جامعة : المنصورة
كـــلية : العلـــوم
قـــســـم:علم الحيوان

توصيف مقرر دراسى

١ بيانات المقرر		
الرمز الكودي: Z 102	**أسم المقرر:Principles of Animal Taxonomy**	**المستوى : الأول**
البرنامج: علوم البيئة	**عدد الوحدات الدراسية: ٣ نظرى ٢ تمارين ٠ عملى ٢**	

٢ هدف المقرر:	**For students undertaking this course, the aims are to:** 1 - Acquire students an understanding of the principles of animal taxonomy. 2 – Develop a set of skills that enable students to understand the principle of classification. 3 - Acquire students an understanding of the morphology, anatomy and function of major of protozoa, Porifera, coelenterates, Platyhelminthes and nematode, Annelides, Arthropodes, and Moluscs. 4 - Enable students to differentiate between examples from different phyla. 5 - Equip students with the essential skills and altitudes required to educate how the infection takes place by the protozoan and metazoan parasites and how the treatment occurring. 6 - Provide the recent advances of animal taxonomy.
٣ المستهدف من التدريس المقرر:	
ا.المعلومات والمفاهيم:	**a- Knowledge and Understanding :** **On completing this course, students will be able to:** a1. Recognize the general characters of Protozoa, Porifera, Coelentrata, Platyhelminthes, nematodes, Annelides, Arthropodes, and Moluscs and other taxonomic terms. a 2. Recognize the bases of differentiation between different phyla & specimens of the same phylum. a 3 . Explain the recent developments in the field of Animal Taxonomy. a 4 . Recognize the description of some parasites and their infective stages. a 5. Discus the life cycles of some parasites, the diagnosis and the treatment. a 6. Organize the different phyla of the animal kingdom, and differentiate between them.
ب.المهارات الذهنية	**b- Intellectual Skills:** **On completing this course, students will be able to:** b1. Analyze the different subjects of taxonomy. b 2. Differentiate between Protozoa, Porifera, Coelentrata, Platyhelminthes and nematodes, Annelides, Arthropodes, and Moluscs. b 3. Develop self- awareness and general study skills, problem solving and decision making. b4. Interpret the different terms used in taxonomy. b5. Apply what he studied in practical life.
ج- المهارات المهنية الخاصة بالمقرر:	**c-Professional and Practical Skills:** **On completing this course, students will be able to:** c 1. Classify the used examples according to the basic principles of taxonomy. c 2. Compare between studied examples. c3. Apply knowledge of useful and harmful specimens.

c4. Apply the students' topics in dissection of some invertebrates animals in order to demonstrate different systems. c5. Sketch and compare the structure of the different studied species of the animal kingdom.	
d-General and Transferable Skills: **On completing this course, students will be able to:** d1. Collect and analyze the data. d2. Search for information. d3. Present results in oral and written means. d4. Manage time. d5. Communicate effectively with lecturer through continuous discussion, short essays & work groups of students.	**د- المهارات العامة :**
- Introduction to Taxonomy. - Principles of Animal Taxonomy. - History of Taxonomy. - Scientific Classification of Organisms (Basic Characters of Classification), Biological Nominclture & concepts of Species. - Division of Living Organisms: Kingdom: Planta, kingdom: Protista & Kingdom: Animalia. Subdivisions (Phylum, Class, Order, Family, Genus, Species. - Classification Scheme. - Kingdom: Protista (Protozoa). Classification, Basic Characters. - Examples of Protozoan Animals: *Amoeba, Entamoeba, Euglena, Trypanosoma, Leishmania, Giardia, Toxoplasma, Plasmodium, Cryptosporidium, Paramecium, Balantidium, Trichomonus.* - Broad classification of animal kingdom: Mesozoa, Parazoa and Eumetazoa (Radiata, Bilateria); Protostomia (Acoelomata, Pseudocoelomata and Eucoelomata), Deuterostomia. - Levels of organization (cellular, tissue and organ levels); Modes of coelom formation. - Porifera (sponge). Basic Characters, Examples, Types. - General characters of Coelentrata, Classification, Examples: Hydra, Obelia, Aurelia, Alcyonium & Stony corals. - Phylum: Platyhelminthes, Basic characters, Classification, Examples: Planaria, Fasciola, Schistosoma, Taenia, Heterophyes. - Phylum: Nematodes, Basic Characters & Classification, Examples: Ascaris, Ancylostoma, Enterobius, Trichinella. - Phylum: Annelida: Basic Characters, Classification, Examples: Allolobophora, Neries, & Hirudo. - Phylum: Arthropoda: Basic Characters, Classification, some examples. - Phylum: Echinodermata: Basic Characters, Classification, some examples. - Phylum: Mollusca: Basic Characters, Classification, some examples. - Phylum: Rotifera: Basic Characters, Classification, some examples. - Phylum: Chordata: Basic Characters, Classification, some examples.	**٤ محتوى المقرر:**
4 - Teaching and Learning Methods 1- lectures (2H/W) 2- Tutorial (2H/W) 3- Practical lab. (2H/W)	**٥ اساليب التعليم والتعلم:**

4- Report

٦ أساليب التعليم والتعلم للطلاب ذوى القدرات المحدودة:

The same as normal students, only skeletal disabilities are allowed in the Faculty of Science.

