|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| brasao_UFSC_CFH_horizontal | | **FEDERAL UNIVERSITY OF SANTA CATARINA**  **CENTER OF AGRICULTURAL SCIENCES**  **PLANT GENETIC RESOURCES GRADUATE PROGRAM**  **COURSE SYLLABUS** | | | | |  | | |
|  | | | | | | | | | |
| **I. COURSE IDENTIFICATION:** | | | | | | | | | |
| **CODE** | **COURSE NAME** | | | **COURSE HOURS PER WEEK**  **THEORETICAL PRACTICAL** | | | | **TOTAL SEMESTER HOURS** | |
| **RGV 410021** | **Plant Reproductive Biology** | | | 2h | | 1 | | 54 | |
| **I.1. HORÁRIO** | | | | | | | | |
| **THEORETICAL SECTION** | | | | | **PRACTICAL SECTION** | | | |
|  | | | | |  | | | |
| **II. PROFESSOR(S)** | | | | | | | | |
| Prof. Afonso Inácio Orth  Prof. Miguel Pedro Guerra | | | | | | | | |
| **II. PREREQUISITE (S):** | | | | | | | | |
| **CODE** | **COURSE NAME** | | | | | | | |
|  |  | | | | | | | |
| **IV COURSE(S) FOR WHICH THE DISCIPLINE IS OFFERED** | | | | | | | | |
| Plant Genetic Resources | | | | | | | | |
| **V. COURSE SYNOPSIS** | | | | | | | | | |
| Evolution of reproductive systems in plants. Structure, morphology and floral phenology. Microsporogenesis and megasporogenesis. Systems of self-incompatibility. Types of pollination and fertilization mechanisms. Trophic Resources. Plant-pollinator interactions. Forage behavior of pollinators and dispersers. Structure and population dynamics of pollinators and dispersers in plant populations | | | | | | | | | |
| **VI. OBJECTIVES** | | | | | | | | | |
|  | | | | | | | | | |
| **VII. COURSE PROGRAM** | | | | | | | | | |
|  | | | | | | | | | |
| **VIII. TEACHING METHOD / COURSE DEVELOPMENT** | | | | | | | | | |
| The course will be taught through lectures, practical classes, discussions of scientific articles, and a field trip. | | | | | | | | | |
| **IX. METODOLOGIA DE AVALIAÇÃO** | | | | | | | | | |
| Course grading will be based on in-room discussions, conducted studies and reports, and, mainly, on a case study to be developed and presented at the end of the semester in the form of a seminar and final research report. | | | | | | | | | |
| **X. NEW EVALUATION** | | | | | | | | | |
|  | | | | | | | | | |
|  | | | | | | | | | |
|  | | |  | | | | | | |
| **XII. PRACTICAL CHRONOGRAM** | | | | | | | | | |
|  | | |  | | | | | | |
| **XIII. MAIN BIBLIOGRAPHY** | | | | | | | | | |
| 1. BARTH, F.G. **Insect and flowers: the biology of a partnership**. Princeton: Princeton University Press, 1991. 408 p. 2. DAFNI, A. **Pollination ecology: a practical approach**. Oxford: Oxford University Press, 1992. 250 p. 3. FREE, J.B. **Insect pollination of crops**. 2.ed. London: Academic Press, 1993. 684 p. 4. GIFFORD, E. M. & FOSTER, A. S. **Morphology and evolution of vascular plants**. New York, W.H. Freeman, 1987. 626 p. 5. KEARNS, C.A. & INOUYE, D.W. **Techniques for pollination biologists**. Niwot (CO): University Press of Colorado, 1993. 583 p. 6. RICHARDS, A.J. **Plant breeding systems**. 2. ed. London: Chapman & Hall, 1997. 529 p. 7. TAKAYAMA, S. & ISOGAI, A. Self-Incompatibility in Plants. **Annu. Rev. Plant Biol.,** **56**:467-89. 2005. | | | | | | | | | |
| **XIII. COMPLEMENTARY BIBLIOGRAPHY** | | | | | | | | | |
| 1. BUCHMANN, S.L. & NABHAM, G.P. **The Forgotten Pollinators**. Washington DC., Island Press, 1997. 292 p. 2. CHEUNG, A.Y. Pollen-pistil interactions during pollen-tube growth. Trends in Plant Science, 1:45-50. 3. CAMPBELL, N.A. **Biology.** 2.ed. Redwood City, The Benjamin Cummings Publishing C., 1990. 1165 p. Cap 34: Plant Reproduction. 4. FAEGRI, K. & PIJL, L. van der. **Principles of pollination ecology**. 2. ed. New York, Pergamon Press, 1980. 5. FOSTER, T.; JOHNSTON, R.; SELEZNYOVA, A. A Morphological and Quantitative Characterization of Early Floral Development in Apple (Malus x domestica Borkh.). **Annals of Botany** 92, p.199-206, 2003. 6. HOWE, H.F. & WESTLEY, L.C. **Ecological relationships of plants and animals**. New York: Oxford University Press, 1988. 273 p. 7. MATTON, D.P.; NASS, N.; CLARKE, A.C.; NEWBIGIN, E. Self-incompatibility:how plants avoid illegitimate offspring. **Proc. Natl. Acad. Sci., 91**:1992-97. 1994. 8. MICHENER, C.D. **The bees of the world**. Baltimore, The John Hopkins University Press, 2000. 913p. 9. PERCIVAL, M.S. **Floral biology**. New York, Pergamon Press, 1979. 10. PROCTOR, M.; YEO, P. & LACK, A. **The natural history of pollination**. Portland: Timber Press, 1996. 487 p. 11. RAVEN, P. H.; EVERT, R.F.; CURTIS, H. **Biologia vegetal**. 2.ed. Rio de Janeiro, Guanabara Dois, 1978. 724p. Cap. 16 - Fanerógamas. | | | | | | | | | |