their disabilities. 1.2.3. Demonstrate in history taking, the integration of physical, social and psychological factors both in the causation and effects of disease.
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 clinical examination for Diagnosis of the different types of nonspecific bacterial infection. 1.4.2. Perform clinical examination of different types of parasitic infection. 1.4.3. Perform clinical examination for different types of allergic skin diseases. 1.4.4. Perform hair pull test in case of hair disorders. 1.4.5. Apply proper infection control when dealing with patients 1.4.6. Interpret the clinical signs of different dermatological cases. 1.4.7. Apply the ethics of medical practice when examining patients.
1.5	Prioritize issues to be addressed in a patient encounter.	1.5.1. Apply priority setting while formulating a differential diagnosis for a dermatologic case.

مدير البرنامج المتميز
أ.د. زينب قاسمى

1.6	Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.	1.6.1. Select the proper investigations for different dermatologic cases. 1.6.2. Interpret the findings of basic investigations of dermatologic cases. 1.6.3. Follow the guidelines in choosing the proper investigations while taking into consideration cost-effectiveness.
1.7	Recognize and respond to the complexity, uncertainty, and ambiguity inherent in medical practice.	1.7.1. Follow the guidelines in choosing the proper investigations for a dermatologic case. 1.7.2. Interpret the laboratory results for different dermatologic cases.
1.8	Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand.	1.8.1. Describe normal structure and function of the skin and skin appendages. 1.8.2. Outline types of nonspecific bacterial infections with their clinical picture and treatment 1.8.3. Classify clinical types of specific bacterial infections with their clinical picture and treatment 1.8.4. Describe different types of fungal infections of the skin with their clinical types and treatment 1.8.5. Recognize viral infections of the skin with their clinical picture and management. 1.8.6. Outline different types of parasitic infections with their clinical picture and treatment 1.8.7. Describe pathogenesis, differential diagnosis and treatment of different allergic skin disorders 1.8.8. Outline pathogenesis, differential diagnosis and treatment of different Papulosquamous disorders 1.8.9. Discuss disorders of different skin appendages with their management. 1.8.10. Define disorders of pigmentation with their management. 1.8.11. Describe different autoimmune diseases of the skin with their differential diagnosis and management. 1.8.12. Describe the differential diagnosis of different skin diseases
1.10	Integrate the results of history, physical examination and laboratory test findings into a meaningful diagnostic formulation.	1.10.1. Coordinate the clinical data and investigations to reach the proper diagnosis and appropriate management plan for non-specific bacterial infection. 1.10.2. Integrate the clinical data obtained from history, clinical examination and investigations to reach the proper diagnosis and construct an appropriate management plan for specific bacterial infection.

مدير البرنامج المتميز
أ.د. زينب قاسمى

		1.10.3. Interpret the clinical data and investigations for the proper diagnosis and treatment for fungal infection. 1.10.4. Analyze the clinical data obtained from history, examination and investigations to reach the proper treatment for viral infection. 1.10.5. Relate the clinical data with investigations to diagnose and construct an appropriate management plan for parasitic infection. 1.10.6. Organize the clinical data obtained from history, clinical examination and investigations to reach the proper diagnosis and treatment for allergic skin diseases. 1.10.7. Coordinate history, clinical examination and investigations to reach the proper diagnosis and construct an appropriate management plan for papulo-squamous skin diseases. 1.10.8. Integrate the clinical data and investigations to reach the proper diagnosis and management plan for skin appendages. 1.10.9. Integrate the clinical data from history, clinical examination and investigations to reach the proper diagnosis and treatment for Disorders of pigmentation
1.11	Perform diagnostic and intervention procedures in a skillful and safe manner, adapting to unanticipated findings or changing clinical circumstances.	1.11.1. Do diascopy test for lupus vulgaris cases. 1.11.2. Perform woods light examination for diagnosis of fungal infection 1.11.3. Do cryotherapy in case of verruca vulgaris 1.11.4. Apply Grattage test in case of psoriasis 1.11.5. Do comedo extraction in case of acne vulgaris 1.11.6. Perform woods light examination in case of vitiligo and melasma.
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. Retrieve information and be able to use the recent evidence-based information and communications technologies 1.13.2. Apply continuous medical education and research to keep up to date with the international advancement in medicine and surgery. 1.13.3. Use of information technology to improve the quality of patient care through proper. 1.13.4. Share patients or their caregivers in decision

مدير البرنامج المتميز
أ.د. زينب قاسمى

		making regarding management plans. 1.13.5. Gather and organize material from various sources (including library, electronic and online resources). 1.13.6. Apply the principles of using international guidelines and multidisciplinary team MDT. 1.13.7. Apply basics of scientific research (collection, analysis and interpretation of data).
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 Provide first aid measured for emergency cases including Steven Johanson syndrome

Competency Area 2: The graduate as a health promoter.

Key Competency		Module LOs
2.9	Adopt suitable measures for infection control.	2.9.1 Apply infection control measures while dealing with patients

Competency Area 3: The graduate as a professional.

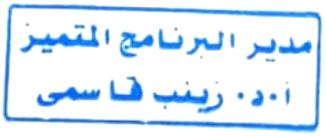
Key competency		Module LOs
3.1	Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.	3.1.1 Demonstrate a professional. respectful attitude while dealing with colleagues, and staff members 3.1.2 Demonstrate commitment and integrity while preparing the coursework and assignments
3.4	Treat all patients equally, and avoid stigmatizing any category regardless of their social, cultural or ethnic backgrounds, or their disabilities.	3.4.1 Demonstrate respect to social, culture, and ethnic difference of patients treating them equally.
3.8	Refer patients to the appropriate health facility at the appropriate stage.	3.8.1 Identify the rules of referral for complex and undiagnosed cases

Competency Area 5: The graduate as a member of the health team and part of the health care system.

Key competency	Module LOs

مدير البرنامج المتميز
أ.د. زينب قاسمى

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 towards colleagues. 5.2.2 Apply teamwork in educational and professional encounters



Competency Area 6: The graduate as a lifelong learner and researcher.

Key competency		Module ILOs
6.2	Develop, implement, monitor, and revise a personal learning plan to enhance professional practice.	6.2.1 Formulate a learning plan for the module in focus 6.2.2 Apply the learning plan respecting emerging priorities and encounters
6.3	Identify opportunities and use various resources for learning.	6.3.1 Use information resources either written or electronic efficiently for the educational process.
6.6	Effectively manage learning time and resources and set priorities.	6.6.1 Manage time and learning resources effectively. 6.6.2 Apply priority setting in the learning process

III- Module Contents:

Theoretical	
Topic	**Teaching hours**
Anatomy & physiology of human skin and its appendages	1
Nonspecific bacterial infections	1
Specific mycobacterial infection: (TB – leprosy)	1
Fungal infection	1
Viral infections	1
Parasitic infestations	1
Skin allergic disorders	1
Papulosquamous disorders	1
Disorders of skin appendages	1
Disorders of pigmentation	1
Autoimmune diseases of the skin	1
Differential diagnosis of common skin diseases	1
Total	**12**
Practical	
Topic	**Teaching hours**

Practical session (1): Anatomy & physiology of human skin and its appendages	1.5	
Practical session (2): Nonspecific bacterial infections	1.5	
Practical session (3): Specific mycobacterial infection: (TB – leprosy)	1.5	
Practical session (4): Fungal infections	1.5	
Practical session (5): Viral infections	1.5	
Practical session (6): Parasitic infestations	1.5	
Practical session (7): Skin allergic disorders	1.5	
Practical session (8): Papulosquamous disorders	1.5	
Practical session (9): Disorders of skin appendages	1.5	
Practical session (10): Disorders of pigmentation	1.5	
Practical session (11): Autoimmune diseases of the skin	1.5	
Practical session (12): Differential diagnosis of common skin diseases	1.5	
Total	18	

IV– Teaching and Learning Methods:

1. **Theoretical Teaching:**
   a) **Interactive lectures: using**
      - Brainstorming
      - Audiovisual aids through animations and diagrams
      - Interaction with the students through questions
      - Student engagement with discussion
   b) **Case Based learning**
   c) **Team Based Learning**
2. **Clinical Teaching:**
   a) **Clinical rounds: using**
      - Web based video and Multimedia applications
      - Problem solving
3. **Self-directed Learning**

V- Student Assessment:

A. Attendance criteria: The minimum acceptable attendance is 75%, otherwise students failing to reach that percentage will be prevented from attending the final examination.

B. Types of Assessment:

- **Formative:** This form of assessment is designed to help the students to identify areas for improvement. It includes a multiple-choice questions, problems-solving exercises and independent learning activities in all subjects. These will be given during tutorial and practical sessions. The Answers are presented and discussed immediately with you after the assessment. The results will be made available to the students.
- **Summative** This type of assessment is used for judgment or decisions to be made about the students' performance. It serves as:
  1. Verification of achievement for the student satisfying requirement
  2. Motivation of the student to maintain or improve performance
  3. Certification of performance
  4. Grades

مدير البرنامج المتميز
أ.د. زينب قاسمى

C- Summative Assessment Methods and Schedule:

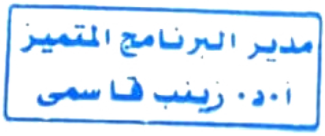
Assessment Method	Percentage	Description	Timing
Regular Evaluation	30%	10% written at the end of and periodicals including problem-solving, multiple-choice questions, give reason, matching, extended matching, complete and compare.	At the end of the module
		20% Participation in the tutorials, TBL, Research.	During the module
Final practical exam	30%	Data show exam	At the end of the module
Final Written	40%	It Includes problem-solving, multiple-choice questions, give reason, matching, extended matching, complete and compare.	At the end of the semester

D- Weighing of Assessment:

Method of Assessment |	Marks	Percentage
Final Written exam.	**20**	**40%**
Final Practical exam.	**15**	**30%**
Activities	**15**	**30%**
Total	**50**	**100%**

E- Grading for by GPA System:

The Percentage	Symbol	Grade
> 85%	A	**Excellent.**
75-<85 %	B	**Very Good**
65 - < 75 %	C	**Good.**
60 - < 65 %	D	**Passed.**
< 60 %	F	**Failed.**
	W	**Withdrawn**



VI. List of references and resources:

1- **Lecture Notes**
2- **Textbooks:**

- Rook's Textbook of Dermatology, 9th edition. By: Burn T, Breathnach S, Cox N, Griffiths C. Blackwell Pub, 2016
- Fitzpatrick's color atlas and synopsis of clinical dermatology, 7th edition. By: Wolff K, Johnson RA. McGraw Hill,2013.

VII- Facilities required for teaching and learning:

1- Faculty Lecture halls
2- Faculty library for textbooks & electronic library for web search.
3- Audiovisual aids as boards, data show and computers.
4- Clinical round teaching rooms.

مدير البرنامج المتميز
ا.د. زينب قاسمى

Key Competencies & Module LOs *vs* Teaching and Assessment Methods Matrix

Key Competencies	Module Learning Outcomes	Teaching Methods						Assessment Methods						
								Formative Assessment		Summative Assessment				
		Recorded Lecture	Inverted Lectures	Case Based Learning	Team based Learning	Clinical Rounds	Self-directed study	Theoretical	Clinical	Written	OSCE	Assignments	quizzes	participation
1.1	1.1.1 to 1,1,5					x			x		x	x		x
1.2	1.2.1 to 1.2.3			x		x			x		x			x
1.4	1.4.1 to 1.4.7					x			x		x	x		x
1.5	1.5.1	X	x	x	x	x	x	x	x	x	x		x	x
1.6	1.6.1 to 1.6.3	X	x	x	x	x	x	x	x	x	x		x	
1.7	1.7.1, 1.7.2			x		x		x		x				
1.8	1.8.1 to 1.8.12	X	x	x	x		x	x		x		x	x	x
1.10	1.10.1 to 1.10.9			x	x	x	x	x	x	x	x		x	x
1.11	1.11.1 to 1.11.6					x			x		x			x
1.13	1.13.1 to 1.13.7			x		x	x	x	x	x	x		x	
1.15	1.15.1			x		x		x	x	x	x		x	x
2.9	2.9.1					x			x		x			x
3.1	3.1.1 to 3.1.2					x			x		x			x
3.4	3.4.1					x			x		x			x
3.8	3.8.1					x			x		x			x
5.2	5.2.1, 5.2.2	X	x	x		x						x		x
5.10	5.10.1 to 5.10.3					x			x		x	x		x
6.2	6.2.1, 6.2.2						x	x	x	x	x	x	x	x
6.3	6.3.1						x	x	x	x	x	x	x	x
6.6	6.6.1, 6.6.2						x	x	x	x	x	x	x	x

Module Coordinator:	**Program Coordinator:**
Name: Dr Mai Medhat	**Name: Prof. Dr. Zeinab Kasemy**

مدير البرنامج المتميز
أ.د. زينب قاسمى

Primary health care & elderly care

University: Menoufia **Faculty:** Medicine

A-Administrative information

Module Title: Primary health care & elderly care

Code No: PHC/ELD 3204

Department offering the Module: Family Medicine, Internal Medicine, Public Health

Program on which the Module is given: Menoufia M.B.B. Ch Credit-hour Program**(5+2)**

Academic year/level: Third level

Semester: Semester VI

Date of specification: 2018.

Date of approval by Departmental Council: 2018

Date of approval by faculty council:2018

Credithours:2.5credit hours / 2 weeks.

	Teaching hours		
	Lectures	**Practical**	**Activities**
Family Medicine	**9**	**13.5**	**27**
Internal Medicine	**3**	**4.5**	**9**
Public Health	**3**	**4.5**	**9**
Total	**15**	**22.5**	**45**

B- Professional Information

I. Aim of the Module:

This module prepares a community-oriented physician capable of implementing preventive and control measures for common communicable diseases on the individual, family, and community levels and, anticipating and responding to community health needs within the primary health care (PHC) setting according to the policies, regulations and guidelines of the Ministry of Health and Population (MOHP) The module enables the students to incorporate the knowledge and skills of many disciplines needed for effective management of medical, neurological, and psychiatric illness in the aged.

مدير البرنامج المتميز
أ.د. زينب قاسمى

II- Intended Learning Outcomes of the Module:

Competency Area 1: The graduate as a health care provider.

Key competency		Module LOs
1.1	Take and record a structured, patient-centered history.	1.1.1. Conduct a thorough history taking to an elderly case. 1.1.2. Interpret the clinical symptoms of different elderly cases. 1.1.3. Communicate with patients regardless of their social, cultural backgrounds or their disabilities. 1.1.4. Apply the ethics of medical practice when dealing with patients and colleagues. 1.1.5. Perform effective eye contact, active listening, and appropriate body language. 1.1.6. Record clinical data in a complete, accurate and retrievable manner. 1.1.7. Present information clearly in written, electronic, and verbal forms. .
1.2	Adopt an empathic and holistic approach to the patients and their problems.	1.2.1. Demonstrate empathy in patient counseling. 1.2.2. Communicate effectively with patients regardless of their social, cultural backgrounds or their disabilities. 1.2.3. Apply the ethics of medical practice when dealing with patients and colleagues. 1.2.4. Show a professional image in manner, dress, speech and interpersonal relationships that is consistent with the medical professions accepted contemporary standards in the community. 1.2.5. Identify the approach for management of difficult communication including breaking bad news.

مدير البرنامج المتميز
أ.د. زينب قاسمى

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. Practice assessment of functional, psychological and cognitive functions of geriatric patients 1.4.2. Practice assessment of weight and nutritional status of elderly 1.4.3. Conduct assessment for the common health problems in elderly. 1.4.4. Practice assessment of end-of-life patient. 1.4.5. Apply the ethics of medical practice when examining patients. 1.4.6. Apply proper infection control when dealing with patients.
1.5	Prioritize issues to be addressed in a patient encounter.	1.5.1. Apply priority setting while formulating a differential diagnosis for an elderly case. 1.5.2. Prioritize problems while managing an elderly case.
1.6	Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.	1.6.1. Follow the guidelines in choosing the proper investigations for an elderly case. 1.6.2. Interpret the laboratory results for different elderly cases.
1.7	Recognize and respond to the complexity, uncertainty, and ambiguity inherent in medical practice.	1.7.1. Work with other healthcare professionals in management of undiagnosed cases. 1.7.2. Apply the rules of consultation for urgent and undiagnosed cases. 1.7.3. Communicate effectively through feedback to help evaluate his own and others work. 1.7.4. Interpret the difference between referral and consultation.
1.8	Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand.	1.8.1. Recognize the definition of primary health care from the community and family medicine view. 1.8.2. Recognize the principles and elements of primary health care. 1.8.3. Schedule the elements of PHC and in relation to the functions of the different health services in Egypt 1.8.4. Recognize the role of PHC physician in addressing local health problems, the prevention and control of vulnerable groups' health problems. 1.8.5. Recognize the role of family health team in family types and dynamics, family function and changes 1.8.6. Recognize family medicine model of care. 1.8.7. Identify characteristics and duties of the

مدير البرنامج المتميز
ا.د. زينب قاسمى

		family physician 1.8.8. List the PHC services in Egypt. 1.8.9. Recognize the meaning and component of BBP. 1.8.10. Recognize reasons for referral . 1.8.11. Describe criteria and elements of referral letters 1.8.12. Define gerontology and geriatrics and list most common condition/ medical problems associated with aging. 1.8.13. Identify the preventive measures included in geriatric periodic health care. 1.8.14. Describe the functional and cognitive assessment of geriatric patients. 1.8.15. Describe the psychosocial and special sense assessment of geriatric patient. 1.8.16. Describe falls in old patient through proper history taking, causes and how to prevent. 1.8.17. Recognize the altered presentation of common medical problems in elderly patients and differentiate between the effect of aging and disease. 1.8.18. Describe new strategies to manage common medical problems in elderly patients. 1.8.19. Demonstrate the nutritional needs, meals and eating to older people. 1.8.20. Recognize the role of primary health care physician in geriatric. 1.8.21. Identify the importance of family and home environment in supporting elderly life. 1.8.22. Recognize the role of family physician with end-of-life patients.
1.10	Integrate the results of history, physical examination and laboratory test findings into a meaningful diagnostic formulation.	1.10.1. Integrate the results of history, physical and laboratory tests into a correct diagnosis. 1.10.2. Formulate a differential diagnosis for an elderly case. 1.10.3. Integrate physical, social, psychological, and medical problems in elderly patients. 1.10.4. Relate common medical illness with multi-system reflection and their differential diagnosis. 1.10.5. Analyze clinical presentation of different medical illness in elderly patients.
1.13	Establish patient-centered management plans in partnership with	1.13.1. Retrieve information and be able to use the recent evidence-based information and

مدير البرنامج المتميز
أ.د. زينب قاسمى

	the patient, his/her family and other health professionals as appropriate, using Evidence Based Medicine in management decisions.	communications technologies 1.13.2. Apply continuous medical education and research to keep up to date with the international advancement in medicine and surgery. 1.13.3. Use of information technology to improve the quality of patient care through proper. 1.13.4. Select the appropriate screening test for elderly people. 1.13.5. Formulate a preventive approach for geriatric periodic health care. 1.13.6. Select the proper management line for different medical disorders in elderly patients. 1.13.7. Share patients or their caregivers in decision making regarding management plans. 1.13.8. Gather and organize material from various sources (including library, electronic and online resources). 1.13.9. Apply the principles of using international guidelines and multidisciplinary team MDT. 1.13.10. Apply basics of scientific research (collection, analysis and interpretation of data). 1.13.11. Apply critical appraisal skills and use of evidence-based guidelines in making decisions about the care of patients. 1.13.12. Evaluate risk /benefit of any intervention to tailor the management plan with minimum risk to the patient.
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. Provide first aid measures for emergency cases in elderly cases.
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 Design, implement and evaluate health services for elderly people. 1.17.2 Formulate the assessment measures for end-of-life patient and his care givers

مدير البرنامج المتميز
أ.د. زينب قاسمى

Competency Area 2: The graduate as a health promoter.

Key Competency		Module LOs
2.1	Identify the basic determinants of health and principles of health improvement.	2.1.1 Interpret the principles of primary health care. 2.1.2 Distinguish between family health model and traditional model of practice 2.1.3 Select the proper activity for health promotion. 2.1.4 Discriminate the characteristics of PHC. 2.1.5 Relate the elements of PHC to the functions of the different health services in Egypt. 2.1.6 Calculate different health related indices 2.1.7 Interpret different health indices in relation to the community problems. 2.1.8 Interpret the family dynamics according to different situations. 2.1.9 Discriminate different stages of family life cycle. 2.1.10 Analyze the changes of family and demonstrate the family dynamics.
2.3	Discuss the role of nutrition and physical activity in health.	2.3.1 Interpret the nutritional status to take appropriate action to meet optimum nutrient supply
2.7	Provide care for specific groups including pregnant women, newborns and infants, adolescents and the elderly.	2.7.1 Apply the components of (BBP) on different cases. 2.7.2 Manage common health problems among elderly. 2.7.3 Conduct health maintenance and disease prevention for elderly people.
2.9	Adopt suitable measures for infection control.	2.9.1 Apply infection control measures while dealing with patients

Competency Area 3: The graduate as a professional.

Key competency		Module LOs
3.1	Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.	3.1.3 Demonstrate a professional. respectful attitude while dealing with colleagues, and staff members 3.1.4 Demonstrate commitment and integrity while preparing the coursework and assignments
3.4	Treat all patients equally, and avoid stigmatizing any category regardless of their social, cultural or ethnic backgrounds, or their disabilities.	3.4.1 Demonstrate respect to social, culture, and ethnic difference of patients treating them equally.
3.8	Refer patients to the appropriate	3.8.1 Identify the rules of referral for complex and

مدير البرنامج المتميز
أ.د. زينب قاسمى

	health facility at the appropriate stage.	undiagnosed cases

Competency Area 4: The graduate as a scholar and scientist.

Key competency		Module LOs
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. Explain the causes of aging within the concept of epidemiologic transition and demographic transition.

Competency Area 5: The graduate as a member of the health team and part of the health care system.

Key competency		Module LOs
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 towards colleagues. 5.2.2 Apply teamwork in educational and professional encounters
5.10	Document clinical encounters in an accurate, complete, timely, and accessible manner, in compliance with regulatory and legal requirements.	5.10.1. Practice writing a proper referral letter.

Competency Area 6: The graduate as a lifelong learner and researcher.

Key competency		Module ILOs
6.2	Develop, implement, monitor, and revise a personal learning plan to enhance professional practice.	6.2.1 Formulate a learning plan for the module in focus 6.2.2 Apply the learning plan respecting emerging priorities and encounters
6.3	Identify opportunities and use various resources for learning.	6.3.1 Use information resources either written or electronic efficiently for the educational process.

مدير البرنامج المتميز
أ.د. زينب قاسمى

6.6	Effectively manage learning time and resources and set priorities.	6.6.1 Manage time and learning resources effectively. 6.6.2 Apply priority setting in the learning process

III. Module Contents:

Theoretical		
Topic	**Teaching hours**	**Department**
Principles of family medicine	**1**	**Family Medicine**
Family types and dynamics	**1**	**Family Medicine**
Family physician **Family health team**	**1**	**Family Medicine**
Basic Benefit Package (BBP)	**1**	**Family Medicine**
Referral	**1**	**Family Medicine**
-Anticipatory care for elderly (Assessment and Screening for geriatric health problems)	**1**	**Family Medicine**
Comprehensive geriatric care **-Functional Domains** **-Cognitive and psychic domains**	**1**	**Family Medicine**
Common medical and non-medical health problems as: Falls, incontinence, physiological deterioration	**1**	**Family Medicine**
-Care of dying patients	**1**	**Family Medicine**
-Introduction to geriatric medicine **- Health related Problems in the elderly**	**1**	**Public Health**
Levels of health care **PHC principles, strategy, and elements**	**1**	**Public Health**
Health indicators	**1**	**Public Health**
Common health problems and their management in elderly patients (renal, endocrine, hepatology)	**1**	**Internal Medicine**
Common health problems and their management in elderly patients (rheumatological and hematology)	**1**	**Internal Medicine**
Nutrition and geriatric	**1**	**Internal Medicine**
Total	**15**	
Practical		
Topic	**Teaching Hours**	**Department**
Approach to geriatric patient-1 (Fulfil checklist for geriatric assessment)	**3**	**Family Medicine**
Approach to geriatric patient-2 (Fulfil checklist for geriatric assessment)	3	**Family Medicine**
-Referral	1.5	**Family Medicine**
Approach to geriatric patient-3 (Fulfil checklist for geriatric assessment)	3	**Family Medicine**
Approach to geriatric patient-4 (Fulfil checklist for	3	**Family Medicine**

مدير البرنامج المتميز
أ.د. زينب قاسمى

geriatric assessment)		
Community services for the elderly	1.5	Public Health
-Indicators for utilization of care	1.5	Public Health
-Indicators for quality of life	1.5	Public Health
History and general examination of geriatric patients	1.5	Internal Medicine
local examination of geriatric patients	1.5	Internal Medicine
Nutrition assessment of elderly	1.5	Internal Medicine
Total	22.5	

IV– Teaching and Learning Methods:

1. **Theoretical Teaching:**
   - **a) Interactive lectures: using**
     - Brainstorming
     - Audiovisual aids through animations and diagrams
     - Interaction with the students through questions
     - Student engagement with discussion
   - **b) Case Based learning**
   - **c) Team Based Learning**
2. **Clinical Teaching:**
   - **a) Clinical rounds: using**
     - Simulated patients
     - Web based video and Multimedia applications
     - Problem solving
3. **Field Training**
4. **Self-directed Learning**

V-StudentAssessment:

A. Attendance criteria:

The minimum acceptable attendance is 75%, otherwise students failing to reach that percentage will be prevented from attending the final examination.

B. Types of Assessment:

- **Formative:** This form of assessment is designed to help the students to identify areas for improvement. It includes a multiple-choice questions, problems-solving exercises and independent learning activities in all subjects. These will be given during tutorial and practical sessions. The Answers are presented and discussed immediately with you after the assessment. The results will be made available to the students.
- **Summative** This type of assessment is used for judgment or decisions to be made about the students' performance. It serves as:
  1. Verification of achievement for the student satisfying requirement
  2. Motivation of the student to maintain or improve performance
  3. Certification of performance
  4. Grades

مدير البرنامج المتميز
أ.د. زينب قاسمى

C- Summative Assessment methods and Schedule:

Assessment Method	Percentage	Description	Timing
Regular Evaluation	30%	10% written at the end of and periodicals including problem solving, multiple choice questions, give reason, matching, extended matching, complete and compare.	At the end of the module
		20% Participation in the tutorials, TBL, Research.	During the module
Final practical exam	30%	OSCE Exam	At the end of the module
Final Written	40%	It Includes problem-solving, multiple choice questions, give a eason, matching, extended matching, complete and compare.	At the end of the semester

D-Weighing of Assessment:

Method of Assessment|	Marks	Percentage
Final Written exam.	**25**	**40%**
Final Practical exam.	**18.75**	**30%**
Activities	**18.75**	**30%**
Total	**63.5**	**100%**

E-Grading for by GPA System:

The Percentage	Symbol	Grade
>85%	A	**Excellent.**
75-<85%	B	**Very Good**
65 - <75%	C	**Good.**
60 - <65%	D	**Passed.**
< 60%	F	**Failed.**
	W	**Withdrawn**

VI. Listofreferencesandresources:

مدير البرنامج المتميز
أ.د. زينب قاسمى

1- **Module handout**.
2- **Essential Books:**

Internal Medicine:

- Brocklehurst's Textbook of Geriatric Medicine and Gerontology, 7th Edition. By: Howard M. Fillit, Kenneth Rockwood, Kenneth Woodhouse. Saunders, 2010
- Oxford Textbook of Geriatric Medicine, 3rd edition. By: Jean-Pierre Michel, B. Lynn Beattie, Finbarr C. Martin, Jeremy D. Walston. Oxford University Press, 2018.

Public Health:

- Population Health: Principles and Applications for Management, 1st Edition. By: Rosemary Caron.
- Essentials Of Public Health – 3rd Edition (Essential Public Health. By: Bernard J. Turnock. Jones & Bartlett Learning, 2015.

Family Medicine:

- Oxford Textbook of Primary Medical Care. By: Roger Jones. Oxford University Press,2004.
- Textbook of Family Medicine 9th Edition. By: Rakel, Robert E. Saunders; 2015.
- Swanson's Family Medicine Review 8th Edition. By: Alfred F. Tallia, Joseph E. Scherger, Nancy W. Dickey. Elsevier, 2016.
- CURRENT Diagnosis & Treatment in Family Medicine, 4th Edition 4th Edition. By: Jeannette South-Paul, Samuel Matheny, Evelyn Lewis. McGraw Hill / Medical, 2015.

VII- Facilities required for teaching and learning:

1- Faculty Lecture halls
2- Faculty library for textbooks & electronic library for web search.
3- Audiovisual aids as boards, data show, and computers.
4- Clinical round teaching rooms.

Key Competencies & Module LOs *vs* Teaching and Assessment Methods Matrix

Key Competencies	Module Learning Outcomes	Teaching Methods+							Assessment Methods						
									Formative Assessment		Summative Assessment				
		Recorded Lecture	Inverted Lectures	Case Based Learning	Team based Learning	Clinical Rounds	Jigsaw Learning	Self-directed study	Theoretical	Clinical	Written	OSCE	Assignments	quizzes	participation
1.1	1.1.1 to 1,1,7					x				x		x	x		x
1.2	1.2.1 to 1.2.5			x		x				x		x			x
1.4	1.4.1 to 1.4.6					x				x		x	x		x
1.5	1.5.1, 1.5.2	x	x	x	x	x		x	x	x	x	x		x	x
1.6	1.6.1, 1.6.2	x	x	x	x	x		x	x	x	x	x		x	
1.7	1.7.1 to 1.7.4			x		x			x		x				
1.8	1.8.1 to 1.8.22	x	x	x	x		x	x	x		x		x	x	x
1.10	1.10.1 to 1.10.5			x	x	x		x	x	x	x	x		x	x
1.13	1.13.1 to 1.13.12			x		x		x	x	x	x	x		x	
1.15	1.15.1			x		x			x	x	x	x		x	x
1.17	1.17.1, 1.17.2					x				x		x			x
2.1	2.1.1 to 2.1.10	x	x		x			x	x		x			x	x
2.3	2.3.1	x	x		x			x	x		x			x	x

مدير البرنامج المتميز
أ.د. زينب قاسمي

2.7	2.7.1 to 2.7.3			x		x			x	x	x	x		x	
2.9	2.9.1					x				x		x			x
3.1	3.1.1 to 3.1.2					x				x		x			x
3.4	3.4.1					x				x		x			x
3.8	3.8.1					x				x		x			x
4.3	4.3.1	x	x	x	x			x	x		x			x	x
5.2	5.2.1, 5.2.2	x	x	x		x							x		x
5.10	5.10.1 to 5.10.3					x				x		x	x		x
6.2	6.2.1, 6.2.2							x	x	x	x	x	x	x	x
6.3	6.3.1							x	x	x	x	x	x	x	x
6.6	6.6.1, 6.6.2							x	x	x	x	x	x	x	x

Module Coordinator: Dr. Mahmoud Elrefy	**Program Coordinator: Prof. Dr. Zeinab Kasemy**

مدير البرنامج المتميز
أ.د. زينب قاسمى

Child Health

University: Menoufia **Faculty: Medicine**

A-Administrative information

Module Title: Child health

Code No: CHILD 3205

Department offering the Module: Pediatrics, Public health, and Family medicine.

Program (s) on which the Module is given: Menoufia M.B.B.Ch Credit- hour Program **(5+2)**

Academic year/level: Third level

Semester: VI

Date of specification: 2018

Date of approval by Department Council: 2018

Date of approval by Faculty Council: 2018

Credit hours: 2.5 hours/ 2 weeks

	Teaching hours		
	Lectures	**Practical**	**Activities**
Pediatric Department	**9**	**13.5**	**27**
Community medicine department	**3**	**4.5**	**9**
Family medicine department	**3**	**4.5**	**9**
Total	**15**	**22.5**	**45**

- Professional Information

I. Aim of the Module:

To provide the students with basic knowledge and clinical skills regarding normal and abnormal growth and development, pediatric nutrition, genetic disorders, neonatal screening, prenatal diagnosis, genetic counseling, preventive and curative health services for children including the practice of active and passive immunization.

مدير البرنامج المتميز
أ.د. زينب قاسمى

II – Learning Outcomes of the Module:

Competency Area 1: The graduate as a health care provider.

Key competency		Module LOs
1.1	Take and record a structured, patient-centered history.	1.1.1. Take good history about different pediatric cases according to their age group. 1.1.2. Analyze different developmental milestones to reach a diagnosis of normal and abnormal development 1.1.3. Analyze family pedigrees of autosomal dominant inheritance and autosomal recessive inheritance. 1.1.4. Interpret the family pedigrees of X-linked recessive and X-linked dominant inheritance.
1.2	Adopt an empathic and holistic approach to the patients and their problems.	1.2.1. Demonstrate empathy in patient consultation 1.2.2. Communicate effectively with patients regardless of their social, cultural backgrounds or their disabilities. 1.2.3. Apply the ethics of medical practice when dealing with patients and colleagues. 1.2.4. Show a professional image in manner, dress, speech and interpersonal relationships that is consistent with the medical professions accepted contemporary standards in the community.
1.4	Perform appropriately timed full physical examination of patients, appropriate to the age, gender,	1.4.1. Apply different anthropometric measures and recognize their abnormalities 1.4.2. Interpret different anthropometric measures and

مدير البرنامج المتميز
أ.د. زينب قاسمى

	and clinical presentation of the patient while being culturally sensitive.	plotting them on different growth charts. 1.4.3. Report clinical uses of growth charts in pediatrics. 1.4.4. Assess different pediatric vital signs. 1.4.5. Perform correct clinical assessment of the child general look and recognize its abnormalities. 1.4.6. Perform correct general examination including head, face, neck, extremities, skin and lymph node examination. 1.4.7. Perform correct clinical examination for a case of Down syndrome and recognize abnormalities in their development. 1.4.8. Perform correct clinical examination and make a diagnostic approach and a treatment plan for children with marasmus and kwashiorkor diseases. 1.4.9. Perform correct clinical examination and make a diagnostic approach and treatment plan for a child with rickets. 1.4.10. Apply basic practical skills for preparing immunization session. 1.4.11. Calculate infant mortality rates.
1.5	Prioritize issues to be addressed in a patient encounter.	1.5.1. **Apply priority setting while formulating** a differential diagnosis for different genetic cases. 1.5.2. Prioritize problems while dealing with growth abnormality.
1.6	Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.	1.6.1. Select the proper investigations for different genetic disorders or growth abnormalities. **1.6.2.** Interpret bone and dental ages. 1.6.3. Follow the guidelines in choosing the proper investigations while taking into consideration cost-effectiveness. 1.6.4. Interpret laboratory and radiological investigations of Down syndrome. 1.6.5. Interpret investigations of Turner syndrome. 1.6.6. Interpret investigations of Klinefelter syndrome. 1.6.7. Interpret laboratory and radiological investigations of Down syndrome. 1.6.8. Interpret investigations of Turner syndrome. 1.6.9. Interpret investigations of Klinefelter syndrome.

مدير البرنامج المتميز
أ.د. زينب قاسمى

1.7	Recognize and respond to the complexity, uncertainty, and ambiguity inherent in medical practice.	1.7.1. Work with other healthcare professions in management of undiagnosed cases. 1.7.2. Apply the rules of consultation for urgent and undiagnosed cases. 1.7.3. Communicate effectively through feedback to help evaluate his own and others work.
1.8	Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand.	1.8.1.Recognize clinical picture of Down syndrome. 1.8.2.Identify causes of death in the case of Down syndrome. 1.8.3.Recognize clinical picture of Trisomy 18 and causes of death. 1.8.4.Describe clinical pictures of Patau and Cri-du-chat syndromes. 1.8.5.Describe clinical picture of Turner syndrome. 1.8.6.Describe clinical picture of Klinefelter syndrome. 1.8.7.Outline features of autosomal dominant inheritance. 1.8.8.Outline features of autosomal recessive inheritance. 1.8.9.Identify features of X-linked recessive and X-linked dominant inheritance. **1.8.10.** Define the importance of family pedigree. 1.8.11. Identify definition of neonatal screening. 1.8.12. Recognize importance of neonatal screening. 1.8.13. Identify criteria of screened diseases. 1.8.14. Outline technique of neonatal screening. 1.8.15. Identify indications of neonatal screening. 1.8.16. Identify etiology**,** pathogenesis, clinical manifestations and complications of rickets. 1.8.17. Identify prevention and treatment of rickets. 1.8.18. Explain etiology, clinical manifestations and complications of marasmus. 1.8.19. Outline treatment of marasmus. 1.8.20. Describe the etiology, clinical manifestations and complications of kwashiorkor. 1.8.21. Identify treatment of kwashiorkor. 1.8.22. Recognize clinical importance of breast feeding. 1.8.23. Identify definition and strategy of weaning. 1.8.24. Identify the preventive health services for children including the cold chain and its components. 1.8.25. Describe the curative health services for children including diagnosis, treatment and prevention of child health problems **1.8.26.** Identify the social health services 1.8.27. Identify both active and passive immunization **1.8.28.** Explain different types of vaccines 1.8.29. Identify common health problems among children. 1.8.30. Identify component of integrated management for childhood illness (IMCI) program. 1.8.31. Recognize importance of IMCI.

مدير البرنامج المتميز
أ.د. زينب قاسمى

		1.8.32. List components of anticipatory care in children. 1.8.33. Recognize the importance of periodic health examination. 1.8.34. Identify common health problems among adolescents. 1.8.35. List steps for proper adolescent approach 1.8.36. Identify component of anticipatory care for adolescents. 1.8.37. Recognize the role of family physician in prevention and management of health problems in children and adolescents.
`1.10	Integrate the results of history, physical examination and laboratory test findings into a meaningful diagnostic formulation.	1.10.1. Formulate the collected data during history taking and clinical examination to reach a provisional diagnosis and differential diagnosis. 1.10.2. Analyze different developmental milestones to reach a diagnosis of normal and abnormal development. 1.10.3. Formulate a differential diagnosis of edema in children.
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. Retrieve information and be able to use the recent evidence-based information and communications technologies 1.13.2. Apply continuous medical education and research to keep up-to-date with the international advancement in medicine and surgery. 1.13.3. Use of information technology to improve the quality of patient care through proper. 1.13.4. Share patients or their caregivers in decision making regarding management plans. 1.13.5. Gather and organize material from various sources (including library, electronic and online resources). 1.13.6. Apply the principles of using international guidelines and multidisciplinary team MDT. 1.13.7. Apply basics of scientific research (collection, analysis and interpretation of data). 1.13.8. Formulate a management for Down syndrome. 1.13.9. Formulate a management for Turner syndrome 1.13.10. Formulate a management plan for Klinefelter syndrome. 1.13.11. Report a management plan for protein energy malnutrition in children. 1.13.12. Construct a management plan for rickets.

Competency Area 2: The graduate as a health promoter.

Key Competency		Module LOs
2.7	Provide care for specific groups including pregnant women, newborns and infants, adolescents and the elderly.	2.7.1. Design health educational messages for adolescent. 2.7.2. Apply IMCI program on different childhood health problems. 2.7.3. Conduct counselling session with an adolescent. 2.7.4. Formulate breast feeding counseling. 2.7.5. Design health educational messages for adolescent.
2.9	Adopt suitable measures for infection control.	2.9.1 Apply infection control measures while dealing with patients

Competency Area 3: The graduate as a professional.

Key competency		Module LOs
3.1	Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.	3.1.1 Demonstrate a professional. respectful attitude while dealing with colleagues, and staff members 3.1.2 Demonstrate commitment and integrity while preparing the coursework and assignments
3.4	Treat all patients equally, and avoid stigmatizing any category regardless of their social, cultural or ethnic backgrounds, or their disabilities.	3.4.1 Demonstrate respect to social, culture, and ethnic difference of patients treating them equally.
3.8	Refer patients to the appropriate health facility at the appropriate stage.	3.8.1 Identify the rules of referral for complex and undiagnosed cases

مدير البرنامج المتميز
أ.د. زينب قاسمى

Competency Area 4: The graduate as a scholar and scientist.

Key competency		Module LOs
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 growth and development and identify different patterns of growth in children. 4.3.2. Identify different types of growth charts. 4.3.3. Describe different milestones of development at its four fields (Gross motor, fine motor, language and social development).
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. Outline indications of karyotyping. 4.5.2. Outline causes of chromosomal aberrations. 4.5.3. Identify mechanism of aneuploidy. 4.5.4. Recognize types of the structural abnormalities of the chromosomes. 4.5.5. Outline definition and incidence of Down syndrome. 4.5.6. Describe cytogenetics of Down syndrome. 4.5.7. Outline incidence and genotype of Turner syndrome. 4.5.8. Outline incidence and genotype of Klinefelter syndrome. 4.5.9. List different modes of inheritance. 4.5.10. Describe modes of six related inheritance. 4.5.11. Outline definition of the congenital anomalies. 4.5.12. Identify classification of congenital anomalies. 4.5.13. Identify the difference between the sequences, developmental field defects, syndromes, associations and complexes. 4.5.14. Outline categories of birth defects. 4.5.15. Discuss mitochondrial inheritance and its criteria. 4.5.16. Identify the normal trails inherited by multifactorial inheritance 4.5.17. Recognize the abnormal trails inherited by multifactorial inheritance

Competency Area 5: The graduate as a member of the health team and part of the health care system.

Key competency		Module LOs
5.2	Respect colleagues and other health care professionals and	5.2.1 Demonstrate respect towards colleagues. 5.2.2 Apply teamwork in educational and professional

work cooperatively with them, negotiating overlapping and shared responsibilities and engaging in shared decision-making for effective patient management.	encounters

Competency Area 6: The graduate as a lifelong learner and researcher.

Key competency		Module ILOs
6.2	Develop, implement, monitor, and revise a personal learning plan to enhance professional practice.	6.2.1 Formulate a learning plan for the module in focus 6.2.2 Apply the learning plan respecting emerging priorities and encounters
6.3	Identify opportunities and use various resources for learning.	6.3.1 Use information resources either written or electronic efficiently for the educational process.
6.6	Effectively manage learning time and resources and set priorities.	6.6.1 Manage time and learning resources effectively. 6.6.2 Apply priority setting in the learning process

III. Module Contents:

Theoretical		
Topic	**Teaching Hours**	**Department**
Basic of genetics Chromosomal aberrations Chromosomal disorders	2	Pediatrics
Patterns of inheritance Prenatal diagnosis and genetic counselling	2	Pediatrics
Neonatal screening	1	Pediatrics
Growth and development	1	Pediatrics
Breast feeding, weaning and formula feeding	2	Pediatrics
PEM, Rickets	1	Pediatrics
Child health services	1	Public Health
Immunity and vaccination	1	Public Health
Cold chain system	1	Public Health
Anticipatory care for child and adolescents	1	Family Medicine
Breast feeding	1	Family Medicine
IMCI	1	Family Medicine
Total	15	
Practical		
Topic	**Teaching Hours**	**Department**
Nutritional and developmental history	1.5	Pediatrics

مدير البرنامج المتميز
أ.د. زينب قاسمى

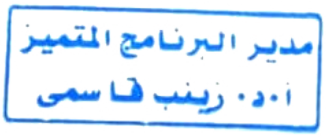
anthropometric measures	1.5	Pediatrics
Nutritional classifications	1.5	Pediatrics
PEM	1.5	Pediatrics
Head, face examination	1.5	Pediatrics
neck, and extremities examination	1.5	Pediatrics
Nutritional Rickets	1.5	Pediatrics
Down syndrome	1.5	Pediatrics
Pediatric Clinical spots	1.5	Pediatrics
Cold chain vaccine	2.5	Public Health
Vaccination	2	Public Health
IMCI	1.5	Family Medicine
Breast feeding counselling	1	Family Medicine
Adolescent care	2	Family Medicine
Total	22.5	

IV– Teaching and Learning Methods:

1. **Theoretical Teaching:**
   a) **Interactive lectures: using**
      - Brainstorming
      - Audiovisual aids through animations and diagrams
      - Interaction with the students through questions
      - Student engagement with discussion

   b) **Case Based learning**
   c) **Team Based Learning**
2. **Clinical Teaching:**
   a) **Clinical rounds: using**
      - Simulated patients
      - Web based video and Multimedia applications
      - Problem solving

   b) **Bedside clinical teaching**
3. **Self-directed Learning**



V- Student Assessment:

A. Attendance criteria:

The minimum acceptable attendance is 75%, otherwise students failing toreach that percentage will be prevented from attending the final examination.

B. Types of Assessment:

- **Formative:** This form of assessment is designed to help the students to identify areas for improvement. It includes a multiple-choice questions, problems-solving exercises and independent learning activities in all subjects. These will be given during tutorial and practical sessions. The Answers are presented and discussed immediately with you after the assessment. The results will be made available to the students.
- **Summative** This type of assessment is used for judgment or decisions to be made about the students' performance. It serves as:
  1. Verification of achievement for the student satisfying requirement
  2. Motivation of the student to maintain or improve performance

3. Certification of performance
4. Grades

C- Summative Assessment Methods and Schedule:

Assessment Method	Percentage	Description	Timing
Regular Evaluation	30%	10% written at the end of and periodicals including problem-solving, multiple-choice questions, give reason, matching, extended matching, complete and compare.	At the end of the module
		10% Attendance and behavior 20% Participation in TBL, Research.	During the module
Final practical exam	30%	OSPE Exam	At the end of the module
Final Written	40%	It Includes problem-solving, multiple-choice questions, give reason, matching, extended matching, complete and compare.	At the end of the semester

D- Weighing of Assessment:

Method of Assessment |	Marks	Percentage
Final Written exam.	25	**40%**
Final Practical exam.	18.75	**30%**
Activities	18.75	**30%**
Total	**62.5**	**100%**

E- Grading for by GPA System:

The Percentage	Symbol	Grade
> 85%	A	**Excellent.**
75-<85 %	B	**Very Good**
65 - < 75 %	C	**Good.**
60 - < 65 %	D	**Passed.**
< 60 %	F	**Failed.**
	W	**Withdrawn**

VI. List of references and resources:

- **Lecture Notes of the Module Departments**
- **Essential books:**

مدير البرنامج المتميز
أ.د. زينب قاسمى

Public Health:

- Population Health: Principles and Applications for Management, 1st Edition. By: Rosemary Caron.
- Essentials Of Public Health – 3rd Edition (Essential Public Health. By: Bernard J. Turnock. Jones & Bartlett Learning, 2015.

Family Medicine:

- Oxford Textbook of Primary Medical Care. By: Roger Jones. Oxford University Press,2004.
- Textbook of Family Medicine 9th Edition. By: Rakel, Robert E. Saunders; 2015.
- Swanson's Family Medicine Review 8th Edition. By: Alfred F. Tallia, Joseph E. Scherger, Nancy W. Dickey. Elsevier, 2016.
- CURRENT Diagnosis & Treatment in Family Medicine, 4th Edition 4th Edition. By: Jeannette South-Paul, Samuel Matheny, Evelyn Lewis. McGraw Hill / Medical, 2015.

Pediatrics:

- Nelson Textbook of Pediatrics, 20th Edition. By: Robert M. Kliegman, Bonita M.D. Stanton, Joseph St. Geme, Nina F Schor. W B Saunders Co Ltd, 2015.
- American Academy of Pediatrics Textbook of Pediatric Care, 2nd Edition. By: Thomas K. McInerny, Henry M. Adam, Deborah E. Campbell, Thomas G. DeWitt, Dr. Jane Meschan Foy, Dr. Deepak M. Kamat. American Academy of Pediatrics, 2016.
- Schwartz's Clinical Handbook of Pediatrics (Point (Lippincott Williams & Wilkins)) 5th Edition. By: Joseph J. Zorc, Elizabeth R. Alpern, Lawrence W. Brown, Kathleen M. Loomes, Bradley S. Marino, Cynthia J. Mollen, Leslie J. Raffini. LWW, 2012.

VII- Facilities required for teaching and learning:

1- Faculty Lecture halls
2- Faculty library for textbooks & electronic library for web search.
3- Audiovisual aids as boards, data show and computers.
4- Clinical round teaching rooms.

مدير البرنامج المتميز
أ.د. زينب قاسمى

Key Competencies & Module LOs *vs* Teaching and Assessment Methods Matrix

Key Competencies	Module Learning Outcomes	Teaching Methods							Assessment Methods						
									Formative Assessment		Summative Assessment				
		Recorded Lecture	Inverted Lectures	Case Based Learning	Team based Learning	Clinical Rounds	Bed Side Clinical Teaching	Self-directed study	Theoretical	Clinical	Written	OSCE	Assignments	quizzes	participation
1.1	1.1.1 to 1,1,4					x	x			x		x	x		x
1.2	1.2.1 to 1.2.4			x		x	x			x		x			x
1.4	1.4.1 to 1.4.11					x	x			x		x	x		x
1.5	1.5.1, 1.5.2	x	x	x	x	x		x	x	x	x	x		x	x
1.6	1.6.1 to 1.6.9	x	x	x	x	x	x	x	x	x	x	x		x	
1.7	1.7.1, 1.7.3			x		x			x		x				
1.8	1.8.1 to 1.8.37	x	x	x	x			x	x		x		x	x	x
1.10	1.10.1 to 1.10.3			x	x	x		x	x	x	x	x		x	x
1.13	1.13.1 to 1.13.12			x		x		x	x	x	x	x		x	
2.7	2.7.1 to 2.7.5			x		x			x	x	x	x		x	
2.9	2.9.1					x	x			x		x			x
3.1	3.1.1 to 3.1.2					x	x			x		x			x
3.4	3.4.1					x	x			x		x			x
3.8	3.8.1					x	x			x		x			x
4.3	4.3.1 to 4.3.3	x	x	x	x			x	x		x			x	x
4.5	4.5.1 to 4.5.17	x	x	x	x			x	x		x			x	x
5.2	5.2.1, 5.2.2	x	x	x		x							x		x
6.2	6.2.1, 6.2.2							x	x	x	x	x	x	x	x
6.3	6.3.1							x	x	x	x	x	x	x	x
6.6	6.6.1, 6.6.2							x	x	x	x	x	x	x	x

Module Coordinator: Dr Ahmed Shawky Hola	**Program Coordinator:** Prof. Zeinab Kasemy

مدير البرنامج المتميز
أ.د. زينب قاسمى

Community Medicine

University: Menoufia **Faculty:** Medicine

A-Administrative information

Module Title: Community medicine

Code: COM 3203

Department offering the Module Public health and community medicine

Program(s) on which the Module is given: Menoufia M.B.B.Ch Credit- hour Program **(5+2)**

Academic year: 3rd year

Semester: VI

Date of specification: 2018

Date of approval by Department Council: 2018

Date of approval by Faculty Council: 2018

Credit hours: 5 credit hours/ 5 weeks

	Teaching hours		
	Lectures	Practical	Activities
Public Health and Community Medicine	30	45	90

B-Professional information

I. Aim of the Module:

To prepare a community-oriented physician capable of implementing preventive and control measures for common communicable diseases on the individual, family and community levels and within the primary health care (PHC) settings following MOHP policies and protocols.

II. Learning outcomes of the Module:

Competency Area 2: The graduate as a health promoter.

Key Competency	Module LOs
2.1 Identify epidemiology and screening of diseases, determinants of health and principles of health promotion.	**2.1.1.** Implement a qualified management plan for dealing with a health problem and disease prevention**.** 2.1.2. Formulate a management plan for public health problems. 2.1.3. Analyze a changing work environment. 2.1.4. Collaborate with his colleagues in a

مدير البرنامج المتميز
أ.د. زينب قاسمى

		teamwork during field visits, class discussion, as well as solving problems. 2.1.5. Demonstrate an ethical behavior with his teachers, colleagues as well as other personnel in the field.
2.2	Describe the principles of disease prevention, and empower communities, specific groups or individuals by raising their awareness and building their capacity for participation.	.2.1. Describe the MOHP programs for prevention and control of the communicable and most prevailing diseases in Egypt. .2.2. Describe the role of PHC physician in addressing local health problems, the prevention and control of vulnerable groups' health problems. .2.3. Define the screening tests pertinent to selected morbidity conditions and the at-risk approach in the application of screening tests. .2.4. Describe the different health education/communication strategies for use with clients, health care team, and the community. .2.5. Explain how different health related behaviors can have an impact on health and disease. .2.6. Assess and respond to individual and population health hazards. .2.7. Express freely and adequately themselves by improving descriptive capabilities and communication skills. .2.8. Demonstrate ethical relationship with faculty and staff members.
2.3	Identify the double burden of major health threats in the community, mainly endemic diseases, communicable and non-communicable diseases.	2.3.1 Explain the ecological factors of morbidity and mortality within the concept of epidemiologic and demographic transitions. 2.3.2 Explain the basic terms and methods used in infectious disease epidemiology, disease prevention and control trials, outbreak investigation, and evaluation of screening tests.
2.4	Recognize the epidemiology of newly emerged and re-emerging diseases, risk factors for their appearance, pattern of their spread and their incidence rate.	2.4.1 Identify trends in health and disease including epidemiological causes of high prevalence of certain infections, causes of eradication, emerging or reemerging previous infections worldwide and in Egypt. 2.4.2 Define epidemiologic approaches of disease occurrence in communities: determinants, distribution and dynamics including prevention and

مدير البرنامج المتميز
أ.د. زينب قاسمى

		control
2.5	Identify the major health threats in the community, including demographic, occupational and environmental risks, endemic diseases, communicable and non-communicable diseases.	2.5.1. Define occupational hazards with their risk factors, prevention and control with element of occupational health program. 2.5.2. Identify the nature, health effects, and sources of environmental risks and Explain methods for monitoring the quality of water, food and air. 2.5.3. Describe principles of waste management in the community and in health care settings.
2.6	Recognize the economic, psychological, social, and cultural factors that interfere with wellbeing (mental and social health).	2.6.1. Demonstrate respect to all patients irrespective of their socioeconomic levels, culture or religious beliefs and use language and other communication skills appropriate to the patient culture. 2.6.2. Interact and communicate sensitively, effectively, and professionally with persons from diverse cultural, socioeconomic, educational, and professional backgrounds, and with persons of all ages and lifestyle preferences.
2.7	Discuss the role of both nutrition & physical activity in health and therapeutic nutrition in early disease management.	2.7.1. Define the basics of nutritional assessment and diet in health and different diseases with identification of nutritional public health problems. 2.7.2 Define malnutrition problems and Explain methods of assessment of nutritional status 2.7.3 Prescribe diet plans for selected disease conditions.
2.8	Provide care for specific groups including pregnant women, newborns and infants, adolescents and the elderly.	2.8.1 Identify the health status of populations, determinants of health and illness, factors contributing to health promotion and disease prevention, and factors influencing the use of health services. 2.8.2 Assess non communicable and communicable diseases within the different health settings and for specific age groups. 2.8.3 Define different MOHP policies, systems, programs, approved standards of practice and describe the specific health programs including, school health, occupational health, etc.

مدير البرنامج المتميز
د.ا. زينب قاسمى

مدير البرنامج المتميز
أ.د. زينب قاسمى

Competency Area 3: The graduate as a professional.

Key competency		Module Los
3.1	Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.	3.1.1 Demonstrate a professional. respectful attitude while dealing with colleagues, and staff members 3.1.2 Demonstrate commitment and integrity while preparing the coursework and assignments

Competency Area 5: The graduate as a member of the health team and part of the health care system.

Key competency		Module LOs
5.2	Respect colleagues and other health care professionals and work cooperatively with them, negotiating overlapping and shared re-sponsibilities and engaging in shared decision-making for effective patient management.	5.2.1 Demonstrate respect towards colleagues. 5.2.2 Apply teamwork in educational and professional encounters
5.8	Apply fundamental knowledge of health economics to ensure the efficiency and effectiveness of the health care system.	5.8.1. Describe the quality cycles and its utilization in different public health settings. 5.8.2. Identify the dimensions of quality in health care, and how to *utilize appropriately quality concepts and processes for performance improvement. 5.8.3. Manage time and resources effectively. 5.8.4. Formulate policy for a given health issue. 5.8.5. Manage planning, implementation and evaluation of health care services, 5.8.6. Utilize health care system in dealing appropriately with a specific community health problem. 5.8.7. Design, implement and evaluate health services for both individuals and populations. use objective, measurable criteria such as epidemiological impact and cost effectiveness. 5.8.8. Conduct, document and analyze a comprehensive situation analysis recognizing non biological factors that may influence disease causation/ management,

	client's perception of health/ disease, access to care and adequately respond to these factors in the benefit of the client, patient& community.

Competency Area 6: The graduate as a lifelong learner and researcher.

Key competency		Module ILOs
6.2	Develop, implement, monitor, and revise a personal learning plan to enhance professional practice.	6.2.1 Formulate a learning plan for the module in focus. 6.2.2 Apply the learning plan respecting emerging priorities and encounters
6.3	Identify opportunities and use various resources for learning.	6.3.1 Use information resources whether written or electronic efficiently for the educational process.
6.6	Effectively manage learning time and resources and set priorities.	6.6.1 Manage time and learning resources effectively. 6.6.2 Apply priority setting in the learning process

III. Module Contents:

Theoretical	
Surveillance & screening	2
Public Health Administration	2
Quality assurance	2
Epidemiology of non-communicable diseases	2
Basic nutrition+ Malnutrition	2
STD+ Contact transmitted diseases	2
Arthropod borne infection+ Parasitic infection	2
Smoking & drug addiction	2
Droplet infection	2
Occupational-heath program+ Zoonotic diseases	2
Water sanitation+ Food sanitation	2
Air sanitation	2
Pneumoconiosis	2
Heat disorders+ Pressure disorders	2
Heavy metals+ Radiation	2
Total	**30**
Practical	
Topic	**Teaching Hours**
Natural history of the disease & epidemiological triad	1.5
Screening Problem solving	1.5
Infectious cycle	1.5

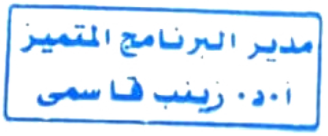
مدير البرنامج المتميز
ا.د. زينب قاسمى

Food born infection: Problem solving	1.5	
Viral hepatitis: Problem solving	1.5	
Health education: Tutorial	1.5	
Hypertension & diabetes: problem solving	1.5	
Diet planning & nutritional assessment	1.5	
Outbreak investigation: Tutorial	1.5	
STD: Problem solving	1.5	
Nutritional anemia	1.5	
Diet therapy: Tutorial	1.5	
Emerging& re-emerging diseases	1.5	
Water sanitation scenario (field visit)	1.5	
Droplet: problem solving	1.5	
Food sanitation– scenario (field visit)	1.5	
Tuberculin & widal test	1.5	
School health: tutorial	1.5	
Evaluation of heat stress and strain	1.5	
Noise	1.5	
Formative exam	1.5	
Pulmonary function tests	1.5	
Factory visit scenario (field visit)	1.5	
Factory visit scenario (field visit)	1.5	
Revision	3	
Revision	3	
Revision	3	
Total		**45 hours**

IV– Teaching and Learning Methods:

1. **Theoretical Teaching:**
   a) **Interactive lectures: using**
      - Brainstorming
      - Audiovisual aids through animations and diagrams
      - Interaction with the students through questions
      - Student engagement with discussion

   b) **Case Based learning**
   c) **Team Based Learning**
2. **Clinical Teaching:**
   Clinical rounds: using
      - Web based video and Multimedia applications
      - Problem solving
3. **Field Training**
4. **Self-directed Learning**



V- Student Assessment:

A. Attendance criteria:

The minimum acceptable attendance is 75%, otherwise students failing toreach that percentage will be prevented from attending the final examination.

