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| **COURSE IDENTIFICATION FORM** | | | | | | | |
| **Course Code and Name:** **The Biology of Shrimp (MSc. Course)** | | | | **Department of :** **Fisheries** | | | |
| |  | | --- | | **Semester** | | **Theoretic Hour** | **Practice Hour** | **Total Hour** | **Credits** | **ECTS** | **Education Language** | **Type: Compulsory Elective** |
| Fall/Spring | 3 | 0 | 3 | 3 | 6 | Turkish | Elective |
| **Prerequisite (s)** | |  | | | | | |
| **Instructor** | | Assist. Prof. Dr. Abdullatif ÖLÇÜLÜ | | | | **Mail : aolculu@munzur.edu.tr**  **Web :** | |
| **Course Assistant** | |  | | | | **Mail :**  **Web :** | |
| **Groups / Classes** | |  | | | |  | |
| **Course Aim** | | The aim of this course is to give detailed information about the biology of shrimps, which have both ecological and economic importance, and the biology of shrimp species to be grown. | | | | | |
| **Course Goals** | | Generally, the aim of the course is to teach the biology of shrimps. Besides, this course is to give ideas to students who want to do scientific studies on shrimps. In addition, to enable the student to establish relationships between the subtitles of the course topics. | | | | | |
| **Course Learning Outs and Proficiencie*s*** | | * Knows the anatomical structures of shrimps, * Knows the stages of molting and its importance, * Recognizes the digestive systems and knows their feeding properties, * Recognizes the circulatory and respiratory systems, * Learns the reproductive physiology of saltwater and freshwater shrimps, * Knows their life cycles and interprets their behavior, | | | | | |
| **Course Basic and Auxiliary Contexts** | | * W. Dall, B. J. Hill, P.C. Rothlisberg, D.J. Sharples. 1990. The Biology of the Penaeidae (Advances in Marine Biology, 27). Academic Press, pp. 489. * Lab Manual, Culture of Penaeid Shrimp Larvae / Treece And Yates, 1993; 95pp. | | | | | |
| **Methods of Give a Lecture** | | Face to face | | | | | |

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| **Assessment Criteria** | |  | **If Available, to Sign (x)** | **General Average Percentage (%) Rate** |
| **1. Quiz** | **X** | **20 %** |
| **2. Quiz** |  |  |
| **3. Quiz** |  |  |
| **4. Quiz** |  |  |
| **5. Quiz** |  |  |
| **Oral Examination** |  |  |
| **Practice Examination (Laboratory, Project etc.)** | **X** | **20 %** |
| **Final Examination** | **X** | **60 %** |
| **Semester Course Plan** | | | | |
| **Week** | **Subjects** | | | |
| **1** | * External anatomical structures of shrimps | | | |
| **2** | • Internal anatomical structures of shrimps | | | |
| **3** | • The structure of the shrimp shell and the stages of molting | | | |
| **4** | • Digestive system | | | |
| **5** | • Circulatory and respiratory systems | | | |
| **6** | • Metabolism | | | |
| **7** | • Osmotic and ionic regulation | | | |
| **8** | • Endocrine system | | | |
| **9** | • Reproduction (in marine shrimps) | | | |
| **10** | • Reproduction (in freshwater shrimps) | | | |
| **11** | • Life cycles of shrimps | | | |
| **12** | • Growth | | | |
| **13** | • Nutritional Physiology | | | |
| **14** | • Behaviors (Nutrition, reproduction, molt, etc.) | | | |