**Α. ORIENTATION: FOREST PRODUCTION –FOREST PROTECTION – NATURAL ENVIRONMENT**

|  |  |  |  |
| --- | --- | --- | --- |
| **Code** | **L (hours)** | **Course Title** | **ECTS** |
| **Α΄ SEMESTER** |
| 0101Υ | 3 | Research Methodology and Scientific Writing | 6 |
| 0102Υ | 3 | Statistics and Sampling Techniques (offered only in Greek) | 6 |
| 0114Υ or0115Υ | 3 | Forest Protection or Soil of Mountain Area: Management, Protection, Amelioration and Restoration of Soil Functions (offered only in Greek) | 66 |
| 0103Ε | 3 | Climate Change and Forest Ecosystems | 6 |
| 0104Ε | 3 | Gene Conservation in Forestry | 6 |
| 0105Ε | 3 | Urban Forestry - Periurban Forests.  | 6 |
| 0106E | 3 | Forest Ecology | 6 |
|  |  |  **TOTAL** | **30** |
| **Β΄ SEMESTER** |
| 0107Υ | 3 | Applied Silviculture and Reforestations | 6 |
| 0108Υ | 3 | Systematics and Taxonomy of Spermatophytes | 6 |
| 0109Υ | 3 | Population Genetics, Quantitative Genetics, Genetics and Forest Tree Improvement, Applications of Breeding on Forest Trees | 6 |
| 0110Ε | 3 | Nature Conservation and Forest Landscape Planning | 6 |
| 0111Ε | 3 | Soil genesis (Formation) and Soil Taxonomy (offered only in Greek) | 6 |
| 0112Ε | 3 | Forest Fire Behavior Prediction Models  | 6 |
| 0113Ε | 3 | Aspects of Applied Geobotany | 6 |
|  |  |  **TOTAL** | **30** |
| **C΄ SEMESTER** |
| Postgraduate Master Thesis | **30** |

**Β. ORIENTATION: RANGE SCIENCE –WILDLIFE MANAGEMENT AND FRESHWATER FISHERIES**

|  |  |  |  |
| --- | --- | --- | --- |
| **Code** | **L (hours)** | **Course Title** | **ECTS** |
| **Α΄ SEMESTER** |
| 0201Υ | 3 | Research Methodology and Scientific Writing | 6 |
| 0202Υ | 3 | Statistics and Sampling Techniques | 6 |
| 0203Υ | 3 | Management of Rangeland Ecosystems | 6 |
| 0204Ε  | 3 | Ecology and Conservation of Rare Wildlife Species | 6 |
| 0205Ε | 3 | Aquatic Organisms and Pollution in Inland Waters | 6 |
|  |  |  **TOTAL** | **30** |
| **Β΄ SEMESTER** |
| 0209Υ | 3 | Growth and Dynamics of Rangeland Ecosystem and Landscape | 6 |
| 0210Υ | 3 | Analysis of Wildlife-Habitat Interactions  | 6 |
| 0211Υ | 3 | Management of Biological Resources in Inland Waters | 6 |
| 0206Ε | 3 | Range Plant Physiology under Abiotic Stress | 6 |
| 0207Ε | 3 | Agroforestry and Environment | 6 |
| 0208Ε | 3 | Restoration of Rangeland Ecosystems | 6 |
|  |  |  **TOTAL** | **30** |
| **C΄ SEMESTER** |
| Postgraduate Master Thesis | 30 |