B. Types of Assessment:

- **Formative:** This form of assessment is designed to help the students to identify areas for improvement. It includes a multiple-choice questions, problems-solving exercises and independent learning activities in all subjects. These will be given during tutorial and practical sessions. The Answers are presented and discussed immediately with you after the assessment. The results will be made available to the students.
- **Summative** This type of assessment is used for judgment or decisions to be made about the students' performance. It serves as:

1. Verification of achievement for the student satisfying requirement
2. Motivation of the student to maintain or improve performance
3. Certification of performance
4. Grades

C. Summative Assessment Methods and Schedule:

Assessment Method	Percentage	Description	Timing
Regular Evaluation	30%	10% written at the end of and periodicals including problem solving, multiple choice questions, give reason, matching, extended matching, complete and compare.	At the end of the module
		20% Participation in the tutorials, TBL, Research.	During the module
Final practical exam	30%	OSPE Exam	At the end of the module
Final Written	40%	It Includes problem-solving, multiple-choice questions, give reason, matching, extended matching, complete and compare.	At the end of the semester

D- Weighing of Assessment:

Method of Assessment |	Marks	Percentage
Final Written exam.	**50**	**40%**
Final Practical exam.	**37.5**	**30%**
Activities	**37.5**	**30%**
Total	**125**	**100%**

E- Grading for by GPA System:

The Percentage	Symbol	Grade
> 85%	A	**Excellent.**
75-<85 %	B	**Very Good**
65 - < 75 %	C	**Good.**
60 - < 65 %	D	**Passed.**
< 60 %	F	**Failed.**

مدير البرنامج المتميز
ا.د. زينب قاسمى

	W	Withdrawn

مدير البرنامج المتميز
أ.د. زينب قاسمى

VI. List of references and resources:

- **Department book**
- **Essential Books:**
  - Population Health: Principles and Applications for Management, 1st Edition. By: Rosemary Caron.
  - Essentials Of Public Health – 3rd Edition (Essential Public Health. By: Bernard J. Turnock. Jones & Bartlett Learning, 2015.
  - Maxey-Rosenau-Last Public Health and Preventive Medicine: Fifteenth Edition (Maxcy-rosenau-last) 15th Edition. By: Robert Wallace. McGraw Hill / Medical; 2007.
  - Textbook Of Community Medicine & Public Health. By: Saira Afzal Sabeena Jalal. Paramount Publishing Enterprise, 2018.

VII- Facilities required for teaching and learning:

1) Faculty Lecture halls
2) Faculty library for textbooks & electronic library for web search.
3) Audiovisual aids as boards, data show and computers.
4) Clinical round teaching rooms.

مدير البرنامج المتميز
أ.د. زينب قاسمى

Key Competencies & Module LOs *vs* Teaching and Assessment Methods Matrix

Key Competencies	Module Learning Outcomes	Teaching Methods							Assessment Methods						
									Formative Assessment		Summative Assessment				
		Recorded Lecture	IInverted Lectures	Case Based Learning	Team based Learning	Clinical Rounds	Field Training	Self-directed study	Theoretical	Clinical	Written	OSCE	Assignments	quizzes	participation
2.1	2.1.1 to 2.1.5	x	x	x	x	x	x	x	X	x	x	x	x	x	x
2.2	2.2.1 to 2.2.8	x	x	x	x	x	x	x	X	x	x	x	x	x	x
2.3	2.3.1., 2.3.2	x	x	x	x	x		x	X	x	x	x	x	x	x
2.4	2.4.1, 2.4.2	x	x	x	x	x		x	X	x	x	x	x	x	x
2.5	2.5.1 to 2.5.3	x	x	x	x	x	x	x	X	x	x	x	x	x	x
2.6	2.6.1, 2.6.2	x	x	x	x			x	X		x			x	x
2.7	2.7.1 to 2.7.3	x	x	x	x	x		x	X	x	x	x	x	x	x
2.8	2.8.1 to 2.8.3	x	x	x	x	x		x	X	x	x	x	x	x	x
3.1	3.1.1 to 3.1.2					x	x			x		x			x
5.2	5.2.1, 5.2.2	x	x	x		x							x		x
5.8	5.8.1 to 5.8.3	x	x	x	x			x	X		x			x	x
6.2	6.2.1, 6.2.2							x	X	x	x	x	x	x	x
6.3	6.3.1							x	x	x	x	x	x	x	x
6.6	6.6.1, 6.6.2							x	x	x	x	x	x	x	x

Module Coordinator: Prof. Mahmoud Abosale	**Program Coordinator:** Prof. Zeinab Kasemy

مدير البرنامج المتميز
أ.د. زينب قاسمى

Investigations

University: Menoufia **Faculty: Medicine**

A - Administrative Information

Module Title: Investigations

Code No: INVEST 3206

Department offering the Module: Clinical Pathology, and Radiology.

Program (s) on which the Module is given: Menoufia M.B.B. Ch Credit- hour Program **(5+2)**.

Academic year/level: Third level

Semester: Sixth semester

Date of specification: 2018.

Date of approval by Department Council: 2018

Date of approval by Faculty Council: 2020, 2022

Credit hours: 2.5 hours / 2 weeks

	Teaching hours		
	Lectures	**Practical**	**Activities**
Clinical Pathology Department	**9**	**13.5**	**27**
Radiology department	**6**	**9**	**18**
Total	**15**	**22.5**	**45**

B- Professional Information

مدير البرنامج المتميز
أ.د. زينب قاسمى

I. Aim of the Module:

To enable the students to identify the role of laboratory in disease management with interpretation of different laboratory reports. The students would be able to interpret basic radiological investigations in the context of the individual patient recognizing their applicability and limitations.

II- Learning Outcomes of the Module

Competency Area 1: The graduate as a health care provider.

Key competency	Module LOs

1.2	Adopt an empathic and holistic approach to the patients and their problems.	1.2.1. Demonstrate empathy in patient counseling. 1.2.2. Communicate effectively with patients regardless of their social, cultural backgrounds or their disabilities. 1.2.3. Apply the ethics of medical practice when dealing with patients and colleagues. 1.2.4. Show a professional image in manner, dress, speech and interpersonal relationships that is consistent with the medical professions accepted contemporary standards in the community. 1.2.5. Identify the approach for management of difficult communication.
1.5	Prioritize issues to be addressed in a patient encounter.	1.5.1. Apply priority setting while selecting an investigation for different cases,
`1.6	Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.	1.6.1. Follow the guidelines in choosing the proper investigations while taking into consideration cost-effectiveness. 1.6.2. Apply multi-modality imaging in the investigation of common clinical conditions (including common emergencies) 1.6.3. Justify the choice of imaging modality. 1.6.4. Judge the dangers of ionizing radiation, magnetic fields and intravascular contrast. 1.6.5. Criticize to avoid unnecessary investigations.
1.7	Recognize and respond to the complexity, uncertainty, and ambiguity inherent in medical practice.	1.7.1. Work with other healthcare professionals in management of undiagnosed cases. 1.7.2. Apply the rules of consultation for urgent and undiagnosed cases. 1.7.3. Communicate effectively through feedback to help evaluate his own and others work
1.8	Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand.	1.8.1. Identify different types of DM, its laboratory diagnosis & complications. 1.8.2. Identify acidosis, alkalosis and regulation of acid base balance. 1.8.3. Determine different kidney function tests & its clinical implication

مدير البرنامج المتميز
أ.د. زينب قاسمى

1.8.4. Determine different liver function tests &its clinical implication.
1.8.5. Identify different types of enzymes and their clinical significance in addition to cardiac markers &its use in AMI.
1.8.6. Determine different thyroid and adrenal gland disorders.
1.8.7. Identify different types and causes of anemias.
1.8.8. Identify different WBCs abnormalities.
1.8.9. Identify physiological hemostasis and role of platelets and coagulation factors.
1.8.10. Determine quantitative and qualitative platelets disorders.
1.8.11. Identify congenital and acquired factors deficiency.
1.8.12. Identify different anticoagulant therapy and their mechanism of action.
1.8.13. Identify different primary and secondary Immunodeficiency diseases & its laboratory diagnosis.
1.8.14. Identify different markers of viral infections &its clinical applications.
1.8.15. Identify different autoimmune diseases & its laboratory diagnosis.
1.8.16. Identify mechanisms and diagnosis of hypersensitivity & allergy.
1.8.17. Define nosocomial infections.
1.8.18. Recognize different organisms causing urinary tract infections.
1.8.19. Determine different organisms causing meningitis and septicemia.
1.8.20. Identify the radiological anatomy to investigate organ function.
1.8.21. Recognize normal structures as they appear on imaging.
1.8.22. Describe normal function processes related to imaging investigations.
1.8.23. Memorize the interpretation of basic imaging studies.
1.8.24. Outline the nature of basic imaging investigations like Ultrasound, CT MRI, Nuclear Medicine.
1.8.25. Recognize the role of diagnostic imaging and intervention in the investigation and management of the common clinical scenarios.
1.8.26. Describe the role of multi-modality imaging in the investigation of common clinical conditions (including common emergencies) and justify the choice of imaging modality.
1.8.27. Recognize and describe common pathologies on basic imaging.

		1.8.28. Recognize radiological and imaging investigation integration in the patient care pathway. 1.8.29. Outline the indications and preparatory requirements for imaging studies. 1.8.30. Explain referral basis of patients effectively and appropriately. 1.8.31. Describe the limitations of imaging techniques. 1.8.32. Recognize and describe common pathologies on basic imaging. 1.8.33. Outline the contraindications to test/procedure. 1.8.34. Recognize the hazards of radiation. 1.8.35. State the basics of radiation protection for the medical team, patients, coworkers and colleagues.
1.10	Integrate the results of history, physical examination and laboratory test findings into a meaningful diagnostic formulation.	1.10.1 Correlate between lab tests & glycemic control. 1.10.2 Relate between ABG findings & different metabolic, respiratory acid base disturbances. 1.10.3 Correlate between kidney function tests findings & different diseases. 1.10.4 Correlate between liver function tests and different liver diseases. 1.10.5 Relate between urine analysis findings & different diseases. 1.10.6 Correlate between cardiac markers results & clinical progression of AMI. 1.10.7 Correlate between lab tests & different adrenal and thyroid disorders. 1.10.8 Correlate between abnormal CBC parameters and different types of anemias. 1.10.9 Correlate between total and differential leucocytic count and other lab findings. 1.10.10 Differentiate between different causes of abnormal coagulation tests either (congenital or acquired), (vascular or platelet dysfunction or clotting factors abnormalities). 1.10.11 Correlate between hepatitis markers and different hepatic viral diseases. 1.10.12 Correlate between different serological tests and different diseases. 1.10.13 Correlate between different IF techniques and detection of diseases. 1.10.14 Relate between Flowcytometry technique and detection of diseases. 1.10.15 Compare the normal and abnormal imaging findings 1.10.16 Evaluate adequately a radiological report and take the appropriate action exclusively in the acute setting.

مدير البرنامج المتميز
أ.د. زينب قاسمى

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 blood glucose assay tests results and its relationship with different diseases. 1.11.2 Assess urine sample precautions, transport, storage and assay. 1.11.3 Apply basic skills and precautions for ABG sampling, transport and storage. 1.11.4 Asses practical skills to interpret abnormal CBC and coagulation parameters to develop a cognitive understanding of the abnormal hematopoietic conditions. 1.11.5 Differentiate normal and abnormal blood film morphology 1.11.6 Assess different autoantibodies tests to identify different autoimmune diseases. 1.11.7 Assess different serological tests results. 1.11.8 Differentiate between ELISA techniques. 1.11.9 Asses different stains and staining techniques 1.11.10 Assess results and effect of bacteriological specimen collection. 1.11.11 Specify suitable culture media for different types of samples. 1.11.12 Relate between specimen collection and good bacteriological tests results.
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. Retrieve information and be able to use the recent evidence-based information and communications technologies 1.13.2. Apply continuous medical education and research to keep up to date with the international advancement in medicine and surgery. 1.13.3. Use of information technology to improve the quality of patient care through proper. 1.13.4. Share patients or their caregivers in decision making regarding management plans. 1.13.5. Gather and organize material from various sources (including library, electronic and online resources). 1.13.6. Apply the principles of using international guidelines and multidisciplinary team MDT. 1.13.7. Apply basics of scientific research (collection, analysis and interpretation of data). 1.13.8. Apply critical appraisal skills and use of evidence-based guidelines in making decisions about the care of patients. 1.13.9. Evaluate risk /benefit of any intervention to tailor the management plan with minimum risk to the patient.

مدير البرنامج المتميز
أ.د. زينب قاسمى

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. Perform first aid measure for emergent hazards of ionizing radiation or contrast media.

Competency Area 2: The graduate as a health promoter.

Key Competency		Module LOs
2.9	Adopt suitable measures for infection control.	2.9.1 Apply infection control measures while dealing with patients

Competency Area 3: The graduate as a professional.

Key competency		Module LOs
3.1	Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.	3.1.3 Demonstrate a professional. respectful attitude while dealing with colleagues, and staff members 3.1.4 Demonstrate commitment and integrity while preparing the coursework and assignments
3.4	Treat all patients equally, and avoid stigmatizing any category regardless of their social, cultural or ethnic backgrounds, or their disabilities.	3.4.2 Demonstrate respect to social, culture, and ethnic difference of patients treating them equally.
3.8	Refer patients to the appropriate health facility at the appropriate stage.	3.8.2 Identify the rules of referral for complex and undiagnosed cases

Competency Area 5: The graduate as a member of the health team and part of the health care system.

Key competency		Module LOs
5.2	Respect colleagues and other health care professionals and	5.2.1 Demonstrate respect towards colleagues. 5.2.2 Apply teamwork in educational and

مدير البرنامج المتميز
ا.د. زينب قاسمى

	work cooperatively with them, negotiating overlapping and shared responsibilities and engaging in shared decision-making for effective patient management.	professional encounters

Competency Area 6: The graduate as a lifelong learner and researcher.