٧ تقويم الطلاب :

أ- الأساليب المستخدمة :

Student Assessment Methods

Mid-term exam	**to assess**	a1-a6,b1-b5,c1-c5
Practical exam	**to assess**	c1,c2,c3,c4,c5
Final exam	**to assess**	a1,a2,a3,a4,a5,a6 b1,b2,b3,b4,b5
Oral exam	**to assess**	a1,a2,a3,a4,a5,a6 d1,d2,d3,d4,d5
Report	**to assess**	a1,a2,a3,a4,a5,a6,d1-d5

ب- التوقيت :

Assessment Schedule

Assessment 1	**Mid-term exam**	**week 7**
Assessment 2	**Practical exam**	**week 14**
Assessment 3	**Final exam**	**week 16**
Assessment 4	**Oral exam**	**week 16**
Assessment 5	**Report**	**week 16**

ج- توزيع الدرجات :

Weighting of Assessments

Mid-term exam	**10%**
Practical Examination	**20%**
Final-Term Examination	**60%**
Oral Examination	**10%**
Total	**100%**

٨- قائمة الكتب الدراسية والمراجع :

أ- مذكرات:

1-Course Note of Principles of Taxonomy authorized by department of zoology.

ب- كتب ملزمة

ج- كتب مقترحة :

1- A Manual of Practical Zoology Invertebrates P.S. Verma, S. Chand and Company , New Delhi , 1983.

2-Invertebrate structure and function, E.J.W. Barrington, Nelson , London, 1967.

3- Invertebrate Zoology (part I – part II) Dr. Gamil N. Soliman, The Palm Press, Cairo, 2001. 4- Invertebrate Zoology P.S. Dhami – J.K. Dhami, R.Chand, New Delhi, 1992. 5- Genetics. Singh,B.D. Kalyani, 2008.	
Different Web sites of genetics and taxonomy of animal kingdom.	**د- دوريات علمية أو نشرات..**

(أ) مصفوفة المعارف والمهارات المستهدفة من المقرر الدراسى

المحتويات للمقرر	أسبوع الدراسة	المعارف الرئيسية	مهارات ذهنية	مهارات مهنية	مهارات عامة
Introduction to Taxonomy. Principles of Animal Taxonomy History of Taxonomy. Scientific Classification of Organisms (Basic Characters of Classification), Biological Nominclture & concepts of Species. Division of Living Organisms: Kingdom: Planta, kingdom: Protista & Kingdom: Animalia. Subdivisions (Phylum, Class, Order, Family, Genus, Species. Classification Scheme.	1-2	a2,a3	b1,b2, b4	c1	d1,d3, d5
Kingdom: Protista (Protozoa). Classification, Basic Characters. Examples of Protozoan Animals: Amoeba, Entamoeba, Euglena, Trypanosoma, Leishmania, Giardia, Toxoplasma, Plasmodium, Cryptosporidium, Paramecium, Balantidium, Trichomonus.	3-5	a1, a2,a4,a 5	b1,b2, b5	c1, c2	d1,d3
Broad classification of animal kingdom: Mesozoa, Parazoa and Eumetazoa (Radiata, Bilateria); Protostomia (Acoelomata, Pseudocoelomata and Eucoelomata), Deuterostomia. Levels of organization (cellular, tissue and organ levels); Modes of coelom formation.	6	a1,a2,a 4	b1,b2	c3	d2,d3
Porifera (sponge). Basic Characters, Examples, Types. General characters of Coelentrata, Classification, Examples: Hydra, Obelia, Aurelia, Alcyonium & Stony corals.	7-9	a1,a2	b1,b4	c4	d1
Phylum: Platyhelminthes, Basic characters, Classification, Examples: Planaria, Fasciola, Schistosoma, Taenia, Heterophyes. Phylum: Nematodes, Basic Characters & Classification, Examples: Ascaris, Ancylostoma, Enterobius, Trichinella.	10-12	a1,a2,a 5	b1,b2	c2	d2, d3
Phylum: Annelida: Basic Characters, Classification, Examples: Allolobophora, Neries, & Hirudo. Phylum: Arthropoda: Basic Characters, Classification, some examples.	13	a1,a2,a 4,a5	b2	c4	d2,d4
Phylum: Echinodermata: Basic Characters, Classification, some examples. Phylum: Mollusca: Basic Characters, Classification, some examples. Phylum: Rotifera: Basic Characters, Classification, some examples. Phylum: Chordata: Basic Characters, Classification, some examples.	14	a1,a4,a 5,a6	b1,b2, b5	c5	d1,d4
Practical according to the course content showing examples of different animals studied in the theoretical part.	2-11	--------	b3	c1,c2, c3, c4,c5	d1, d2,d3, d4

أستاذ المقرر: د./ محمد فتحى ابوالنور

رئيس مجلس القسم العلمى : أ.د./ هناء على حسن