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| **COURSE IDENTIFICATION FORM** | | | | | | | |
| **Course Code and Name:** SM 6049 ADVANCED AQUACULTURE ENGINEERING | | | | **Department of :** Fisheries and Aquaculture | | | |
| |  | | --- | | **Semester** | | **Theoretic Hour** | **Practice Hour** | **Total Hour** | **Credits** | **ECTS** | **Education Language** | **Type: Compulsory Elective** |
| Fall | 3 | 0 | 3 | 3 | 5 | Turkish | Optional |
| **Prerequisite (s)** | | - | | | | | |
| **Instructor** | | Prof. Dr. Volkan KIZAK | | | | **Mail :** volkan.kizak@munzur.edu.tr  **Web :** | |
| **Course Assistant** | | - | | | | **Mail :**  **Web :** | |
| **Groups / Classes** | | Doctorate | | | |  | |
| **Course Aim** | | Understanding of advanced aquaculture engineering, comprehension of importance of aquacultural engineering in terms of culturing the aquatic organisms and providing seafood . | | | | | |
| **Course Goals** | | Ability to understand advanced aquaculture engineering and their applications in the world, comprehend the importance of aquaculture engineering in terms of aquaculture, use and apply the knowledge of this engineering in culture of aquatic organisms. | | | | | |
| **Course Learning Outs and Proficiencie*s*** | | To be able to describe the importance of aquaculture engineering and supply the highest efficiency in aquaculture by applying aquacultural engineering techniques . | | | | | |
| **Course Basic and Auxiliary Contexts** | | 1. Aquaculture Engineering (2007), Ed.; Lekang O.I., p.340, Blackwell Publishing, UK. 2. Encyclopedia of Aquaculture (2000), Ed.; Stickney R.R., p.1063, John Wiley & Sons, USA. 3. Aquaculture Principles and Practices (2005), Eds.; Pillay T.V.R. and Kutty M.N., p624, Blackwell Publishing, UK. | | | | | |
| **Methods of Give a Lecture** | | Theoretical | | | | | |

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| **Assessment Criteria** | |  | **If Available, to Sign (x)** | **General Average Percentage (%) Rate** |
| **1. Quiz** | **X** |  |
| **2. Quiz** |  |  |
| **3. Quiz** |  |  |
| **4. Quiz** |  |  |
| **5. Quiz** |  |  |
| **Oral Examination** |  |  |
| **Practice Examination (Laboratory, Project etc.)** |  |  |
| **Final Examination** | **X** |  |
| **Semester Course Plan** | | | | |
| **Week** | **Subjects** | | | |
| **1** | Introduction to aquaculture engineering | | | |
| **2** | Aquaculture systems | | | |
| **3** | Water quality | | | |
| **4** | Filtration of water | | | |
| **5** | Disinfection | | | |
| **6** | Heating and cooling | | | |
| **7** | Ventilation and pure oxygen | | | |
| **8** | Recirculating systems | | | |
| **9** | Hatchery equipments | | | |
| **10** | Ponds and tanks | | | |
| **11** | Net cage systems | | | |
| **12** | Feeding systems | | | |
| **13** | Live fish transportations | | | |
| **14** | Planning of aquaculture facilities | | | |