Key competency		Module ILOs
6.2	Develop, implement, monitor, and revise a personal learning plan to enhance professional practice.	6.2.1 Formulate a learning plan for the module in focus 6.2.2 Apply the learning plan respecting emerging priorities and encounters
6.3	Identify opportunities and use various resources for learning.	6.3.1 Use information resources either written or electronic efficiently for the educational process.
6.6	Effectively manage learning time and resources and set priorities.	6.6.1 Manage time and learning resources effectively. 6.6.2 Apply priority setting in the learning process

III. Module content

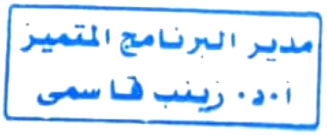
Theoretical		
Topics	**Teaching Hours**	**Department**
Diabetes mellitus & its complications.	0.5	Clinical Pathology
Na, K & Acid base balance.	1	Clinical Pathology
Kidney function tests & related diseases.	0.5	Clinical Pathology
Liver function tests & related diseases.	0.5	Clinical Pathology
Enzymes and Cardiac Markers.	1	Clinical Pathology
Hormones	0.5	Clinical Pathology
RBC & related disorders.	1	Clinical Pathology
WBC & its disorders.	1	Clinical Pathology
Hemostasis & coagulation.	1	Clinical Pathology
Markers of viral infections.	0.5	Clinical Pathology
Disorders of immune system: Hypersensitivity, Autoimmunity, Immunodifficiency.	0.5	Clinical Pathology
Nosocomial infections and UTI.	0.5.	Clinical Pathology
Meningitis and septicemia.	0.5	Clinical Pathology
Introduction to radiology and medical imaging	1	Radiology
Imaging of the genitourinary tract	1	Radiology
Imaging of the gastrointestinal tract	1	Radiology

مدير البرنامج المتميز
أ.د. زينب قاسمى

Imaging of the nervous system	1	Radiology
Imaging of musculoskeletal system	1	Radiology
Imaging of the cardiovascular and respiratory system	1	Radiology
Total	**15**	
Practical		
Topics	**Teaching Hours**	**Department**
Urine Analysis.	2	Clinical Pathology
ABG	2	Clinical Pathology
CBC, PT and PTT.	2	Clinical Pathology
ESR, Retics, blood cell morphology	2	Clinical Pathology
Principles of various immunoassay	2	Clinical Pathology
Microbiological sampling- Culture medias	2	Clinical Pathology
Revison	1.5	Clinical Pathology
Imaging of Genito-urinary system.	2	Radiology
Imaging of gastro-intestinal system.	2	Radiology
Imaging of central nervous system.	2	Radiology
Imaging of Musculo-skeletal system.	2	Radiology
Imaging of thorax	1	Radiology
Total	**22.5**	

IV– Teaching and Learning Methods:

1. **Theoretical Teaching:**
   a) **Interactive lectures: using**
      - Brainstorming
      - Audiovisual aids through animations and diagrams
      - Interaction with the students through questions
      - Student engagement with discussion
   b) **Case Based learning**
   c) **Team Based Learning**
2. **Clinical Teaching:**
   Clinical rounds: using
      - Web based video and Multimedia applications
      - Problem solving
3. **Self-directed Learning**



V- Student Assessment:

A. Attendance criteria:

The minimum acceptable attendance is 75%, otherwise students failing toreach that percentage will be prevented from attending the final examination.

B. Types of Assessment:

- **Formative:** This form of assessment is designed to help the students to identify areas for improvement. It includes a multiple-choice questions, problems-solving exercises and

independent learning activities in all subjects. These will be given during tutorial and practical sessions. The Answers are presented and discussed immediately with you after the assessment. The results will be made available to the students.

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

1. Verification of achievement for the student satisfying requirement
2. Motivation of the student to maintain or improve performance
3. Certification of performance
4. Grades

C- Summative Assessment Methods and Schedule:

Assessment Method	Percentage	Description	Timing
Regular Evaluation	30%	10% written at the end of and periodicals including problem solving, multiple choice questions, give reason, matching, extended matching, complete and compare.	At the end of the module
		20% Participation in the tutorials, TBL, Research.	During the module
Final practical exam	30%	OSCE Exam	At the end of the module
Final Written	40%	It Includes problem-solving, multiple-choice questions, give a reason, matching, extended matching, complete and compare.	At the end of the semester

D- Weighing of Assessment:

Method of Assessment |	Marks	Percentage
Final Written exam.	**25**	**40%**
Final Practical exam.	**18.75**	**30%**
Activities	**18.75**	**30%**
Total	**62.5**	**100%**

E- Grading for by GPA System:

The Percentage	Symbol	Grade
> 85%	A	**Excellent.**
75-<85 %	B	**Very Good**
65 - < 75 %	C	**Good.**
60 - < 65 %	D	**Passed.**
< 60 %	F	**Failed.**

مدير البرنامج المتميز
أ.د. زينب قاسمى

Withdrawn	**W**	

مدير البرنامج المتميز
أ.د. زينب قاسمى

VI. List of references and resources:

a) **Lecture notes**

b) Essential Books:

Clinical Pathology:

- Tietz fundamentals of clinical chemistry and molecular diagnostics, 7th edition. By: Carl A. Burtis, David E. Bruns, Barbara G. Sawyer, Norbert W. Tietz. Elsevier/Saunders, 2015.
- Hematology for the Medical Student 1st edition. By: Alvin H. Schmaier, Lilli M. Petruzzelli. LWW, 2003.
- Essentials of Clinical Immunology, 5th Edition. By: Helen Chapel, Mansel Haeney, Siraj Misbah, Neil Snowden. Wiley-Blackwell, 2006.

Radiology:

- Textbook of Radiology and Imaging, 7th Edition. By: David Sutton, Rodney Reznek, Janet Murfitt. Churchill Livingstone, 2002.
- Fundamentals of Diagnostic Radiology, 3rd Edition. By: William E. Brant, Clyde A. Helms. Lippincott Williams & Wilkins, 2006.
- Primer of Diagnostic Imaging, 4th edition. By Ralph Weissleder, Jack Wittenberg, Mukesh G. Harisinghani, John W. Chen, Stephen E. Jones, Jay W. Patti. Mosby, 2006.

VII- Facilities required for teaching and learning:

1- Faculty Lecture halls
2- Faculty library for textbooks & electronic library for web search.
3- Audiovisual aids as boards, data show and computers.
4- Skill lab and patient simulators
5- Clinical round teaching rooms.

مدير البرنامج المتميز
أ.د. زينب قاسمى

Key Competencies & Module LOs *vs* Teaching and Assessment Methods Matrix

Key Competencies	Module Learning Outcomes	Teaching Methods						Assessment Methods						
								Formative Assessment		Summative Assessment				
		Recorded Lecture	Inverted Lectures	Case Based Learning	Team based Learning	Clinical Rounds	Self-directed study	Theoretical	Clinical	Written	OSCE	Assignments	quizzes	participation
1.2	1.2.1 to 1.2.5			x		x			x		x			x
1.5	1.5.1	x	x	x	x	x	x	x	x	x	x		x	x
1.6	1.6.1 to 1.6.5	x	x	x	x	x	x	x	x	x	x		x	
1.7	1.7.1, 1.7.3			x		x		x		x				
1.8	1.8.1 to 1.8.35	x	x	x	x		x	x		x		x	x	x
1.10	1.10.1 to 1.10.16			x	x	x	x	x	x	x	x		x	x
1.11	1.11.1 to 1.11.12					x			x		x			x
1.13	1.13.1 to 1.13.9			x		x	x	x	x	x	x		x	
1.15	1.15.1			x		x		x	x	x	x		x	x
2.9	2.9.1					x			x		x			x
3.1	3.1.1 to 3.1.2					x			x		x			x
3.4	3.4.1					x			x		x			x
3.8	3.8.1					x			x		x			x
5.2	5.2.1, 5.2.2	x	x	x		x						x		x
6.2	6.2.1, 6.2.2						x	x	x	x	x	x	x	x
6.3	6.3.1						x	x	x	x	x	x	x	x
6.6	6.6.1, 6.6.2						x	x	x	x	x	x	x	x

Module Coordinator: Dr Reem Elkholy	**Program Coordinator:** Prof. Zeinab Kasemy

مدير البرنامج المتميز
أ.د. زينب قاسمى

Basic Clinical Oncology

University: Menoufia **Faculty:** Medicine

A-Administrative information

Title: Basic Clinical Oncology

Code No: ONCO 3207

Department offering the Module : Clinical Oncology and Nuclear Medicine.

Program (s) on which the Module is given: Menoufia M.B.B.Ch Credit- hour Program **(5+2)**.

Academic year/level: Third level

Semester: Semester VI

Date of specification: 2020.

Date of approval by Departmental and Faculty Council: 2020

Credit hours: 1 credit hour/ 1 week

	Teaching hours		
	Lectures	Practical	Activities
Department of Clinical Oncology and Nuclear Medicine	6	9	18

- Professional Information

I.– Aim of the Module:

To provide the students with the basic information about diagnosis, treatment, and early detection of cancer based on the data obtained during the Module.

مدير البرنامج المتميز
أ.د. زينب قاسمى

II. Learning Outcomes of the Module:

Competency Area 1: The graduate as a health care provider.

Key competency		Module LOs	
1.2	Adopt an empathic and holistic approach to the patients and their problems.	1.2.1. 1.2.2. 1.2.3. 1.2.4. 1.2.5.	Demonstrate empathy in patient counseling. Communicate effectively with patients regardless of their social, cultural backgrounds or their disabilities. Apply the ethics of medical practice when dealing with patients and colleagues. Show a professional image in manner, dress, speech and interpersonal relationships that is consistent with the medical professions accepted contemporary standards in the community. Identify the approach for management of difficult communication
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. 1.4.2. 1.4.3. 1.4.4. 1.4.5.	Perform meticulous general examination before and after radiotherapy and chemotherapy. Perform detailed local examination before and after radiotherapy and chemotherapy. Interpret the clinical signs of different oncology cases. Apply the ethics of medical practice when examining patients. Apply proper infection control when dealing with patients.
1.5	Prioritize issues to be addressed in a patient encounter.	**1.5.1.** **1.5.2.**	Apply priority setting while formulating a differential diagnosis for different oncology cases. Prioritize problems while dealing with oncology cases.
1.6	Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.	1.6.1. 1.6.2. 1.6.3. 1.6.4. 1.6.5.	Follow the guidelines in choosing the proper investigations while taking into consideration cost-effectiveness. Interpret a pathology report in an accurate manner that helps for chemotherapy, hormonal and targeted therapy decision. Interpret basic figures in different nuclear scan. Relate basics of nuclear activity to differentiate cancer types. Relates basics of biopsy types and image modalities with different cancer types.

1.7	Recognize and respond to the complexity, uncertainty, and ambiguity inherent in medical practice.	1.7.1. Work with other healthcare professionals in management of undiagnosed cases. 1.7.2. Apply the rules of consultation for urgent and undiagnosed cases. 1.7.3. Communicate effectively through feedback to help evaluate his own and others work.
1.8	Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand.	1.8.1. Identify the etiology of different types of malignant tumors. 1.8.2. Identify different methods of diagnosis, different biopsy types, role of molecular tests and certain investigations specific to different types of cancer. 1.8.3. Recognize the difference between prognostic and predictive factors of cancer. 1.8.4. Identify the basic tools for cancer prevention. 1.8.5. Identify parameters of follow up of long-term survivors and assessment tools in oncology. 1.8.6. Identifies different types of chemotherapy drugs. 1.8.7. Identifies chemotherapy drugs toxicity. 1.8.8. Identify main classifications, indications of hormonal and targeted therapy. 1.8.9. Describe and discuss the different mechanisms of actions and toxicities of different hormonal and targeted therapies. 1.8.10. Justify different nuclear diagnosis types suitable for different diseases 1.8.11. Identify what are radioactive isotopes applications in the field of oncology, diagnostic and therapeutic nuclear testing, Hazards and Protection in nuclear medicine. 1.8.12. Identify definition of palliative care 1.8.13. Determine type of patients in need for palliative care 1.8.14. List manipulations and palliative measures that can be offered to patients and their families 1.8.15. Classify types of radiation therapy used in cancer treatment 1.8.16. Identify how radiation interact with human tissues 1.8.17. Discuss mechanism of radiation production 1.8.18. Describe techniques of radiotherapy. 1.8.19. Side effects of Radiation Therapy

مدير البرنامج المتميز
أ.د. زينب قاسمى

1.10	Integrate the results of history, physical examination and laboratory test findings into a meaningful diagnostic formulation.	1.10.1. Integrate the results of history, physical and laboratory tests into a correct diagnosis and create an individualized treatment plan. 1.10.2. Evaluate patients' conditions and identify who is candidate for palliation. 1.10.3. Interpret the principles of patient simulation, contouring and planning in radiotherapy department.
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. Retrieve information and be able to use the recent evidence-based information and communications technologies 1.13.2. Apply continuous medical education and research to keep up to date with the international advancement in medicine and surgery. 1.13.3. Use of information technology to improve the quality of patient care through proper. 1.13.4. Share patients or their caregivers in decision making regarding management plans. 1.13.5. Gather and organize material from various sources (including library, electronic and online resources). 1.13.6. Apply the principles of using international guidelines and multidisciplinary team MDT. 1.13.7. Apply basics of scientific research (collection, analysis and interpretation of data). 1.13.8. Apply critical appraisal skills and use of evidence-based guidelines in making decisions about the care of patients. 1.13.9. Evaluate risk /benefit of any intervention to tailor the management plan with minimum risk to the patient. 1.13.10. Apply screening programs in oncology and early detection of the familial cancers. 1.13.11. Formulate a planning program for cancer control. 1.13.12. Correlate patients' clinical features with their basic treatment needs from palliative care point of view 1.13.13. Relate basics of radiation therapy with the planning techniques
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. Perform first aid management for acute reactions due to chemotherapy or targeted therapy.

مدير البرنامج المتميز
أ.د. زينب قاسمى

Competency Area 3: The graduate as a professional.

Key competency		Module LOs
3.1	Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.	3.1.1 Demonstrate a professional. respectful attitude while dealing with colleagues, and staff members 3.1.2 Demonstrate commitment and integrity while preparing the coursework and assignments
3.4	Treat all patients equally, and avoid stigmatizing any category regardless of their social, cultural or ethnic backgrounds, or their disabilities.	3.4.1 Demonstrate respect to social, culture, and ethnic difference of patients treating them equally.
3.8	Refer patients to the appropriate health facility at the appropriate stage.	3.8.1 Identify the rules of referral for complex and undiagnosed cases

Competency Area 5: The graduate as a member of the health team and part of the health care system.

