ATPT-1801: SPECIAL TOPICS: PAINTERS ICRA/FIRST AID

Cuyahoga Community College

Viewing: ATPT-1801 : Special Topics: Painters ICRA/First Aid

Academic Term:
Spring 2019

Subject Code
ATPT - Appld Indus Tech - Painting

Course Number:
1801

Title:
Special Topics: Painters ICRA/First Aid

Catalog Description:
Certification course for First Aid and Infection Control Risk Assessment (ICRA). Fundamentals of 1st aid, CPR and AED, including substance overdose and emergency treatment is covered. In addition, procedures and practices for IUPAT workers working in health care facilities as prescribed in health care facilities is also be part of the combined course along with hands on application.

Credit Hour(s):
1

Lecture Hour(s):
1

Requisites

Prerequisite and Corequisite
Departmental approval: admission to Painters' apprenticeship program.

Outcomes

Course Outcome(s):
I Discuss the fundamentals of basic First Aid, CPR, AED and substance overdose and application techniques required for certification by the American Heart Association.

Essential Learning Outcome Mapping:
Critical/Creative Thinking: Analyze, evaluate, and synthesize information in order to consider problems/ideas and transform them in innovative or imaginative ways.

Objective(s):
1. **List and define the terms related to First Aid and CPR processes and tools.**
2. **Explain the purpose of training for the First aid and CPR rescuer on painter jobsites.**
3. **List and explain the roles and responsibilities of the rescuer.**
4. **Explain the importance of proper glove removal of the rescuer during and after rescue procedures.**
5. **Describe the importance of emergency site evaluation prior to commencement of rescue operations.**
6. **List and describe the various conditions of breathing injuries and emergencies.**
7. **List the different types of environmental emergencies and discuss relative treatments.**
8. **Explain the procedures followed during respiratory emergencies including compressions and mouth-to-mouth treatment.**
9. **Explain the purpose of AED treatment including scene assessment.**
10. **Recognize signs and symptoms of symptoms of substance overdoses and discuss respective treatments.**

Course Outcome(s):
II Describe infection control risk assessment (ICRA) and discuss the purpose for IUPAT worker awareness including hazard identification, controls, and disease transmission.

Essential Learning Outcome Mapping:

Critical/Creative Thinking: Analyze, evaluate, and synthesize information in order to consider problems/ideas and transform them in innovative or imaginative ways.

Objective(s):

1. **List and define the terms related to ICRA**
2. **Identify the purpose of ICRA training for the IUPAT worker with regards to health hazards related to patient care facilities.**
3. **List and explain the possible health hazards affecting workers, patients, and visitors resulting from construction and renovations in hospitals and health care facilities.**
4. **Discuss the transmission of infectious pathogens through mechanical systems and dedicated biological waste drains.**
5. **Explain how pathogen migration can be controlled using various measures and equipment.**
6. **Differentiate between health care facility renovation and typical construction worksites.**
7. **Identify specialty personal protective equipment required for construction work within health care facilities.**
8. **Identify the different chemicals and chemical vapors contained in cleaning solvents and describe protection factors for the patient and the IUPAT worker.**

Course Outcome(s):

III Discuss the different patient risk groups, identify the related hazards and describe the construction and critical barriers required to control pathogen infiltration into patient areas.

Essential Learning Outcome Mapping:

Critical/Creative Thinking: Analyze, evaluate, and synthesize information in order to consider problems/ideas and transform them in innovative or imaginative ways.

Objective(s):

1. **List and explain the different patient risk groups and identify dust creating tasks.**
2. **List dust controls and explain methods employed to minimize infiltration.**
3. **Explain the purpose of proper signage outside of the workplace entry and describe the respective placement of each used to restrict non-worker entry.**
4. **List and describe critical barriers and discuss potential risks of dust infiltration.**
5. **List the methods used to transport and store solvent based paints and cleaning materials and equipment and describe the various barriers required at doors and windows.**

Methods of Evaluation:

quizzes, test and class participation;

Course Content Outline:

Course Outline

First Aid, CPR, AED and Overdoses

1. **Terminology**
   a. **1st Aid**
   b. **CPR**
   c. **AED**
   d. **Bandage**
   e. **Tourniquet**
   f. **Compression**
   g. **Bites and stings**
   h. **Rescuer**
   i. **Chest compression**
   j. **Epi-pen**
   k. **Chain of survival**
   l. **Arrest**
   m. **Defibrillator**
   n. **Blood born pathogen**
2. **Purpose**
   a. **Emergency ready**
   b. **Personal preparedness**

   c. **Calm victim**
   d. **Safe scene**
   e. **Resuscitation**
   f. **1st responder**
3. **Roles and responsibilities**
   a. **Safe scene**
   b. **Assistance**
   c. **Provide direction**
   d. **1st Aid provider**
   e. **Stabilization of victim**
   f. **Provide details**
   g. **Maintain victim privacy**
4. **Glove removal**
   a. **Procedure**
      i. **Pinch wrist**
      ii. **Ball glove**
      iii. **2nd glove removal**
      iv. **Disposal**
         1. **Label**
         2. **Bio hazard container**
         3. **Zip lock bag**
   b. **Purpose**
      i. **Hazard containment**
      ii. **Victim protection**
      iii. **Rescue protection**

1. **Site evaluation**
   a. **Rescuer protection**
   b. **General**
   c. **Information delivery**
   d. **Initiate treatment procedure**
2. **Breathing emergencies**
   a. **Chocking**
      i. **Heimlich procedure**
         1. **Hand/arm position**
         2. **Thrust action**
      ii. **Airway clearing**
   b. **Allergies**
      i. **Peanut/nut**
      ii. **Bites**
      iii. **Stings**
      iv. **Shell fish**
   c. **Asthma**
3. **Environmental**
   a. **Chemical**
      i. **Methyl ethyl key tone**
      ii. **Denatured alcohol**
      iii. **Ammonia**
      iv. **Thinners**
   b. **Heat**
      i. **Dehydration**
      ii. **Heat stroke**
      iii. **Sunburn**
   c. **Cold related**
      i. **Hypothermia**
      ii. **Frost bite**
      iii. **Slips**
      iv. **Falls**
4. **Respiratory emergency procedures**

a. **Scene evaluation**
b. **Victim check**
c. **Call/shout for help**
d. **Breathing check**
e. **Compression administration**
f. **Mouth to mouth**
    i. **Compression count**
    ii. **Breath administration**
    iii. **Rotate with help**

1. **AED treatment**
    a. **Diagnostic test**
        i. **Heart beat**
        ii. **Irregular rhythm**
    b. **Shock if needed**
    c. **Operation**
        i. **Electrical access**
        ii. **Locate electrode pads to chest**
        iii. **Connect pads to machine**
    d. **Scene assessment**
        i. **Piercings**
        ii. **Jewelry**
        iii. **Support wires**
2. **Substance overdose**
    a. **Drug type**
        i. **Pain killers**
        ii. **Oxycontin**
        iii. **Heroin**
        iv. **Opioids**
    b. **Symptoms**
        i. **Erratic breathing**
        ii. **Hyper active**
        iii. **Unusual drowsiness**
    c. **Treatment**
        i. **Naloxone**
        ii. **Nar can**

1. **ICRA: purpose, hazards, and controls**
    a. **Terminology**
        i. **ICRA**
        ii. **Air changes per hour ACH**
        iii. **Anemometer**
        iv. **Anteroom**
        v. **Biohazard**
        vi. **C. Diff**
        vii. **Cubic feet per minute CFM**
        viii. **High efficiency particulate air HEPA**
        ix. **Heating ventilation and air conditioners HVAC**
        x. **Manometer**
        xi. **Micron**
        xii. **Mil**
        xiii. **Magnetic resonance imaging MRI**
        xiv. **Nosocomial**
        xv. **Opportunistic infection**
        xvi. **Intumescent**
        xvii. **Chase**
        xviii. **Immune compromise**
    b. **ICRA: patient hazards**

i. **Purpose**
1. **Infection control**
a. **Housekeeping**
b. **Dust control**
2. **Facility disruption**
a. **Patient**
b. **General public**
ii. **Hazards**
1. **Hospital acquired infection**
2. **Mold**
3. **Viruses**
4. **Fumes**
5. **Vapors**
6. **Noise**
7. **Vibration**

c. **Health hazards**
i. **Legionnaires disease**
ii. **HIV/AIDS**
iii. **Tuberculosis**
iv. **Hepatitis**
v. **Fungal infections**
vi. **Pneumonia**
vii. **Common cold**
viii. **Viral infections**

1. **Infectious pathogen transmission**
a. **Mechanical systems**
i. **Duct work**
1. **Supply**
2. **Return**
ii. **Exhaust systems**
iii. **Water supply**
1. **Stagnation-water**
2. **Microbe infestation**
iv. **Common waste drain**
1. **Leaks**
2. **Blockage**

b. **Biological and chemical waste drain**
i. **Leaks**
ii. **Damage/breakage**

2. **Pathogen migration control**
a. **Measures**
i. **Barriers**
1. **Visquine**
2. **Ridged**
3. **Mobile containment cube**
4. **Ante rooms**
5. **Ceiling critical**
ii. **HVAC lock-out**
iii. **Housekeeping**
iv. **Negative air pressure control**
v. **Routes of entry control**

b. **Materials**
i. **Tape**
ii. **Adhesives**
iii. **Disinfectants**
iv. **Fire resistant plastic**
v. **Drywall**
vi. **Plywood**
vii. **Lumber**

- c. **Equipment**
  - i. **Negative air machines**
  - ii. **Anemometer**
  - iii. **Monometer**
  - iv. **HEPA vacuum**
  - v. **Filter fabric**
  - vi. **Particle counter**
  - vii. **Charcoal filter**
  - viii. **Sticky mat**
  - ix. **Water spray bottle**
  - x. **Flexible vent hose**
  - xi. **Trash gondola**
  - xii. **Dryer mop**
  - xiii. **Sweeping compound**
  - xiv. **Broom, dust pan, shovel**
  - xv. **Wet mop and bucket**

3. **Health care facility renovation vs. general construction**
   - a. **General construction**
     - i. **Work times**
     - ii. **Personal**
       1. **Supervisor**
       2. **Various trades**
     - iii. **Standard safety practices**
   - b. **Health care facility renovation**
     - i. **Personal**
       1. **Trade workers**
       2. **Medical staff**
       3. **Patients**
       4. **General visitors**
       5. **Administrative staff**
     - ii. **Hours of operation**
     - iii. **General construction practices**
   - c. **Restrictions**
     - i. **Behavior**
     - ii. **Worker attire**
     - iii. **Products**
       1. **Cleaner**
       2. **Solvents**
       3. **Low volatile organic compound (VOC)**
     - iv. **Noise**
     - v. **Barriers**
     - vi. **Entry/exit locations**
     - vii. **Stair/elevator use**
     - viii. **Worker break areas**
     - ix. **Interim life saving measures**
       1. **Fire suppression**
       2. **Alarms**
4. **Specialty PPE**
   - a. **Respirator**
   - b. **Chemical resistant gloves**
   - c. **Face shield**
   - d. **Disposable items**
     - i. **Tyvek suit**
     - ii. **Boot cover**
     - iii. **Latex gloves**
     - iv. **Hair net**
     - v. **Dust mask**
5. **Cleaning solvents and protection**

a. **Solvents**
    i. **Methyl Ethel Ketone MEK**
    ii. **Toluene**
    iii. **Xylene**
    iv. **Alcohol**
    v. **ammonia**
b. **Protection**
    i. **Patient**
        1. **Ventilation**
        2. **Air filtering**
        3. **Containments**
        4. **Critical barriers**
        5. **Patient relocation**
    ii. **Worker**
        1. **Respiratory protection**
        2. **Hand, skin and eye protection**
        3. **Micro porous suit**
        4. **Material storage**
        5. **Material disposal**

1. **Risk groups, controls and barrier construction**
    a. **Patient risk groups**
        i. **Low risk**
            1. **Administrative personnel**
            2. **Care givers**
            3. **Visitors**
        ii. **Medium risk**
            1. **Cardiology department**
            2. **ECHO cardiology**
            3. **Endoscopy**
            4. **Nuclear medicine physical therapy**
            5. **Radiology**
            6. **Respiratory therapy**
        iii. **High risk**
            1. **Critical care unit**
            2. **Emergency room**
            3. **Labor and delivery**
            4. **Laboratories**
            5. **Newborn nurseries**
            6. **Outpatient surgery**
            7. **Pharmacy**
            8. **Surgical units**
            9. **Post-operative recovery**
        iv. **Highest risk**
            1. **Immune compromised patient areas**
            2. **Burn unit**
            3. **Cardiac catheter areas**
            4. **Central sterile supply**
            5. **Intensive care units**
            6. **Negative pressure isolation rooms**
            7. **Oncology department**
            8. **Operating rooms**
    b. **Dust controls and methods**
        i. **Dust controls**
            1. **Water spray bottles**
            2. **Sticky mats**
            3. **Spray adhesives**
            4. **Duct tape**
            5. **High Efficiency Particulate Air HEPA**
        ii. **Methods**

1. **Temporary barriers**
2. **Negative air**
3. **Task performance**
4. **Engineering controls**
5. **Tools**
6. **Equipment**

1. **Signage**
   a. **Purpose**
      i. **Entry control**
      ii. **Walkway sustainability**
      iii. **Worker restriction**

1. **Placement**
   a. **Entry**
   b. **Exits**
   c. **Restricted areas**
2. **Critical barriers**
   a. **Types**
      i. **Air vents**
      ii. **Doorways**
      iii. **Windows**
      iv. **Penetrations**
   b. **Risk control**
      i. **Patient location**
      ii. **Hospital acquired infections**
3. **Material and equipment transport and storage**
   a. **Transport**
      i. **Cover**
      ii. **Seal**
      iii. **Cleaned**
   b. **Storage**
      i. **Proper containers**
      ii. **Proper labelling**
4. **Barrier construction**
   a. **Work area assessment**
   b. **Work procedures**
      i. **Door treatment**
      ii. **Critical vent barriers**
      iii. **Penetrations**
   c. **Tools and materials**
   d. **Rigid barrier construction**
   e. **Plastic sheeting**

Resources Other

Additional Resources

www.carpenters.org

fti.personallearning.edu.go

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