**C. ORIENTATION: PLANNING AND DEVELOPMENT OF NATURAL RESOURCES**

|  |  |  |  |
| --- | --- | --- | --- |
| **Code** | **L (hours)** | **Course Title** | **ECTS** |
| **Α΄ SEMESTER** |
| 0301Υ | 3 | Research Methodology and Scientific Writing | 6 |
| 0302Υ | 3 | Statistics and Sampling Techniques | 6 |
| 0303Υ | 3 | Information Systems and Environment | 6 |
| 0304Ε | 3 | Regression Analysis (offered only in Greek) | 6 |
| 0305Ε | 3 | Environmental Geographic Information Systems | 6 |
|  |  |  **TOTAL** | **30** |
|  |  |  |  |
| **Β΄ SEMESTER** |
| 0306Υ | 3 | Economic Evaluation of Forest Investments and Environmental Goods | 6 |
| 0307Υ | 3 | Environmental Policy and Sustainable Development | 6 |
| 0308Υ | 3 | Adaptive Forest Management | 6 |
| 0309Ε | 3 | Environmental Remote Sensing and Digital Image Analysis | 6 |
| 0310Ε | 3 | Multivariate Statistical Analysis (offered only in Greek) | 6 |
| 0311Ε | 3 | Environmental Interpretation and Didactic of Environment | 6 |
|  |  |  **TOTAL** | **30** |
| **C΄ SEMESTER** |
| Postgraduate Master Thesis | 30 |

**D. ORIENTATION: FOREST AND WATER ENGINEERING**

|  |  |  |  |
| --- | --- | --- | --- |
| **Code** | **L (hours)** | **Course Title** | **ECTS** |
| **Α΄ SEMESTER** |
| 0401Υ | 3 | Research Methodology and Scientific Writing | 6 |
| 0402Υ | 3 | Statistics and Sampling Techniques | 6 |
| 0403Υ | 3 | Stochastic Hydrology | 6 |
| 0404Ε | 3 | Mountainous Water Management Methods and Principles  | 6 |
| 0405Ε | 3 | Building Materials and Dimentioning Forest Constructions | 6 |
|  |  |  **TOTAL** | **30** |
| **Β΄ SEMESTER** |
| 0406Υ | 3 | Integrated Cadastral Systems | 6 |
| 0407Υ | 3 | Opening up and Transport Networks, Forest Road Construction | 6 |
| 0408Υ | 3 | Sediment Transport Mechanisms (creation, transport, deposition) | 6 |
| 0409Ε | 3 | Soil-Mechanical Applications and Machinery | 6 |
| 0410Ε | 3 | Geoinformatics Application on Mountainous Water Management | 6 |
| 0411Ε | 3 | Forest and Water Engineering Works in Relation to the Environment  | 6 |
|  |  |  **TOTAL** | **30** |
| **C΄ SEMESTER** |
| Postgraduate Master Thesis | 30 |

**Ε. ORIENTATION: HARVESTING AND TECHNOLOGY OF FOREST PRODUCTS**

|  |  |  |  |
| --- | --- | --- | --- |
| **Code** | **L (hours)** | **Course Title** | **ECTS** |
| **Α΄ SEMESTER** |
| 0501Υ | 3 | Research Methodology and Scientific Writing | 6 |
| 0502Υ | 3 | Statistics and Sampling Techniques | 6 |
| 0503Υ | 3 | Research Methods of Timber Harvesting Systems | 6 |
| 0504Ε | 3 | Wood Structure Microtechniques | 6 |
| 0505Ε | 3 | Composite Wood Products – Production Technology, Properties, Uses | 6 |
|  |  |  **TOTAL** | **30** |
| **Β΄ SEMESTER** |
| 0506Υ | 3 |  Relationship between Structure and Properties and Uses of Wood | 6 |
| 0507Υ | 3 | New Technologies in Wood Processing | 6 |
| 0508Υ | 3 | Furniture Technology | 6 |
| 0509Ε | 3 | The Human Factor in Harmony with the Working Environment in Forestry and Forest Products Economy | 6 |
| 0510Ε | 3 | Quality Control and Certification of Wood Products | 6 |
| 0511Ε | 3 | Environmental Impacts of Timber Harvesting and Utilization | 6 |
|  |  |  **TOTAL** | **30** |
|  |  |  |  |
| **C΄ SEMESTER** |
| Postgraduate Master Thesis | 30 |