

## **Suggested research topics**

### **Winter semester of the academic year 2019/2020**

<b>Course name in Arabic: علم النباتات المائية...</b>
<b>Course name in English: Aquatic Botany</b>
<b>Professor Dr.: Yassin Mohamed Al-Sdany.</b>
<b>Level: First</b>
<b>Department: Aquaculture and Fish processing and Biotechnology</b>

No.	Research title	Research items
1	<b>The Ecology of macro and micro marine plants</b>	1- Occurrence and distribution of algae 2- Factors Controlling the Distribution of seaweed Species 3- Effect of water movement and quality on algae and plankton populations 4- Interaction between human and marine plant communities
2	<b>Survey the types of algae and aquatic plants in Egyptian marine habitats</b>	1. phytoplankton, 2. periphyton 3. Cyanophyta 4. Chlorophyta 5. Rhodophyta 6. Phaeophyta 7. flowering plants
3	<b>Survey the types of algae and aquatic plants in Egyptian freshwater habitats</b>	1. phytoplankton, 2. periphyton 3. Cyanophyta 4. Chlorophyta 5. Rhodophyta 6. Phaeophyta 7. flowering plants
4	<b>CULTIVATION OF MARINE PLANTS</b>	1. Requirements for growth 2. Cultivation in the sea 3. Cultivation in fresh water 4. Species suitable for cultivation and feeding of fish and crustaceans
5	<b>Give information about seaweeds. Different applications of seaweeds.</b>	1- Traditional uses 2- Industrial uses 3- Potential uses 4- Medicinal Uses 5- Human foods
6	<b>General characters of Cyanophyta (blue green algae - Cyanobacteria)</b>	1. Life history , 2. Occurrence and distribution, 3. Structural and morphological features 4. Types of cell organization 5. Function, and Adaptation 6. Reproduction 7. classification and ecology. 8. Role in aquaculture

No.	Research title	Research items
7	<b>General characters of Chlorophyta</b>	1. Life history , 2. Occurrence and distribution, 3. Structural and morphological features 4. Types of cell organization 5. Function, and Adaptation 6. Reproduction 7. classification and ecology. 8. Role in aquaculture
8	<b>General characters of Rhodophyta</b>	9. Life history , 10. Occurrence and distribution, 11. Structural and morphological features 12. Types of cell organization 13. Function, and Adaptation 14. Reproduction 15. classification and ecology. 16. Role in aquaculture
9	<b>General characters of PHAEOPHYCEAE</b>	1. Life history , 2. Occurrence and distribution, 3. Structural and morphological features 4. Types of cell organization 5. Function, and Adaptation 6. Reproduction 7. classification and ecology. 8. Role in aquaculture
10	<b>Role of algae and aquatic plants in aquaculture</b>	1. phytoplankton, 2. periphyton 3. Cyanophyta 4. Chlorophyta 5. Rhodophyta 6. Phaeophyta 7. and flowering plants
11	<b>Physiology and biochemistry of marine and freshwater algae including</b>	1. Nutrition in Algae 2. Metabolic pathways 3. Reproductive physiology 4. Storage and extracellular products 5. Growth and development

**Course Instructor:**

**Name: Yassin Mohamed Al-Sdany**

**Signature: Yassin Mohamed Al-Sdany**

**Head of Botany Department**