COMMON COURSE OUTLINE: Course discipline/number/title: HTFL 2341: Greenhouse Crop Production

A. CATALOG DESCRIPTION
   1. Credits: 4
   2. Hours/Week: 2 hours lecture per week, 4 hours lab per week
   3. Prerequisites (Course discipline/number): None
   4. MnTC Goals (if any): None

   In this course students learn about the day-to-day operations involved in managing a greenhouse. Coursework includes the study of enclosed structures to manipulate the environment, applying cultural practices as they affect plant physiological processes, scheduling and controlling crop growth for target market periods, and greenhouse business management. Crops will be grown to demonstrate plant production and provide hands-on crop production experience. This course will help to prepare students for a career in management of commercial greenhouses, conservatories and institutional greenhouses.

B. DATE LAST REVISED (Month, year): May, 2015

C. OUTLINE OF MAJOR CONTENT AREAS:
   1. Greenhouse Construction
   2. Heating, Cooling & Environmental Control Systems
   3. Crop Culture Requirements
      a) Root media
      b) Water
      c) Fertilization
      d) Carbon Dioxide Fertilization
      e) Plant Growth Regulation
      f) Integrated Plant Pest Management
   4. Schedule, grow, & evaluate greenhouse crops
   5. Business Management
      a) Pricing
      b) Marketing
      c) Merchandising
      d) Salesmanship

D. LEARNING OUTCOMES (GENERAL): The student will be able to:
   1. Engineer heating, cooling, ventilation, benching, lighting, irrigation and fertilization systems for a greenhouse.
   2. Control greenhouse environmental and cultural inputs for optimum crop growth and development.
   3. List and describe procedural steps necessary during greenhouse crop production from propagation to marketing.
   4. Identify and define environmental factors that regulate plant growth
   5. Develop production schedules for greenhouse crops.
   6. Grow several crops in the greenhouse.
   7. Identify and name greenhouse crops and classify them as potted, cut and/or garden crops.
   8. Apply business management principles to a commercial greenhouse setting

E. LEARNING OUTCOMES (MNTC): NA

F. METHODS FOR EVALUATION OF STUDENT LEARNING:
   1. Exams
   2. Quizzes
   3. Lab work
   4. Crop Analysis
   5. Class participation
   6. Other assignments
G. RCTC CORE OUTCOME(S) ADDRESSED:
☐ Communication
☐ Critical Thinking
☐ Global Awareness/Diversity
☐ Civic Responsibility
☒ Personal/Professional Accountability
☐ Aesthetic Response

H. SPECIAL INFORMATION (if any): None