HORTICULTURE (HRT)

Graduate Studies

HRT 200A – Horticulture & Agronomy: Principles (4 units)

Course Description: Core course to introduce students to the principles that are of general importance in horticultural and agronomic research, including agroecology, plant developmental physiology, crop improvement, and biotechnology. Generally taken in the first year of the graduate program.

Prerequisite(s): Graduate standing.

Learning Activities: Lecture/Discussion 4 hour(s). *Grade Mode:* Letter.

HRT 200B – Horticulture & Agronomy: Practices (4 units)

Course Description: Introduction to horticultural and agronomic cropping systems. Covers current applied research within agroecology, crop improvement, crop production, postharvest biology. *Prerequisite(s):* HRT 200A recommended, graduate standing.

Learning Activities: Lecture/Discussion 2 hour(s), Fieldwork 3 hour(s), Seminar 3 hour(s).

Grade Mode: Letter.

HRT 203 – Research Perspectives in Horticulture (3 units)

Course Description: Following lectures/discussions of scientific methodology, students develop research proposals aided by classroom discussions and individual interactions with instructors. Lectures and critiques of classical papers provide a sense of the evolution of the current concepts in perennial plant biology.

Prerequisite(s): Graduate standing.

Learning Activities: Lecture 1 hour(s), Lecture/Discussion 2 hour(s). *Grade Mode*: Letter.

HRT 211 - Current Topics in Root Biology (3 units)

Course Description: How roots grow and interact with their environment, from embryonic roots to large tree roots. Analysis of recent literature related to the impact of internal controls on root growth and root system development (e.g., developmental signaling, carbohydrate availability, water status), and the impacts of the external environment on root physiology, root system development, and individual root growth (e.g., soil structure, soil microbial, water, nutrients). *Learning Activities:* Lecture/Discussion 3 hour(s). *Grade Mode:* Letter.

HRT 290 - Seminar (1 unit)

Course Description: Seminars presented by invited speakers, students, or faculty on selected topics in horticulture. Prerequisite(s): Graduate standing at UC Davis. Learning Activities: Seminar 1 hour(s). Grade Mode: Satisfactory/Unsatisfactory only.

HRT 298 - Group Study (1-5 units)

Course Description: Group study. Learning Activities: Variable. Repeat Credit: May be repeated. Grade Mode: Letter.

HRT 299 - Research (1-12 units)

Course Description: Research. Prerequisite(s): Consent of instructor. Learning Activities: Variable 3-36 hour(s). Repeat Credit: May be repeated. Grade Mode: Satisfactory/Unsatisfactory only.