Key competency		Module LOs
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 towards colleagues. 5.2.2 Apply teamwork in educational and professional encounters

مدير البرنامج المتميز
ا.د. زينب قاسمى

Competency Area 6: The graduate as a lifelong learner and researcher.

Key competency		Module ILOs
6.2	Develop, implement, monitor, and revise a personal learning plan to enhance professional practice.	6.2.1 Formulate a learning plan for the module in focus 6.2.2 Apply the learning plan respecting emerging priorities and encounters
6.3	Identify opportunities and use various resources for learning.	6.3.1 Use information resources either written or electronic efficiently for the educational process.
6.6	Effectively manage learning time	6.6.1 Manage time and learning resources effectively.

and resources and set priorities. 6.6.2 Apply priority setting in the learning process

III. Module Contents:

Theoretical	
Basics of Cancer Diagnosis & Early Detection	1 hour
Basics of Chemotherapy.	1 hour
Basics of Targeted and Hormonal Therapy.	1 hour
Basics of Radiotherapy.	1 hour
Basics of nuclear medicine.	1 hour
Basics of Palliative Care.	1 hour
Total	6
Practical	
Topic	**Teaching Hours**
Identify the component and the team of chemotherapy unit	1.5 hr
How to manage chemotherapy toxicity (real and simulated patients)	1.5 hr
Identifications the team and the components of radiotherapy unit	1.5 hr
Identify how the patient receives the radiation session	1.5 hr
Identify the team and the component of nuclear medicine unit	1.5 hr
How to read a report of bone scan, renogram and thyroid scan.	1.5 hr
Total	**9**

IV– Teaching and Learning Methods:

1. **Theoretical Teaching:**
   a) **Interactive lectures: using**
      - Brainstorming
      - Audiovisual aids through animations and diagrams
      - Interaction with the students through questions
      - Student engagement with discussion
   b) **Case Based learning**
   c) **Team Based Learning**
2. **Clinical Teaching:**
   Clinical rounds: using
      - Web based video and Multimedia applications
      - Problem solving
3. **Self-directed Learning**

مدير البرنامج المتميز
أ.د. زينب قاسمى

V- Student Assessment:

A. Attendance criteria:

The minimum acceptable attendance is 75%, otherwise students failing toreach that percentage will be prevented from attending the final examination.

B. Types of Assessment:

- **Formative:** This form of assessment is designed to help the students to identify areas for improvement. It includes a multiple-choice questions, problems-solving exercises and independent learning activities in all subjects. These will be given during tutorial and practical sessions. The Answers are presented and discussed immediately with you after the assessment. The results will be made available to the students.
- **Summative** This type of assessment is used for judgment or decisions to be made about the students' performance. It serves as:

1. Verification of achievement for the student satisfying requirement
2. Motivation of the student to maintain or improve performance
3. Certification of performance
4. Grades

C- Summative Assessment methods and schedules:

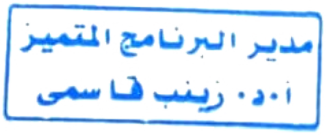
Assessment Method	Percentage	Description	Timing
Regular Evaluation	30%	10% written at the end of and periodicals including problem solving, multiple choice questions, give reason, matching, extended matching, complete and compare.	At the end of the module
		20% Participation in the tutorials, TBL, Research.	During the module
Final practical exam	30%	OSCE Exam	At the end of the module
Final Written	40%	It Includes problem-solving, multiple choice questions, give a eason, matching, extended matching, complete and compare.	At the end of the semester

D- Weighing of Assessment:

Method of Assessment |	Marks	Percentage
Final Written exam.	**10**	**40%**
Final Practical exam.	**7.5**	**30%**
Activities	**7.5**	**30%**
Total	**25**	**100%**

E- Grading for by GPA System:

The Percentage	Symbol	Grade
> 85%	A	**Excellent.**
75-<85 %	B	**Very Good**
65 - < 75 %	C	**Good.**
60 - < 65 %	D	**Passed.**
< 60 %	F	**Failed.**



	W	**Withdrawn**

VI. List of references and resources:

- **Module handout**.
- **Essential Books:**
  - Basics of Oncology 2009th Edition. By: Frederick O. Stephens, Karl Reinhard Aigner. Springer, 2009.
  - The Basic Science of Oncology, Sixth Edition 5th Edition. By: Ian Tannock, Richard Hill, Robert Bristow, Lea Harrington. McGraw Hill / Medical, 2013.

VII- Facilities required for teaching and learning:

1- Faculty Lecture halls
2- Faculty library for textbooks & electronic library for web search.
3- Audiovisual aids as boards, data show and computers.
4- Clinical round teaching rooms.

مدير البرنامج المتميز
أ.د. زينب قاسمى

Key Competencies & Module LOs *vs* Teaching and Assessment Methods Matrix

Key Competencies	Module Learning Outcomes	Teaching Methods						Assessment Methods						
								Formative Assessment		Summative Assessment				
		Recorded Lecture	Inverted Lectures	Case Based Learning	Team based Learning	Clinical Rounds	Self-directed study	Theoretical	Clinical	Written	OSCE	Assignments	quizzes	participation
1.2	1.2.1 to 1.2.5			x		x			x		x			x
1.4	1.4.1 to 1.4.5					x			x		x	x		x
1.5	1.5.1, 1.5.2	x	x	x	x	x	x	x	x	x	x		x	x
1.6	1.6.1 to 1.6.5	x	x	x	x	x	x	x	x	x	x		x	
1.7	1.7.1 to 1.7.3			x		x		x		x				
1.8	1.8.1 to 1.8.19	x	x	x	x		x	x		x		x	x	x
1.10	1.10.1 to 1.10.3			x	x	x	x	x	x	x	x		x	x
1.13	1.13.1 to 1.13.13-			x		x	x	x	x	x	x		x	
1.15	1.15.1			x		x		x	x	x	x		x	x
2.9	2.9.1					x			x		x			x
3.1	3.1.1 to 3.1.2					x			x		x			x
3.4	3.4.1					x			x		x			x
3.8	3.8.1					x			x		x			x
5.2	5.2.1, 5.2.2	x	x	x		x						x		x
6.2	6.2.1, 6.2.2						x	x	x	x	x	x	x	x
6.3	6.3.1						x	x	x	x	x	x	x	x
6.6	6.6.1, 6.6.2						x	x	x	x	x	x	x	x

Module Coordinator: Dr Reham Abdelaziz	**Program Coordinator:** Prof. Zeinab Kasemy

مدير البرنامج المتميز
أ.د. زينب قاسمى

Clinical Psychology

University: Menoufia **Faculty: Medicine**

A-Administrative information

Title: Clinical psychology

Code No: PSYCH 3208

Department offering the Module : Neuropsychiatry

Program (s) on which the Module is given: Menoufia M.B.B.Ch Credit- hour Program **(5+2)**

Academic year/level: Third level

Semester: Semester

Date of specification: 2018.

Date of approval by Department Council: 2018

Date of approval by Faculty Council: 2018

Credit hours: 1 credit hour/ Longtudinal

Teaching Hours: 15 hours/ Lectures

	Teaching hours		
	Lectures	Practical	Activities
Neuropsychiatry Department	6	9	18

- Professional Information

I. Aim of the Module:

To provide the students with basic knowledge regarding normal and abnormal psychological development (psychosocial, emotional, cognitive and moral) and its clinical application, and approach for management/

مدير البرنامج المتميز
أ.د. زينب قاسمى

II – Learning Outcomes of the Module

Competency Area 1: The graduate as a health care provider.

Key competency		Module LOs
1.1	Take and record a structured, patient-centered history.	1.1.1. Take good history about different emotional symptom according to their age group. 1.1.2. Take good history about different thinking symptom according to their age group. **1.1.3.** Take a good history about different cognitive signs.
1.2	Adopt an empathic and holistic approach to the patients and their problems.	1.2.1. Demonstrate empathy in patient counseling. 1.2.2. Communicate effectively with patients regardless of their social, cultural backgrounds or their disabilities. 1.2.3. Apply the ethics of medical practice when dealing with patients and colleagues. 1.2.4. Show a professional image in manner, dress, speech and interpersonal relationships that is consistent with the medical professions accepted contemporary standards in the community. 1.2.5. Identify the approach for management of difficult communication including
1.3	Assess the mental state of the patient.	1.3.1. Perform correct clinical assessment of normal and abnormal contimum. 1.3.2. Perform correct clinical examination for cognition 1.3.3. Perform correct clinical examination for behavior. 1.3.4. Perform correct clinical examination and make a diagnostic approach and treatment plan for

مدير البرنامج المتميز
أ.د. زينب قاسمى

		cognitive behavioral therapy. 1.3.5. Interpret different stages of development and measure t's positive and negative outcomes. 1.3.6. Report clinical uses of cognitive distortions and its implication in cognitive behavioral therapy. 1.3.7. Interpret cognitive and behavioral aspects of behavior. 1.3.8. Analyze different cognitive and behavioral problem to plan for efficient cognitive behavioral therapy. 1.3.9. Interpret psychological assessment for memory, attention, working memory, emotion, thinking, cognitive distortions investigations of different age group. 1.3.10. Formulate the management of cognitive and behavioral problems. 1.3.11. Interpret investigations of memory, attention, working memory, emotion, thinking, cognitive distortions. . 1.3.12. Analyze individual cognitive distortion. 1.3.13. Interpret the intelligent quotient. 1.3.14. Formulate a differential diagnosis of emotions 1.3.15. Formulate a differential diagnosis of thinking 1.3.16. Formulate a differential diagnosis of cognition 1.3.17. Formulate a differential diagnosis of defense mechanisms. 1.3.18. Report cognitive behavioral therapy management plan of an anxious patient 1.3.19. Report cognitive behavioral therapy management plan of depressed patient
1.5	Prioritize issues to be addressed in a patient encounter.	**1.5.1.** Apply priority setting while formulating a differential diagnosis for different psychological cases.
1.7	Recognize and respond to the complexity, uncertainty, and ambiguity inherent in medical practice.	1.7.1. Work with other healthcare professionals in management of undiagnosed cases. 1.7.2. Apply the rules of consultation for urgent and undiagnosed cases. 1.7.3. Communicate effectively through feedback to help evaluate his own and others work.

مدير البرنامج المتميز
أ.د. زينب قاسمى

1.8	Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand.	1.8.1. Outline causes of positive and negative outcome of each stage. 1.8.2. Identify mechanism of positive and negative outcome 1.8.3. Recognize different implications of each stage of development 1.8.4. Outline the definition of four stages of cognitive development. 1.8.5. Describe clinical attainment of each one of the four stages. 1.8.6. Outline the different causes of failure of attaining the normal stage characteristics. 1.8.7. Identify criteria of screened the different stages of development (psychosocial, cognitive, emotional and moral development) in different population e.g. schools 1.8.8. Identify the technique of screening. 1.8.9. Recognize the prevention of negative outcome of each stage of development (. psychosocial, cognitive, emotional and moral development). 1.8.10. Discuss the neural correlation of emotion and affect. 1.8.11. Identify etiology, pathogenesis, clinical manifestations of different emotions 1.8.12. Differentiate between normal euthymic emotion and abnormal emotions. 1.8.13. Explain etiology, clinical manifestations of different emotional diseases. 1.8.14. Outline the definitions of euthymic normal emotion and definition of different abnormal emotions. 1.8.15. Describe the etiology, clinical manifestations of different abnormal emotion 1.8.16. Identify the assessment and investigation of each abnormal emotion 1.8.17. Recognize clinical importance of thought 1.8.18. Identify classification of thought disorders 1.8.19. Identify the difference between normal and abnormal thinking. 1.8.20. Describe the health services for awareness of the different groups of the population with normality and abnormality of thinking. 1.8.21. Identify social health services for improving population awareness. 1.8.22. Identify common cognitive problems among different age groups.

مدير البرنامج المتميز
أ.د. زينب قاسمى

		1.8.23. Identify component of cognitive examinations 1.8.24. Recognize the importance of memory, attention, and exudative functions in healthy study. 1.8.25. List components and definitions of each cognitive function. 1.8.26. Recognize the importance of periodic cognitive examination for early detection of diseases and prevention. 1.8.27. Identify common cognitive problems among different age groups. 1.8.28. List steps for proper cognitive examination 1.8.29. Identify components of psychological testing of intelligence. 1.8.30. Recognize the role of psychiatrists in prevention and management of memory and executive problems in children, adolescents, and geriatric 1.8.31. Outline the definitions of different cognitive distortion. 1.8.32. Outline the classifications of different defense mechanisms. 1.8.33. Recognize clinical importance of detecting cognitive distortion and its implication in preventing psychiatric diseases as a risk factors of them 1.8.34. Identify the difference between healthy and unhealthy defense mechanisms 1.8.35. Describe the health services for awareness of the different groups of the population with normality and abnormality of behavior **1.8.36.** Identify the social health services for improving population awareness with cognitive distortions to improve quality of life and improve economic outcomes.
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. Retrieve information and be able to use the recent evidence-based information and communications technologies 1.13.2. Apply continuous medical education and research to keep up to date with the international advancement in medicine and surgery. 1.13.3. Use of information technology to improve the quality of patient care through proper. 1.13.4. Share patients or their caregivers in decision making regarding management plans. 1.13.5. Gather and organize material from various sources (including library, electronic and online resources).

مدير البرنامج المتميز
أ.د. زينب قاسمى

		1.13.6. Apply the principles of using international guidelines and multidisciplinary team MDT. 1.13.7. Apply basics of scientific research (collection, analysis and interpretation of data). 1.13.8. Apply critical appraisal skills and use of evidence-based guidelines in making decisions about the care of patients 1.13.9. Apply Cognitive behavioral program on different psychological problems. 1.13.10. Conduct counselling session with a normal population. 1.13.11. Diagnose and manage common health problems among different age groups. 1.13.12. Practice health maintenance and disease prevention for different age group. 1.13.13. Formulate the way of management of cognitive part of cognitive behavioral therapy 1.13.14. Formulate the way of management of behavioral part of cognitive. 1.13.15. Formulate cognitive treatment of a depressed patient by cognitive behavioral therapy 1.13.16. Formulate behavioral treatment of a depressed patient by cognitive behavioral therapy 1.13.17. Formulate the management of memory 1.13.18. Interpret investigations of attention 1.13.19. Formulate management of Working memory 1.13.20. Formulate psychosocial, cognitive, moral development counseling 1.13.21. Design health educational messages for different age groups. 1.13.22. Choose the appropriate screening test for each age group. 1.13.23. . Organize cognitive behavioral therapy sessions. 1.13.24. Correlate between age and need of screening psychosocial, cognitive, moral among different age group.

Competency Area 3: The graduate as a professional.

