110  Applied Entomology of Economic Plants
Fall: 3(2-2) Fall: Traverse City. RB: Interest or experience in ornamentals and turf production systems. R: Open to students in the Institute of Agricultural Technology. Not open to students with credit in ENT 111. Arthropod pests of horticultural plants and turf grasses. Groups and species of economic importance to Michigan.

111  Basics of Applied Entomology
Spring. 2(2-2) R: Open to students in the Institute of Agricultural Technology. SA: AT 057 Not open to students with credit in ENT 110. Basic insect biology, principles of integrated pest management, and the major pests of field crops, woody ornamentals, other perennials, turf, and commercial greenhouses. Offered first ten weeks of semester.

205  Pests, Society and Environment
Fall. Spring. Summer. 3(3-0) Not open to students with credit in ENT 404. Nature of pests and their impact on society. Principles of integrated pest management in relation to environmental quality and sustainable development.

319  Introduction to Earth System Science
Fall. 3(3-0) Interdepartmental with Geological Sciences and Integrative Biology and Plant Biology and Sociology. Administered by Entomology. RB: Completion of one course in biological or physical science. Systems approach to Earth as an integration of geochemical, geophysical, biological and social components. Global dynamics at a variety of spatio-temporal scales. Sustainability of the Earth system.

364  Turfgrass Entomology

401  Directed Studies
Fall. Spring. Summer. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Approval of department. Individual field or laboratory research, or review of published literature, on a topic of interest.

404  Fundamentals of Entomology
Fall. 3(2-4) P: BS 162 or PLB 105 or LB 144 Insect classification, identification, diversity, physiology and ecology. Importance of insects to humans and the environment. Insect collection required.

407  Diseases and Insects of Forest and Shade Trees
Spring. 4(3-3) Interdepartmental with Plant Biology and Plant Pathology. Administered by Plant Pathology. P: (PLB 105 or BS 162 or LB 144) and Completion of Tier I Writing Requirement SA: BOT 407 Diseases, insects, and environmental problems affecting trees in forests, parks, suburbs, and nurseries. Methods of control.
Master's Thesis Research
Fall, Spring, Summer. 1 to 12 credits. A student may earn a maximum of 24 credits in all enrollments for this course. R: Open only to master's students in the Department of Entomology.
Master's thesis research.

Doctoral Dissertation Research
Fall, Spring, Summer. 1 to 12 credits. A student may earn a maximum of 36 credits in all enrollments for this course. R: Open to doctoral students.
Doctoral dissertation research.