

**Basic Weatherization Training Outline**

**This curriculum outline is based on the efforts of many groups and individuals involved in the Weatherization Curriculum Collaborative. The participants involved in developing this curriculum are listed at the end of the document. The purpose of this document is to provide coordinated guidance for weatherization worker program initiatives under the ARRA and other grants and programs.**

**The goal of this curriculum is to identify learning modules that will allow participating individuals to gain a basic knowledge of the weatherization process and to become familiar with the tools and techniques used by contractors to perform weatherization work.**

**Given that the objectives of the ARRA relate to helping people move into new jobs and upgrade skills for the new GREEN ECONOMY there is some time spend on upgrading basic skills in measurement and construction math along with soft skills development and work readiness skills.**

**We have put emphasis on OSHA and other safety and health training, including training that will result in stand alone OSHA and other certifications so that participants in the programs can present formal certification competencies to their possible employers. Also, it is important to include these safety and health concerns in order to prepare potential workers to protect themselves from the hazards they and their co-workers may face.**

**This curriculum outline is advisory only. It is for use as an open source of information and is intended to provide guidance. Some states, including Maine and West Virginia for example, have state regulatory language that delineates specific standards for weatherization worker training and contractor performance. This is likely to be the nation-wide trend. Our curriculum is an attempt to begin the creation of a standard for Chicago and Illinois.**

**1) Orientation**

*Approximate time 8-16 hours*

- Motivation
- Job Opportunities, pay scales and career ladders
- Where does weatherization fit within the Green economy?
- Homeowner / employee safety
- Air quality
- Fire safety code
- Physical requirements of the job
- Drug free work place

**2) Safety awareness and certification**

*Approximate time 24-30 hours*

- On the job OSHA standards – employer / employee responsibilities
- Basic safety
  - Tools
  - Ladders

- Fire safety code
- Electrical hazards
- Walking and working surfaces
- Waste minimization and disposal
- Safety training on the job
  - Tool box training
  - Sign in sheets
  - Possible sign daily meeting
- Safety Certifications
  - Scaffold safety *4hrs*
  - Asbestos awareness *2hrs*
  - Mold *2hrs*
  - Lead safety awareness *2hrs*
  - 10-hour construction certificate

*(Programs below have required repeat training)*

- 1<sup>st</sup> Aid *4hrs*
- CPR *4hrs*

**3) Measurement and Construction math**

*Approximate time 36 hours*

- Tape measurement reading
- Fractions
- Calculations
- Application technique and technology

**4) