Tropical Agriculture and the Environment (TAE)

Plant Production & Management

*UH Manoa requirements are those in effect for the 2017-2018 academic year. Students are advised to consult future UH Manoa catalogs to determine if changes have been made to any requirements.

UHM General Education Core Requirements (three credits each, unless noted otherwise)

A. Foundations

- (1) FW =Written Communication (ENG 100, ENG 100A, ENG 190, ESL 100 or AMST 111)
- (2) FS = Symbolic Reasoning (MATH 100, MATH 140 or NREM 203);
- (3) FG = Global & Multicultural Perspective (A/B/C), first course
 - FG =Global & Multicultural Perspective (A/B/C), second course

B. Diversification

- (1) DA/DH/DL = Arts, Humanities, & Literature, first course
- (2) DA/DH/DL = Arts, Humanities, & Literature, second course
- (3) DS = Social Sciences, first course
- (4) DS = Social Sciences, second course
- (5) DB = BIOL 171
- (6) DY = BIOL 171L (1cr)
- (7) DB = BIOL 172
- (8) DY = BIOL 172L (1cr)
- (9) DP = CHEM 161 (3cr)
- (10) DY = CHEM 161L (1cr)
- (11) DP = CHEM 162 (3cr)
- (12) DY = CHEM 162L (1cr)

UHM Graduation Requirements Focus

- (1) H = Hawaiian, Asian & Pacific
- (2) E = Contemporary Ethical Issues (300+) will be satisfied by taking any one of the following: TPSS 416 Introduction to Social, Ethical, and Political Issues Associated with Biotechnology; PEPS 310 Environment and Agriculture; PEPS 350 Invasive Pest Species; PEPS 451 Environmental Law; MBBE/BIOL 304 Biotechnology: Science and Ethical Issues; CMB 351/BIOL 340 Genetics, Evolution and Society
- (3) Oral Communication (300+)
- (4) Writing Intensive (W)
 - a. First 100 or 200-level course
 - b. Second 100 or 200-level course
 - c. TPSS 200, Tropical Crop Science, third course
 - d. Fourth course, PEPS 421
 - e. Fifth course, TPSS 492L, Internship

D. Hawaiian/Second Language - Alternative

Any four (4)-course combination of Languages, TPSS, PEPS or other approved related course not used to satisfy requirements in the TAE major.

- (1) First course
- (2) Second course
- (3) Third course
- (4) Fourth course

College of Tropical Agriculture and Human Resources Requirements

G. CTAHR Required Set of Interrelated Courses

- (1) FAMR 380* DS & 380L Research Methodology (4 cr) **OR** NREM 310 Statistics in Agriculture (3 cr)
- (2) TPSS 492 Internship (TPSS 492 (1 cr) + TPSS 492L (3 cr) = 4 credits)

Tropical Agriculture and the Environment (TAE) Requirements (21 Credits)

H. TAE Core

- (1) TPSS 200 Agriculture, Environment, and Society
- (2) BIOL 265 Ecology and Evolutionary Biology or PEPS 210 Introduction to Environmental Science
- (3) TPSS 304 Fundamentals of Soil Science (4)
- (4) TPSS 470 Plant Physiology
- (5) TPSS 470L Plant Physiology Laboratory
- (6) PEPS 421W Foundations of Pest Management (4)
- (7) TPSS/PEPS 499 Directed Research (3)

Certificate in Agribusiness Management

- (1) ECON 130 Principles of Economics
- (2) TPSS 322 Farm & Food Marketing or BUS 312
- (3) TPSS 341 Managerial Accounting
- (4) TPSS 351 Enterprise Management
- (5) TPSS 429 Spreadsheet Modeling for Business & Economic Analysis

Graduation Requirements

E. Grade Point Average (GPA)

- (1) 2.0 cumulative or higher
- (2) Good academic standing

F. Credit Minimums

- (1) 120 Credits Total Applicable
- (2) 30 Credits in residence at UHM Graduation
- (3) 45 Upper Division (300*) credits

Plant Production & Management

Group A: Fundamental courses (Take all 6 courses)

- (1) TPSS 364 Horticulture Practices
- (2) PEPS 363 General Entomology
- (3) PEPS 363 General Entomology Lab
- (4) TPSS 420 Plant Propagation
- (5) PEPS 405 Plant Pathogens & Disease
- (6) TPSS 481 Weed Science

Group B: Production Electives Take 6 from the two groups below, including at least 9 credits from Production courses **Production Courses**

- (1) TPSS 220 Organic Crop Production (2)
- (2) TPSS 405 Turf Management
- (3) TPSS 300 Tropical Crop Production Systems (4)
- (4) TPSS 430 Nursery Management
- (5) TPSS 401 Vegetable Crop Production
- (6) TPSS 440 Tissue Culture & Transformation
- (7) TPSS 402 Flower and Foliage Crop Production
- (8) HWST 352 Advanced Taro Cultivation
- (9) TPSS 403 Tropical Fruit Production

Supporting Courses

- (1) TPSS 311 Current topics in Plant Sciences (1)
- (2) TPSS 336 Renewable Energy and Society
- (3) TPSS 350 Tropical Landscape Practices
- (4) TPSS 352 Landscape Architecture History, Theory & Practice
- (5) TPSS 353 Landscape Graphics Studio
- (6) TPSS 354 Tropical Landscape Planting Design Studio
- (7) TPSS 369 Ornamental Plant materials
- (8) TPSS 371 Genetics: Theory to Application
- (9) TPSS 418 Turf Pest Management (4)
- (10) TPSS 421 Tropical Seed Science (2)
- (11) TPSS 429 Spreadsheet Modeling for Business and Economic Analysis*
- (12) TPSS 435 Environmental Soil Chemistry
- (13) TPSS 450 Nutrient Mgt. Soils & Plants (4)
- (14) TPSS 453 Plant Breeding & Genetics
- (15) TPSS 460 Plant Soil Atmosphere Physics
- (16) TPSS 463 Irrigation and Water Management
- (17) TPSS 473 Postharvest Physiology
- (18) TPSS 475 Plant Nutrient Diagnosis
- (19) TPSS 409 Cultural Geography
- (20) TPSS 491 Experimental Topics (variable credit)
- (21) TPSS 416 Issues Concerning Biotechnology
- (22) TPSS 499 Directed Study (variable credit)