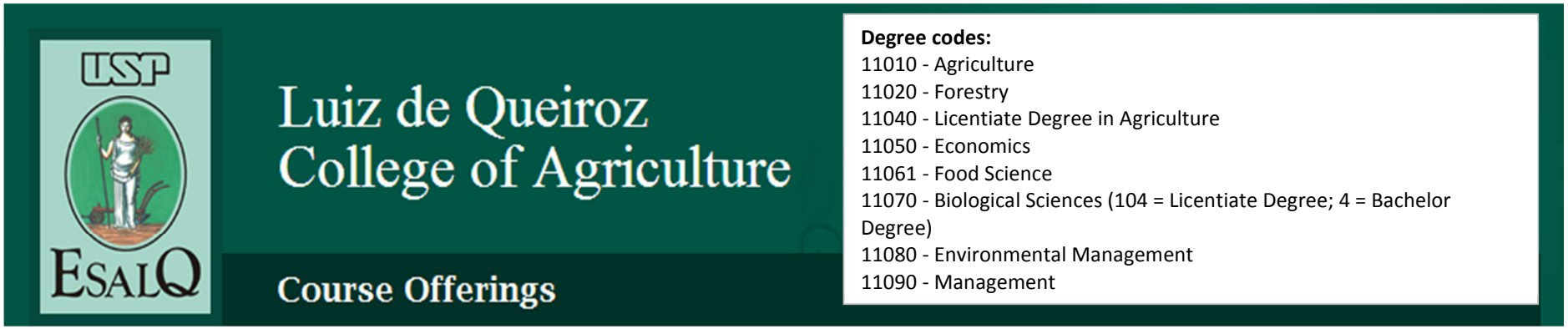
Luiz de Queiroz College of Agriculture

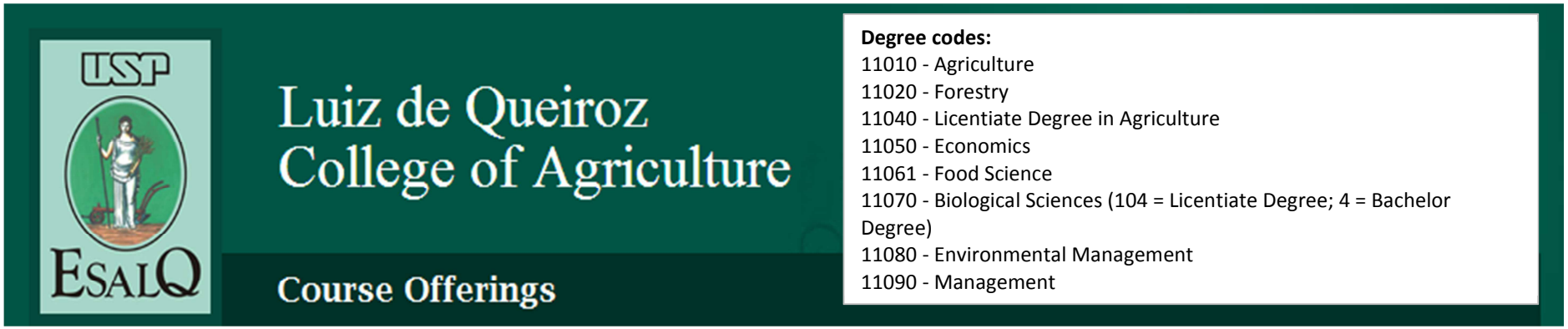
Course Offerings

Degree codes:
11010 - Agriculture
11020 - Forestry
11040 - Licentiate Degree in Agriculture
11050 - Economics
11061 - Food Science
11070 - Biological Sciences (104 = Licentiate Degree; 4 = Bachelor Degree)
11080 - Environmental Management
11090 - Management

