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| brasao_UFSC_CFH_horizontal | | **FEDERAL UNIVERSITY OF SANTA CATARINA**  **CENTER OF AGRICULTURAL SCIENCES**  **PLANT GENETIC RESOURCES GRADUATE PROGRAM**  **COURSE SYLLABUS** | | | | |  | | |
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| **I. COURSE DESCRIPTION:** | | | | | | | | | |
| **CODE** | **COURSE NAME** | | | **COURSE HOURS PER WEEK**  **THEORETICAL PRACTICAL** | | | | **TOTAL SEMESTER HOURS** | |
| RGV 410005 | Conservation of Plant Genetic Resources | | | 04 | |  | | 72 | |
| **I.1. SCHEDULE** | | | | | | | | |
| **THEORETICAL SECTION** | | | | | **PRACTICAL SECTION** | | | |
|  | | | | |  | | | |
| **II. PROFESSOR(S)** | | | | | | | | |
| Miguel Pedro Guerra  Rubens Onofre Nodari | | | | | | | | |
| **II. PREREQUISITE(S):** | | | | | | | | |
| **CODE** | **COURSE NAME** | | | | | | | |
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| **IV COURSE(S) FOR WHICH THE DISCIPLINE IS OFFERED** | | | | | | | | |
| Plant Genetic Resources | | | | | | | | |
| **V. COURSE SYNOPSIS:** | | | | | | | | | |
| The state of biodiversity, ecosystem evaluation, biodiversity hotspots, and the Living Planet Index. Threats to Biodiversity. The Convention of Biological diversity and its related agreements. The policies of conservation and international treaties. Origin, domestication, use, and conservation of plant genetic resources (PGRs). Methods of germplasm conservation. Conservation systems. In vitro conservation. Preservation policies, conservation, and use of genetic resources. Conservation projects. | | | | | | | | | |
| **VI. OBJECTIVES** | | | | | | | | | |
| To present, to analyze, and to discuss the principles and strategies of conservation and the sustainable use of plant genetic resources. | | | | | | | | | |
| **VII. COURSE PROGRAM** | | | | | | | | | |
| 1. Historical context. Definitions and concepts. The state of diversity. Biodiversity, PGRs, and agriculture. Biodiversity hotspots. Living Planet Index. Environmental crises and sustainability.  2. The Convention of Biological Diversity (CDB). Access to biodiversity components. The International Regime on Access and Benefit Sharing (ABS). National and international programs and treaties for the conservation and use of PGRs.  3. Centers of origin and diversity. Levels of diversity. Strategies for the maintenance of genetic diversity. Biogeography and central questions in the domestication of plants and animals.  4. The worth of plant genetic resources. Vulnerability and genetic erosion.  In situ conservation of PGRs. Protected and non-protected natural lands. On-farm conservation.  Priorities for *in situ* conservation.  *Ex situ* conservation of PGRs: Harvest, Collection, Preservation, Characterization, Evaluation, Documentation, and Exchange of germplasm. *In vitro* conservation techniques for PGRs.  Brazilian policies and regulations. Units of conservation, Criteria and degrees of threat, National System of Conservation Units. | | | | | | | | | |
| **VIII. TEACHING METHOD / COURSE DEVELOPMENT** | | | | | | | | | |
| Lectures, directed discussions, seminars, and analysis of selected articles. Grading will be based on a test, class participation, a seminar, and a conservation project | | | | | | | | | |
| **IX. EVALUATION METHOD** | | | | | | | | | |
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| **X. NEW EVALUATION** | | | | | | | | | |
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| **XII. PRACTICAL SECTION CHRONOGRAM** | | | | | | | | | |
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| **XIII. COMPLEMENTARY BIBLIOGRAPHY** | | | | | | | | | |
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