Course specification

University/Academy: Damanhour
Faculty/Institute: Science
Department: Zoology

1. course Data:

<table>
<thead>
<tr>
<th>Course code:</th>
<th>Course title:</th>
<th>Academic year/level:</th>
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<tbody>
<tr>
<td>Zool 102</td>
<td>systematic zoology</td>
<td>(second term) / 1st Year 2007/2008</td>
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<thead>
<tr>
<th>Specialization:</th>
<th>No. of instructional units:</th>
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<tbody>
<tr>
<td>biology group</td>
<td>lecture 3 hrs /week, tutorial, practical 4hrs/week</td>
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2. course Aim

- Obtaining a broad spectrum on various invertebrate phyla from protozoa to annelida regarding their morphology, biology, lifecycles and their economic importance.
- Understanding phylogenetic relations between these invertebrate groups.

3. Intended learning outcome

a) Knowledge and understanding

A1: list the general characters of the main phyla (protozoa, porifera, cnidaria, platyhelminthes, nematoda and annelida
A2: identify the main types of invertebrates upon their morphological variations.
A3: illustrate the biology and life cycles of selected examples of invertebrates.
A4: define the phylogenetic relations among the different invertebrates.

b) Intellectual

B1: Apply the taxonomical rules on specific examples of
| skills | invertebrates.  
B2: Compare between unicellular and multicellular animals.  
B3: Differentiate between Acoelomate, pseudocoelomate and coelomate animals.  
B4: Evaluate the advancement and similarities between phyla. |
| --- | --- |
| c) Professional skills | C1: Use the light microscope to identify various examples of invertebrates.  
C2: Dissect selected examples of the main invertebrates group.  
C3: Draw and classify the samples. |
| d) General skills | D1: Make reports with the standard scientific guidelines.  
D2: Work effectively both in a team and independently.  
D3: Exchange ideas, principles and information by oral, written and visual means. |
| 4. course content | Introduction general characters and classification of protozoa.  
Phylum sarcomastigofra  
Subphylum: mastigophra  
Examples: euglena, trypanosoma.  
Subphylum sarcodin  
Examples: amoeba, entamoeba histolytica, entamoeba coli.  
Apicomplexa  
Example: plasmodium vivax.  
Phylum: ciliophora  
Examples: parameciym, balantidiym coli.  
Phylum: porifera  
General characters, classification, structure, nutrition, respiration, excerition and reproduction.  
Phylum: cnidaria  
General characters, classification. |
<table>
<thead>
<tr>
<th>Class : Hydrozoa.</th>
<th>Examples : hydra.</th>
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<tbody>
<tr>
<td>Class : scyphozoa.</td>
<td>Example : Aurelia.</td>
</tr>
<tr>
<td>Class : Turbellaria</td>
<td>Example : planaria.</td>
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**Mid term exam**

<table>
<thead>
<tr>
<th>Class : Trematoda.</th>
<th>Example : Fasciola.</th>
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<tr>
<td>Class : Cestode.</td>
<td>Example : Taenia.</td>
</tr>
<tr>
<td>Example : Ascaris.</td>
<td>Revision exam.</td>
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5. **Teaching and learning methods for students with special needs**

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<tr>
<th>5.1. Lectures.</th>
<th>5.2. practical work.</th>
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6. **Student**
Assessment

a) Procedures used:
- Mid term exam.
- Final Practical exam.
- Final written exam

b) Schedule:
- Assessment 1: Mid term Week: 10
- Assessment 2: Practical Week: 15
- Assessment 3: Final written exam Week: 16

c) Weighing of Assessment:
- Mid-Term Examination: 10
- Final-Term Examination: 150
- Practical Examination: 30
- Semester Work: 10

Total 200

7. List of Textbooks and References:

a) Course Notes
Systematic zoology.

b) Required Books (Textbooks)
Gamil N. Soliman; The Mideastern invertebrate funa part 1, 2 Egypt 2007

Barnes, R.S.K. :”Kingdom animalia”.
In Asynoptic classification of living organisms.
Blachwell scientific publication 1984.
Barnes, R.S.K. : The invertebrates

d) Periodicals, web sites,…,etc
www.mhhe.com
www.blackwellpublishing.com

Course Instructor: Dr. Gihan Mahmoud El-khodary

Head of Department: Dr. Karolin Kamel

Date: -----/-----/----