Course specification

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

1. course Data:

| Course code: Bot 303 | Course title: Archegoniatae and their fossils | Academic year/level: 2009/2010
|                     |                                              | 3rd year student (first term) |
| Specialization: Botany | No. of instructional units: 3 lecture 3 practical |

2. course Aim

By the end of the course, students will be able to:
- Realize the principles of Archegoniatae.
- Understand the classification of Archegoniatae.
- Understand the evolutionary affinities of representative examples
- Realize the structure of representative examples
- Realize the life cycles of representative examples.
- Understand the geological history of representative example
- Recognize basic concepts of Archegoniatae

3. Intended learning outcome

a) Knowledge and understanding

By the end of the course, students will be able to:
A1: Write the significant differences between Bryophyta, Pteridophyta and Gymnospermae
A2: Describe the structure of Archegoniatae.
A3: List the basic concepts of Archegoniatae.
A4: Mention the significant differences between classes, orders and important families.

b) Intellectual skills

By the end of the course, the students are expected to develop higher order skills that are reflected in their ability to:
B1: Differentiate between Archegoniatae
B2: Analysis the structural and the functional specialization of Archegoniatae
B3: Compare between the internal structures of different Archegoniatae groups.
B4: Evaluate the basic knowledge of in handling and interpreting information.
B5: Compare between classes, orders and important families of Archegoniatae
### B6: Discover the structure of representative example of Archegoniatae.

B7: Comment the life cycles of representative example of Archegoniatae 

B8: Analysis the basic knowledge of geological history of Archegoniatae 

B9: Evaluate the basic knowledge of evolutionary affinities of representative example of Archegoniatae 

c) **Professional skills**

By the end of the course, students will be able to:
- C1: Demonstrate the main features of Archegoniatae  
- C2: Use the simple microscope to identify different botanical samples.  
- C3: Practice the different internal structure of Archegoniatae 
- C4: Explain the main features of Archegoniatae 

d) **General skills**

By the end of the course, students will be able to:
- D1: Exchange ideas, principles and information by oral, written and visual means. 
- D2: Work effectively both in a team and independently. 
- D3: Using the information technology to gather information and right reports. 

### 4. course content

- Introduction about Archegoniatae  
- classification and Evolutionary affinities of Bryophyta 
- Geological history of Bryophyta 
- structure of representative examples of Bryophyta 
- life cycles of representative examples of Bryophyta 
- classification and Evolutionary affinities of Pteridophyta 
- Geological history of Pteridophyta 
- structure of representative examples of Pteridophyta 
- life cycles of representative examples of Pteridophyta 
- classification and Evolutionary affinities of Gymnospermae 
- Geological history of Gymnospermae 
- 12- structure of representative examples of Gymnospermae, 
- life cycles of representative examples of Gymnospermae,
### Gymnospermae

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<thead>
<tr>
<th>5. Teaching and learning methods</th>
<th>Lectures and seminars. Lab work. Problems. Short reports.</th>
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<th>6. teaching and learning methods for students with special needs</th>
<th>N/A</th>
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<tr>
<th>Student Assessment</th>
<th>Quizzes. Mid term exam. Practical exam. Final term exam</th>
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**a) Procedures used:**

<table>
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<tr>
<th>b) Schedule:</th>
<th>Assessment 1: Quizzes. Week: 4-7</th>
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<tbody>
<tr>
<td></td>
<td>Assessment 2: Mid term exam. Week: 8</td>
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<td>Assessment 3: Practical exam. Week: 15</td>
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<td>Assessment 4: Final term exam. Week: 16</td>
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<tr>
<th>c) Weighing of Assessment:</th>
<th>Semester work 10</th>
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<tbody>
<tr>
<td></td>
<td>Mid term exam 10</td>
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<td>Practical examination 30</td>
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<td>Final term exam 100</td>
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<td>Total</td>
<td>150</td>
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### 7. List of Textbooks and References:

**a) Course Notes**

Course Notes in Plant Archegoniatae

**b) Required Books (Textbooks)**


**c) Recommended Books**

1- The Structure and Development of the Mosses and Ferns
2- Green Plants Their Origin and Diversity -

**d) Periodicals, web sites,…,etc**

www.Plant anatomy.com

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**Course Instructor:**

**Head of Department:** Dr.

**Date:** 20/8/2009