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| **COURSE IDENTIFICATION FORM** | | | | | | | |
| **Course Code and Name:** SM 5059 WATER QUALITY CRITERIA IN AQUACULTURE | | | | **Department of :** Fisheries and Aquaculture | | | |
| |  | | --- | | **Semester** | | **Theoretic Hour** | **Practice Hour** | **Total Hour** | **Credits** | **ECTS** | **Education Language** | **Type: Compulsory Elective** |
| Fall | 1 | 2 | 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** | | Master | | | |  | |
| **Course Aim** | | Understanding the importance of water quality in aquaculture, determining and applying the most appropriate water quality characteristics according to species, and understanding its importance in terms of fish health. | | | | | |
| **Course Goals** | | To have knowledge about water parameters, to apply appropriate water conditions, to understand the importance of water quality in terms of fish welfare and aquaculture operations. | | | | | |
| **Course Learning Outs and Proficiencie*s*** | | Can explain water quality characteristics and parameters, provide optimal water conditions according to species, and carry out aquaculture operations in the best way with the water quality knowledge. | | | | | |
| **Course Basic and Auxiliary Contexts** | | 1. Encyclopedia of Aquaculture (2000), Ed.; Stickney R.R., p.1063, John Wiley & Sons, USA. 2. Aquaculture Principles and Practices (2005), Eds.; Pillay T.V.R. and Kutty M.N., p624, Blackwell Publishing, UK. | | | | | |
| **Methods of Give a Lecture** | | Theoretical and practice | | | | | |

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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** | The importance of water quality in aquaculture | | | |
| **2** | Fish physiology and water relationship | | | |
| **3** | Water parameters | | | |
| **4** | Water temperature | | | |
| **5** | Dissolved oxygen | | | |
| **6** | pH | | | |
| **7** | Carbon dioxide | | | |
| **8** | Salinity | | | |
| **9** | Conductivity | | | |
| **10** | Nitrite, nitrate, ammonia and ammonium | | | |
| **11** | Effect of aquaculture activities on water quality | | | |
| **12** | Water quality in recirculated systems | | | |
| **13** | Water quality in aquaponic systems | | | |
| **14** | Treatment of effluents | | | |