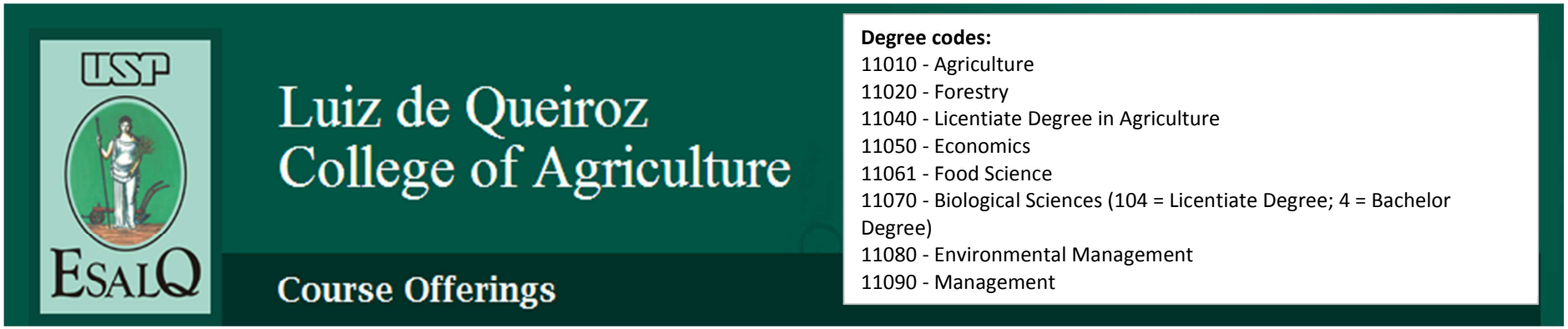
ID	Course Name	Professor	Course Content Summary	Total Course Hours	Semester	Degree code
LSO0210	Geology Applied to Soils	Antonio Carlos de Azevedo Celso Augusto Clemente	Geology principles (historical geology); Earth system: structure and composition, lithosphere, mineralogy and petrology; Geological processes; Geological and geo morphological aspects of Brazil; Geology, geomorphology, weathering and soil relations; Soil concept and composition.	30	2nd	11020 11010
LSO0257	Principles of Edaphology	Antonio Roque Dechen Quirino Augusto de Camargo Carmello	The soils around us; Soil physical properties; Soil water; Soil colloids; Soil organisms; Soil morphology; Soil organic matter; Soils and environmental management.	90	1st	11080
LSO0300	Soil Chemistry and Fertility	Carlos Eduardo Pellegrino Cerri Jussara Borges Regitano Luis Reynaldo Ferracciú Alleoni	Chemical and mineralogical composition of the soil; Electric charge, adsorption and ion exchange; Soil reaction and soil acidity; Organic matter, nitrogen, phosphorus, potassium, calcium, magnesium, sulfur and soil micronutrients; Soil fertility concepts and laws.	60	1st	11020 11010
LSO0310	Soil Physics	Miguel Cooper	Soil Physical characterization; Soil structure and its relation with aeration and soil water behavior; Methods related to aggregated determination, particle size distribution, aeration, soil penetration resistance, water absorption and storage.	30	1st	11020 11010



LSO0360	Restoration of Degraded Lands	Gerd Sparovek Miguel Cooper Ricardo Ribeiro Rodrigues	Initially, students are introduced to real problems of degradation in the field and different control practices; The process of environmental degradation and recovery is discussed through theoretical modeling and forecasting; The practices of recovery are studied in terms of their operation and efficiency of control; In the end, students apply knowledge in a practical exercise, through a conservation plan.	90	2nd	11080
LSO0400	Soil Biology	Carlos Eduardo Pellegrino Cerri Marcio Rodrigues Lambais	Main soil organisms; Their ecological Roles; The interactions between plants and microorganisms; The role of microbes on soil fertility.	30	2nd	11020 11010
LSO0410	Soil Genesis, Morphology and Classification	Antonio Carlos de Azevedo Pablo Vidal Torrado Tiago Osório Ferreira	History of pedology; Soil morphology;Soil forming factors; Pedogenic processes; Soil classification; Identification of soils and soil properties.	60	2nd	11020 11010
LSO0420	Plant Mineral Nutrition	Antonio Roque Dechen Francisco Antonio Monteiro Quirino Augusto de Camargo Carmello	Root absorption; Leaf absorption; Transport and redistribution; Mineral elements; Criteria for essentiality: direct and indirect; Macronutrients: nitrogen, phosphorus, potassium, calcium, magnesium and sulfur; Micronutrients: boron, chlorine, copper, iron, manganese, molybdenum, nickel and zinc; Beneficial elements: cobalt, silicon and sodium; Toxic elements: aluminum, bromine, cadmium, lead, chromium and fluoride.	60	1st	11020 11010



LSO0526	Fertilizers and Fertilization	Paulo Sergio Pavinato	The efficient use of correctives and fertilizers for increasing productivity in tropical countries. Raw material and technology of production of correctives and fertilizers. Fertilizer and correctives use and management. Alternative techniques for nutrient supply: green fertilization, organic fertilization. Soil chemical management for high productivity: no tillage x conventional tillage; Fertilizer effects on environment. Legislation rules about mineral and organic fertilizers, correctives, substrates, inoculants and contaminants.	60	1st	11020 11010
LSO0616	Supervised Internship in Soils and Plant Nutrition I	Quirino Augusto de Camargo Carmello	During the supervised internship, the students will be under the supervision of Professors of the Soil Science Department developing activities related to the routine activities of the agronomist, forestry engineer, biologist and environmental manager; The activities will be carried out inside the campus, in public or private institutions, under the direction of a supervisor.	105	1st/2nd	11020 11010
LSO0635	Supervised Internship in Soils and Plant Nutrition II	Quirino Augusto de Camargo Carmello	During the supervised internship, the students will be under the supervision of Professors of the Soil Science Department developing activities related to the routine activities of the agronomist, forestry engineer, biologist and environmental manager; The activities will be carried out inside the campus, in public or private institutions, under the direction of a supervisor.	105	1st/2nd	11020 11010



LSO0660	Soil Conservation and Management	Gerd Sparovek Jose Alexandre Melo Dematte Jussara Borges Regitano	Technological adaptation of the edaphic environment to human needs; Food production: fiber and energy through agriculture; Hydric resources quality, availability and management; Advantages, restrictions and effects of technological alternatives; Soil surveying and mapping; Soil conservation; soil pollution; soil physical adaptation; soil use, evaluation and planning; Efficiency cost, positive and negative impacts, implementation strategy and result monitoring.	90	2nd	11020 11010