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| **Subject** | **Advanced Vegetable production in a protected environment** |
| **Type** | **Semester** | **ECTS** | **Code** |
|  O |  I |  6 |  |
| **Aims and Objectives** | The purpose and objectives of this course is for students to know the importance, history, spread, condition, and perspective of the development of protected environments. Classification of protected environments. General constructive and construction principles of protected environments. The microclimate of protected environments. Thermal balance of protected environments.Also aspects of plant physiology in protected environments. Relationships of photosynthesis and respiration with temperature, light intensity, CO2 concentration, etc. Water needs in protected environments and their calculation. Plant nutrition in protected environments. The physiological role of the main nutritional elements. Symptoms of deficiency and excess of the main nutritional elements. Calculation of fertilizer needs. Cultivation of tomato, pepper, eggplant, cucumber, melon, etc. in protected environments |
| **Learning outcomes** | This course aims to provide students with information and capacity building, the state and development prospects of protected environments; the classification of protected environments; the microclimate of protected environments, and the thermal balance of protected environments. Students also during their practical work that they will develop both in the faculty environment and also in production farms with protected environments will be faced with practical problems and their solutions in the field. Also, familiarity with aspects of plant physiology in protected environments, the relationship of photosynthesis and respiration with temperature, lighting intensity, CO2 concentration, etc.; the water and nutrient requirements of plants grown in protected environments; cultivation in protected environments of the most important vegetable species; tomatoes, peppers, eggplants, cucumbers, melons, etc. will be their basis for raising capacities in the field of protected environments.At the end of this course, students will be able to take on professional commitments in the professional administration of microclimate control in protected environments and the correct implementation of good agricultural practices in order to sustainably intensify production from greenhouses. |
| **Literature/References** | 1. Astrit Balliu. 2012. Mjediset e mbrojtura, 2. FAO 2017. Good Agricultural Practices for greenhouse vegetable production in the South East European countries - Principles for sustainable intensification of smallholder farms, Edition: Plant Production and Protection Paper 230.3. FAO 2013. Good agricultural practices for greenhouse vegetable crops. 4. Tomatoes. 2005. Ed. E. Heuvelink. CAB International, Ëallingford, Oxfordshire, UK5. Bosland. P & E. Votava. 1999. Peppers and Spice Capsicums. CAB International. |