

# ATPL-2360: GREEN PLUMBING SYSTEMS

---

## Cuyahoga Community College

**Viewing: ATPL-2360 : Green Plumbing Systems**

**Board of Trustees:**

2012-06-28

**Academic Term:**

Spring 2019

**Subject Code**

ATPL - Applied Ind Tech - Plumbers

**Course Number:**

2360

**Title:**

Green Plumbing Systems

**Catalog Description:**

Fundamentals of sustainable design, green building practices and installation procedures that are used in the plumbing industry. Includes applied green awareness and function with respect to the conservation and recycling of potable water and the reuse of storm and sanitary water disposal systems.

**Credit Hour(s):**

1

**Lecture Hour(s):**

1

## Requisites

**Prerequisite and Corequisite**

Departmental approval: admission to Plumber's apprenticeship program.

## Outcomes

**Course Outcome(s):**

1. Discuss the concepts of green building fundamentals.

---

**Course Outcome(s):**

2. Identify the differences between standard storm and waste water disposal systems.

---

**Course Outcome(s):**

3. Differentiate between potable and gray water systems.

---

**Methods of Evaluation:**

1. Homework
2. Quizzes
3. Tests

**Course Content Outline:**

1. Green plumbing fundamentals
  - a. Natural resources
    - i. Water recycling
    - ii. Green standard adaptation
    - iii. Energy conservation

- b. Water supply
    - i. Protection
    - ii. Reclamation
    - iii. Conservation
  - c. Green technology
    - i. Construction methods
    - ii. Energy and natural resource conservation
  - d. Legislation
    - i. Clean water act
    - ii. Environmental protection act
2. Green building versus standard construction
- a. Storm water
    - i. Disposal systems
    - ii. Retention and retention basins
    - iii. Rain gardens
    - iv. Rain barrels
    - v. Safety concerns
  - b. Applications
    - i. Holding tanks
    - ii. Pumps
    - iii. Connections
3. Potable and gray
- a. Water reclamation
    - i. Plumbing systems
    - ii. Storm water projects
  - b. Gray water
    - i. Definitions
    - ii. Uses
  - c. Installation procedures
    - i. Engineered practices
    - ii. Materials and equipment

..

## Resources

Montoya, Michael. *Green Building Fundamentals*. Columbus, OH: Prentice Hall, 2010.

---

Korcak, Michael J. *Green Awareness: Energy Efficiency, Comfort Conditioning, Electrical Plumbing*. ESCO Press, 2008.

---

Yudelson, Jerry. *Green Building A to Z*. Gabriola Is., Canada: New Society Publishers, 2007.

---

## Resources Other

1. Current edition of the State of Ohio Plumbing Code
2. The Green Awareness Mechanical Systems Manual
3. Drainage – Text Book from the International Union of Plumbers
4. Power points and handouts - Plumbers Local 55 JATC
5. IAPMO Green Plumbing and Mechanical Code Supplement
6. [www.greenlightplumbing.com/richard.html](http://www.greenlightplumbing.com/richard.html) (<http://www.greenlightplumbing.com/richard.html>)
7. [www.greenhomebuilding.com/natural\\_building.htm](http://www.greenhomebuilding.com/natural_building.htm) ([http://www.greenhomebuilding.com/natural\\_building.htm](http://www.greenhomebuilding.com/natural_building.htm))

Top of page

Key: 629