

**IX International School – 2025**  
**Class: 011225 Tropical Biobased Production Systems | July 14<sup>th</sup> - 25<sup>th</sup>**



**Coordinators:** Profs. Aline Silva Mello Cesar, Brunno da Silva Cerozi and Rafael Munhoz Pedroso

**Support - International Office:** Carmen Pilotto, Elaine Oliveira, Luciana Joia and Rodrigo Gullo

Esalq/USP Campus (Av. Pádua Dias, n. 11, Piracicaba/SP) [Ermelinda Room - Central Building]

**Program (draft version)**

**1st week**

<b>Monday - July 14</b>	<b>Activity</b>
8:30 am - 10:00 am	Registration - Welcome Coffee (Dean and Coordination)
10:00 am - 12:00 pm	<b>Opening Class: Overview of Brazilian Agriculture</b>
12:00 pm - 1:30 pm	Lunch Break
1:30 pm - 5:00 pm	<b>Orientation to Evaluation/Final Project (coordinators)</b> <b>Official Photo and Tour – Campus and Visit to research centers</b>
<b>Tuesday - July 15</b>	<b>Activity</b>
8:30 am - 12:00 pm	<b>Biosystems Engineering</b> - An outlook for food and agriculture in the next decades - Digital Agriculture
12:00 pm - 1:30 pm	Lunch Break
1:30 pm - 3:00 pm	<b>Animal Science</b> - Milk production in the tropics
3:00 pm - 5:00 pm	<b>Final Project Preparation (1) (students)</b>
<b>Wednesday - July 16</b>	<b>Activity</b>
8:30 am – 12:00 pm Dep. Entomology and Acarology	<b>Entomology and Acarology</b> - Challenges for Integrated Pest Management
12:00 pm - 1:30 pm	Lunch Break
1:30 pm - 5:00 pm	<b>Forest Sciences</b> - Tropical Planted Forest Management - Eucalyptus pulp production in Brazil
<b>Thursday - July 17</b>	<b>Activity</b>
8:30 am - 12:00 pm	<b>Biological Sciences</b> - Theobroma cacao: How tropical pathogens threaten the world chocolate supply - Forest Dynamics and Restoration
12:00 pm - 1:30 pm	Lunch Break
1:30 pm - 5:00 pm	<b>Final Project Preparation (2) (students)</b>
<b>Friday - July 18</b>	<b>Activity</b>
8:30 am - 12:00 pm	<b>Genetics</b> - Past, Present, and Future of Arabica Coffee Genetics: From Domestication to the Challenge of Climate Change - Challenges and Opportunities of Maize Breeding under Tropical conditions of Brazil
12:00 pm - 1:30 pm	Lunch Break
1:30 pm - 5:00 pm	<b>Economics, Administration and Sociology</b> - Economics and Natural Resource Use in Brazilian Agriculture - Impact of the tropical agriculture on food security
<b>Saturday - July 19</b>	Free
<b>Sunday - July 20</b>	Free

**2nd week**

<b>Monday - July 21</b>	<b>Activity</b>
8:30 am - 12:00 pm	<b>Crop Science</b> - Sustainable sugarcane production - Science and technology of cultivation of major crops in tropical agriculture
12:00 pm - 1:30 pm	Lunch Break
1:30 pm - 3:00 pm	<b>Math, Chemistry and Statistics</b> - Data science: general concepts and some applications in Agriculture
3:00 pm - 5:00 pm	<b>Final Project Discussion and Preparation (3) (coordinators and students)</b>

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<b>Tuesday - July 22</b>	
8:30 am - 12:00 pm	<b>Soil Science</b> - Soil health and Carbon sink - Remote Sensing Applied to Soil Science and Mapping
12:00 pm - 1:30 pm	Lunch Break
1:30 pm - 5:00 pm	<b>Plant Pathology and Nematology</b> - Sustainable Management of Diseases and Plants - Phytopathogenic Bacteria in Tropical Agriculture
<b>Wednesday- July 23</b>	
8:30 am - 12:00 pm	<b>Final Project Preparation (4) (students)</b>
12:00 pm - 1:30 pm	Lunch Break
1:30 pm - 5:00 pm	<b>Final Project Preparation (5) (students)</b>
<b>Thursday- July 24</b>	
8:30 am - 12:pm	<b>Food Science and Technology</b> - Sugar Technology and Bioprocesses - “Cachaça” Science, Technology and Art
12:00 pm - 1:30 pm	Lunch Break
1:30 pm - 5:00 pm	<b>Final Project Preparation (6) (students)</b>
<b>Friday - July 25</b>	
8:30 am - 12:pm	<b>Students Presentations</b>
12:00 pm - 1:30 pm	Lunch Break
1:30 pm - 5:00 pm	<b>Students Presentations</b>

\*Final Project proposal: During the course, students will be encouraged to work on creating an innovative project whose theme will be **Food and Nutritional Security in Tropical Production Systems**. At the end of the course, students will present their projects to the Esalq community and guests, and the best projects can be presented at global meetings in which A5 takes part.