Key competency		Module LOs
3.1	Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.	3.1.1 Demonstrate a professional. respectful attitude while dealing with colleagues, and staff members 3.1.2 Demonstrate commitment and integrity while preparing the coursework and assignments

مدير البرنامج المتميز
أ.د. زينب قاسمى

3.4	Treat all patients equally, and avoid stigmatizing any category regardless of their social, cultural or ethnic backgrounds, or their disabilities.	3.4.1 Demonstrate respect to social, culture, and ethnic difference of patients treating them equally.
3.8	Refer patients to the appropriate health facility at the appropriate stage.	3.8.1 Identify the rules of referral for complex and undiagnosed cases

Competency Area 4: The graduate as a scholar and scientist.

Key competency		Module LOs
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. Define psychosocial, cognitive, emotional and moral development in different stages of growth in children, adolescent, adult and geriatric 4.4.2. Describe different characteristics of development at its four fields (psychosocial, cognitive, emotional and moral development). 4.4.3. Outline eight stages of psychosocial development and the four stages of cognitive development

Competency Area 5: The graduate as a member of the health team and part of the health care system.

Key competency		Module LOs
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 towards colleagues. 5.2.2 Apply teamwork in educational and professional encounters

Competency Area 6: The graduate as a lifelong learner and researcher.

Key competency		Module ILOs
6.2	Develop, implement, monitor, and revise a personal learning plan to enhance professional practice.	6.2.1 Formulate a learning plan for the module in focus 6.2.2 Apply the learning plan respecting emerging priorities and encounters
6.3	Identify opportunities and use various resources for learning.	6.3.1 Use information resources either written or electronic efficiently for the educational process.
6.6	Effectively manage learning time and resources and set priorities.	6.6.1 Manage time and learning resources effectively. 6.6.2 Apply priority setting in the learning process

مدير البرنامج المتميز
أ.د. زينب قاسمى

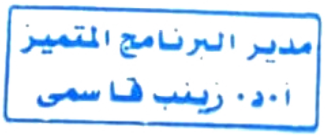
III. Module Contents:

Theoretical	
Topic	**Teaching hours**
Affective aspect of behaviour	1
Cognitive aspect of behaviour	1
Thinking and perceptual aspect of behaviour	1
Cognitive distortions and defense mechanisms	1
Psychosocial, cognitive and moral development	1
Basics of cognitive behavioral therapy	1
Total	**6**
Practical	
Topic	**Teaching Hours**
How to examine different normal and abnormal emotions and their assessment by psychological testing	1.5
How to examine different normal and abnormal thinking and their assessment by psychological testing	1.5
How to examine different normal and abnormal cognition and their assessment by psychological testing	1.5
How to examine different normal and abnormal perception and their assessment by psychological testing	1.5
Clinical cognitive part of cognitive behavioural therapy	1.5
Clinical behavioural part of cognitive behavioural therapy	1.5
Total	9

IV– Teaching and Learning Methods:

1. **Theoretical Teaching:**
   a) **Interactive lectures: using**
      - Brainstorming
      - Audiovisual aids through animations and diagrams
      - Interaction with the students through questions
      - Student engagement with discussion

   b) **Case Based learning**
2. **Clinical Teaching:**
   Clinical rounds: using
      - Web based video and Multimedia applications
      - Problem solving
3. **Self-directed Learning**



V- Student Assessment:

A. Attendance criteria:

The minimum acceptable attendance is 75%, otherwise students failing toreach that percentage will be prevented from attending the final examination.

B. Types of Assessment:

- **Formative:** This form of assessment is designed to help the students to identify areas for improvement. It includes multiple-choice questions, problems-solving exercises and independent learning activities in all subjects. These will be given during tutorial and

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

- **Summative** This type of assessment is used for judgment or decisions to be made about the students' performance. It serves as:

1. Verification of achievement for the student satisfying requirement
2. Motivation of the student to maintain or improve performance
3. Certification of performance
4. Grades

C- Summative Assessment Methods and Schedule:

Assessment Method	Percentage	Description	Timing
Regular Evaluation	30%	10% written at the end of and periodicals including problem-solving, multiple-choice questions, give reason, matching, extended matching, complete and compare.	At the end of the module
		20% Participation in the tutorials, TBL, Research.	During the module
Final practical exam	30%	OSCE Exam	At the end of the module
Final Written	40%	It Includes problem-solving, multiple-choice questions, give a reason, matching, extended matching, complete and compare.	At the end of the semester

D- Weighing of Assessment:

Method of Assessment |	Marks	Percentage
Final Written exam.	**10**	**40%**
Final Practical exam.	**7.5**	**30%**
Activities	**7.5**	**30%**
Total	**25**	**100%**

E- Grading for by GPA System:

The Percentage	Symbol	Grade
> 85%	A	**Excellent.**
75-<85 %	B	**Very Good**
65 - < 75 %	C	**Good.**
60 - < 65 %	D	**Passed.**
< 60 %	F	**Failed.**
	W	**Withdrawn**

مدير البرنامج المتميز
أ.د. زينب قاسمى

VI. List of references and resources:

- **Module handout**.
- **Essential Books:**
  - Clinical Psychology: Assessment, Treatment, and Research 1st Edition. By: David C.S. Richard, Steven K. Huprich. Academic Press, 2008
  - Introduction to Clinical Psychology (8th Edition) 8th Edition. By: Geoffrey P. Kramer, Douglas A. Bernstein, Vicky Phares. Pearson, 2013.

VII- Facilities required for teaching and learning:

1- Faculty Lecture halls
2- Faculty library for textbooks & electronic library for web search.
3- Audiovisual aids as boards, data show and computers.
4- Clinical round teaching rooms.

Key Competencies & Module LOs *vs* Teaching and Assessment Methods Matrix

Key Competencies	Module Learning Outcomes	Teaching Methods					Assessment Methods						
							Formative Assessment		Summative Assessment				
		Recorded Lecture	Inverted Lectures	Case Based Learning	Clinical Rounds	Self-directed study	Theoretical	Clinical	Written	OSCE	Assignments	quizzes	participation
1.1	1.1.1 to 1.1.3				x			x		x	x		x
1.2	1.2.1 to 1.2.5			x	x			x		x			x
1.3	1.3.1 to 1.3.19			x	x			x		x		x	x
1.5	1.5.1	x	x	x	x	x	x	x	x	x		x	x
1.6	1.6.1 to 1.6.3	x	x	x	x	x	x	x	x	x		x	
1.7	1.7.1 to 1.7.3			x	x		x		x				
1.8	1.8.1 to 1.8.36	x	x	x		x	x		x		x	x	x
1.13	1.13.1 to 1.13.24			x	x	x	x	x	x	x		x	
3.1	3.1.1 to 3.1.2				x			x		x			x
3.4	3.4.1				x			x		x			x
3.8	3.8.1				x			x		x			x
4.4	4.4.1 to 4.4.3	x	x	x	x	x	x		x			x	x
5.2	5.2.1, 5.2.2	x	x	x	x						x		x
5.10	5.10.1 to 5.10.3				x			x		x	x		x
6.2	6.2.1, 6.2.2					x	x	x	x	x	x	x	x
6.3	6.3.1					x	x	x	x	x	x	x	x
6.6	6.6.1, 6.6.2					x	x	x	x	x	x	x	x

Module Coordinator:	**Program Coordinator:**
Name: Dr Afaf Zein Elabideen	**Name: Prof. Dr. Zeinab Kasemy**

مدير البرنامج المتميز
أ.د. زينب قاسمى

Vertical Integration Module (6)

University: Menoufia **Faculty: Medicine**

A-Administrative information

Module Title: Vertical Integration Module (6)

Department offering the Module: Internal Medicine

Program (s) on which the Module is given: Menoufia M.B.B.Ch Credit- hour Program **(5+2)**.

Academic year/level: Third level

Semester: Semester VI

Date of specification: 2018

Date of approval by departments council: 2018

Date of approval by faculty council: 2018

Credit hours: 0.5 credit hour/ Longtudinal

	Lectures
Internal medicine Department	7.5 h

B- Professional Information

I – Aim of the Module:

To provide the students with the clinical skills of history taking of different symptomatology, interpreting the examination of the patient, and a final diagnosis of the patient while using effective communication skills.

مدير البرنامج المتميز
أ.د. زينب قاسمى

II. Learning Outcomes of the Module:

Competency Area 1: The graduate as a health care provider.

Key competency		Module LOs	
1.1	Take and record a structured, patient-centered history.	1.1.1.	Describe the different items in history taking.
		1.1.2.	Identify the important questions to ask for the patient with chest pain
		1.1.3.	Identify the important questions to ask for the patient with thyroid swelling
		1.1.4.	Identify the important questions to ask for the patient with bowel habit changes
		1.1.5.	Identify the important questions to ask for the patient with wight loss
1.2	Adopt an empathic and holistic approach to the patients and their problems.	1.2.1.	Demonstrate empathy in patient counseling.
		1.2.2.	Communicate effectively with patients regardless of their social, cultural backgrounds or their disabilities.
		1.2.3.	Apply the ethics of medical practice when dealing with patients and colleagues.
		1.2.4.	Show a professional image in manner, dress, speech and interpersonal relationships that is consistent with the medical professions accepted contemporary standards in the community.
		1.2.5.	Identify the approach for management of difficult communication including
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 his approach to patient with different complaints and different examination findings
		1.4.2.	Interpret the patient examination findings especially the vital signs
		1.4.3.	Apply the ethics of medical practice when examining patients.
		1.4.4.	Apply proper infection control when dealing with patients.
1.5	Prioritize issues to be addressed in a patient encounter.	**1.5.1.**	**Apply priority setting while formulating** a differential diagnosis for different cases.
1.6	Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.	1.6.1.	Follow the guidelines in choosing the proper investigations while taking into consideration cost-effectiveness.
		1.6.2.	Interpret laboratory and radiological investigations of any patient.

مدير البرنامج المتميز
أ.د. زينب قاسمى

1.7	Recognize and respond to the complexity, uncertainty, and ambiguity inherent in medical practice.	1.7.1. Work with other healthcare professionals in management of undiagnosed cases. 1.7.2. Apply the rules of consultation for urgent and undiagnosed cases. 1.7.3. Communicate effectively through feedback to help evaluate his own and others work.
1.10	Integrate the results of history, physical examination and laboratory test findings into a meaningful diagnostic formulation.	1.10.1. Integrate the results of history, physical and laboratory tests into a correct diagnosis and create an individualized treatment plan. 1.10.2. Differentiate between different causes of neck swelling
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. Retrieve information and be able to use the recent evidence-based information and communications technologies 1.13.2. Apply continuous medical education and research to keep up to date with the international advancement in medicine and surgery. 1.13.3. Share patients or their caregivers in decision making regarding management plans. 1.13.4. Gather and organize material from various sources (including library, electronic and online resources).

Competency Area 2: The graduate as a health promoter.

Key Competency		Module LOs
2.9	Adopt suitable measures for infection control.	2.9.1 Apply infection control measures while dealing with patients

Competency Area 3: The graduate as a professional.

Key competency		Module LOs
3.1	Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.	3.1.1 Demonstrate a professional. respectful attitude while dealing with colleagues, and staff members 3.1.2 Demonstrate commitment and integrity while preparing the coursework and assignments
3.4	Treat all patients equally, and avoid stigmatizing any category regardless of their social, cultural or ethnic backgrounds, or their disabilities.	3.4.1 Demonstrate respect to social, culture, and ethnic difference of patients treating them equally.
3.8	Refer patients to the appropriate health facility at the appropriate stage.	3.8.1 Identify the rules of referral for complex and undiagnosed cases

مدير البرنامج المتميز
أ.د. زينب قاسمى

Competency Area 5: The graduate as a member of the health team and part of the health care system.

Key competency		Module LOs	
5.2	Respect colleagues and other health care professionals and work cooperatively with them, negotiating overlapping and shared re-sponsibilities and engaging in shared decision-making for effective patient management.	5.2.1 5.2.2	Demonstrate respect towards colleagues. Apply teamwork in educational and professional encounters

Competency Area 6: The graduate as a lifelong learner and researcher.

Key competency		Module ILOs	
6.2	Develop, implement, monitor, and revise a personal learning plan to enhance professional practice.	6.2.1 6.2.2	Formulate a learning plan for the module in focus Apply the learning plan respecting emerging priorities and encounters
6.3	Identify opportunities and use various resources for learning.	6.3.2	Use information resources either written or electronic efficiently for the educational process.
6.6	Effectively manage learning time and resources and set priorities.	6.6.1 6.6.2	Manage time and learning resources effectively. Apply priority setting in the learning process

III. Module Contents:

Topic	Teaching hours
Approach to patient with chest pain	1
Approach to patient with loss of wight	1
Approach to patient with thyroid sweeling	1.5
Interpretation of the patient examination	2
Interpretation of patient investigations	2
Total	**7.5**

IV– Teaching and learning methods

The following teaching / learning methods are used to promote better understanding:

- **Interactive Lectures/online**
- **Self-directed learning.**

- **Interactive lectures:** In large groups, the lecturer introduces a topic or common clinical conditions and explains the underlying topic through questions, pictures, videos of patients' interviews, exercises, etc. Students are actively involved in the learning process.
- **Self-directed learning**: Students assume responsibilities of their own learning through individual study, sharing and discussing with peers, seeking information from Learning

مدير البرنامج المتميز
أ.د. زينب قاسمي

Resource Center, teachers and resource persons within and outside the college. Students can utilize the time within the college scheduled hours of self-study.

V- Student Assessment:

A. Attendance criteria:

The minimum acceptable attendance is 75%, otherwise students failing toreach that percentage will be prevented from attending the final examination.

B- Assessment methods

- Formative assessment: Through predesigned checklist and assignment with assessment of student participation in the lecture
- Summative Written: MCQ, EMQs, complete, true false and problemsolving

C- Assessment schedule

Final examination: Final-term assessment at the end of the semester bywritten examination.

D- Weighting of assessments:

- Final-term examination: 100 % (12.5 marks)

VI. List of references and resources:

- **Module notes**.
- **Essential Books:**
  - The Washington Manual of General Internal Medicine Consult, 3rd Edition. By: Thomas Ciesielski. LWW, 2017.
  - Decision Making in Medicine 3rd Edition. By: Stuart B. Mushlin, Harry L. Greene. Mosby, 2009.

VII- Facilities required for teaching and learning:

1- Faculty Lecture halls
2- Faculty library for textbooks & electronic library for web search.
3- Audiovisual aids as boards, data show and computers.

Module Coordinator:Dr. Enas Zahran	**Program Coordinator: Prof. Dr. Zeinab Kasemy**

مدير البرنامج المتميز
أ.د. زينب قاسمى

توصيف موديولات بكالريووس الطب و الجراحة العام

(البرنامج المتميز 5+2

ساعات معتمدة)

لجنة المعايير الاكاديمية و التوصيف بالبرنامج	منسق	مدير وحدة ضمان الجودة	عميد الكلية
د. أحمد حمدان	أ.د زينب عبدالعزيز قاسمي	ا.د/ أميرة فتحى عبد العاطى	أ.د/ محمد فهمي النعمانى

مدير البرنامج المتميز
ا.د. زينب قاسمى