

COURSE OUTLINE
Revision: S. Hilderbrand
February 2011

DEPARTMENT: Hospitality and Service Occupations
CURRICULUM: Landscape Horticulture
COURSE TITLE: Advanced Irrigation Diagnostics and Repairs
COURSE NUMBER: **LHO 237**
TYPE OF COURSE: Professional Technical
COURSE LENGTH: 1 Quarter
CREDIT HOURS: 5
LECTURE HOURS: 44
LABHOURS: 22
CLASS SIZE: 25
PREREQUISITES: LHO 135 and LHO 236 or Instructor permission

COURSE DESCRIPTION:

This course will be an in-depth study of the diagnostic skills necessary to troubleshoot, locate and repair problems associated with improper design and installation, malfunctions of equipment and parts and the evaluation of a systems efficiency. Emphasis will be on turf and landscape areas. Mechanical, electrical and hydraulic systems will be analyzed.

LHO 237 Advanced Irrigation Diagnostics and Repairs
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STUDENT LEARNING OUTCOMES ADDRESSED:

Evaluation- Be able to diagnose and locate the problems within a system through a sequential process.

Technology- Have a firm understanding of the tools and equipment available to aid in the diagnostic process and repair.

Critical thinking and problem solving- Use critical thinking skills and knowledge to solve system problems and the application of proper repair.

GENERAL COURSE OBJECTIVES:

At the end of the course the student will:

1. Be able to identify most common problems.
2. Organize data collected through experimentation in report form.
3. Obtain process of elimination skills necessary to diagnose system problems.
4. Have knowledge of industry technological advances in diagnostic tools.
5. Learn temporary and permanent repair techniques.
6. Understand techniques in design, installation and in the repair of systems to prevent future problems.

TOPICAL OUTLINE:

APPROX. HOURS

Common system problems	10	
Written surveys and estimates	6	
Diagnostic process	10	
Component diagnostics	10	
Electrical diagnostics		10
Repair-short term and permanent	<u>20</u>	
	Total	66

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