

Syllabus- Landscape Construction Section

Part 1- Before Constructions Begins

- A. Landscape Design
 - a. When can a landscape contractor do the design?
 - b. Site Assessment and Measurements
 - c. Construction Documents
 - d. Process and Budgeting
 - e. Functional Use of Space
 - f. Elements and Principles of Design
 - g. Designing with Plant Material
- B. Construction Process
 - a. Safety on the Job
 - b. Pre-construction Activities
 - c. Rough Grading, Erosion Protection, and Site Drainage
 - d. Utilities
 - e. Walls, Pavement, Site Structures
 - f. Finish Grading
 - g. Site Amenities
 - h. Plant Materials
 - i. Cleanup, Project Closeout, Warranty, Scheduling
- C. Legal Requirements
 - a. Project Management
 - b. Codes, Ordinances, and Deed Restrictions
- D. Interpreting Construction Documents
 - a. Understanding Bid Packet/Specifications
 - b. Reading/Interpreting Construction Drawings
 - c. Construction Math
- E. Project Pricing
 - a. Estimates and Bidding
 - b. Calculating Project Costs
- F. Construction Techniques and Small Equipment Operation
 - a. Excavation Techniques
 - b. Drainage Piping and Layout
 - c. Installing Paving and Wall Materials
 - d. Use of Wood in the Landscape
 - e. Small Equipment Use- generators, compressors, pneumatic and battery-powered tools, sod cutter, trencher, rototiller, concrete mixer, power washer
- G. Construction Layout
 - a. Layout Equipment and Measurement Techniques
 - i. Slope and Establishing Elevations
 - ii. Laying Out Shapes, Paths, etc.
 - iii. Locating Plant Material

Part 2- Existing Site Elements

- A. Site Access and Storage Areas
- B. Protecting Plant Material
- C. Protecting Structures, Pavement, Utilities, Soil, Environmentally Sensitive Area
- D. Removal of Unwanted Site Elements
- E. Recycling and Waste Disposal

Part 3- Grading, Site Drainage, and Erosion

- A. Understanding Soil that Supports Plant Growth
- B. Understanding Soil that Supports Structures
- C. Site Grading- How to?
- D. Water Management on Site
 - a. Irrigation- sustainable practices
 - b. Stormwater- direction, collection, discharge
- E. Site Drainage- Grading, subsurface and surface infrastructures that affect drainage, movement, and storage
- F. Erosion Control
 - a. Protecting Site from: Perimeter Erosion, Surface Erosion, and Channel Erosion

Part 4- Low Voltage Lighting

Part 5- Landscape Retaining Walls and Stairs

- A. Material Types
- B. Wall Layout, Excavation, Base Preparation, Construction Techniques
- C. Wall Heights and the Law
- D. Stairs
 - a. Building Codes
 - b. Material Types

Part 6- Landscape Paving

- A. Paving Materials
- B. Project Layout, Excavation, Grading and Space Preparation, and Construction Techniques

Part 7- Freestanding Walls

- A. Wall Materials
- B. Construction of footers and Base Preparation, and Wall Construction

Part 8- Site Amenities

- A. Water Features- Types, Site Preparation, Installation Techniques, Maintenance
- B. Furniture, Playground Equipment, Outdoor Kitchens, and Patio amenities
 - a. Safety and Installation of Playground Equipment
 - b. Installing Outdoor Equipment

- c. Installing Firepits/Fireplaces
- d. Installing Edging, Planters, and Plant Protection