Course specification

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

1. Course Data:

<table>
<thead>
<tr>
<th>Course code: Bot 102</th>
<th>Course title: Botany</th>
<th>Academic year/level: 2007/2008 1st year/second term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialization: Biology</td>
<td>No. of instructional units:</td>
<td>lecture 3hr tutorial - practical 4hr</td>
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2. Course Aim

The overall aim of all awards in this course is to introduce what is meant by the science of archegoniate and plant taxonomy to provide general understanding of some phenomena with a particular emphasis on:

1. Gain some information about the different classification systems.
2. Arrange plant organisms phylogenetically into primitive and advanced groups.
3. Introduction on the basic component and principles on plant taxonomy.
4. Detailed structure of the flower.
5. Development of the various floral parts.
7. Pollination and fertilization process.
8. Studies of the main characters for the most common families of flowering plants represents in the flora of Egypt.

3. Intended learning outcome

- **Knowledge and understanding**

  BY the end of this course the students will be able to:

  A1: List the different classification systems of plant kingdom
  A2: Describe the morphological, anatomical, structures, life cycles, evolutionary trend and habitats of plant organisms belonging to different Tara.
  A3: Draw the flower parts and illustrate the development of floral parts.
  A4: Define the fruit and list its types

- **Intellectual skills**

  By the end of the course, the student is expected to develop higher order skills that are reflected in the student’s ability to:

  B1: Compare between Bryophyta, pteridophyta and Spermatophyta.
  B2: Conclude the structure and their life histories.
  B3: Classify plants into taxonomic groups based on evolutionary of phytogenetic characters.

- **Professional**

  By the end of the course, student will be able to:
### skills

| C1 | Use the microscope to examine slides of Bryophyta, Pteridophyta and Spermatophyta |
| C2 | Prepare a scheme by which the student can classify plants into taxonomic groups based on evolutionary and Phytogenetic characters |
| C3 | Use local specimens as well as permanent prepared slides for obtained from different sources representing evolutionary specimens other than Egyptian ones. |
| C4 | Dissect and examine the flower. |
| C5 | Draw flora diagram and longitudinal section. |
| C6 | Deduce the floral formula. |
| C7 | Examine the different types of fruits and inflorescence. |

- **General skills**

| D1 | Manage Interpersonal skills, relating to the ability to interact with other people and to engage in team working. |
| D2 | Exchange ideas, principles and information by oral, written and visual means. |
| D3 | Work effectively both in a team and independently |
| D4 | Use the information technology together information and right reports |

### 4. course content

| 4.a | Morphology of the flower |
| 4.b | Development of various floral parts, pollination and fertilization process, fruit structure and types, the common flowering plants representing important families of Egyptian flora |
| 4.c | Development of various floral parts, the most common flowering plants represents in the flora of Egypt |

**Topic of Archegoniatae**

- Bryophyta
- Pteridophyta
- Spermatophyta

### Teaching and learning methods

- Lectures, practical laboratory
- Preparing microscopic slides
- Contact hours

### 5. teaching and learning methods for students with special needs

- Computer hall to be used in visual labs and simulation experiments.
  - Data show, overhead projector

### 6. Student Assessment

- Written exam
- Practical exam
- Problems Assignments.
### Procedures used:

<table>
<thead>
<tr>
<th>Assessment 1: Quizzes</th>
<th>Week: 4-7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment 2: Mid term exam</td>
<td>Week: 8</td>
</tr>
<tr>
<td>Assessment 3: practical exam</td>
<td>Week: 15</td>
</tr>
<tr>
<td>Assessment 4: Final written exam</td>
<td>Week: 16</td>
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</tbody>
</table>

### Schedule:

Overall:

<table>
<thead>
<tr>
<th>Mid-Term Examination:</th>
<th>5</th>
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<tbody>
<tr>
<td>Final-Term Examination:</td>
<td>70</td>
</tr>
<tr>
<td>Practical Examination:</td>
<td>20</td>
</tr>
<tr>
<td>Semester Work:</td>
<td>5</td>
</tr>
<tr>
<td>Total:</td>
<td>100</td>
</tr>
</tbody>
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### Weighing of Assessment:

- Mid-Term Examination: 5
- Final-Term Examination: 70
- Practical Examination: 20
- Semester Work: 5
- Total: 100

### Course Notes

- Essential Books (Text Books)
  - Botany: A functional approach. Water H. Muller,

### Required Books (Textbooks)


### Recommended Books

### Periodicals, web sites, etc

- Periodicals, Web Sites, . . . etc
- www.mbhe.com

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**Course Instructor:** Dr. Awatef S. Abdel-Fattah  
**Head of Department:** Dr

**Date:** 11/10/2008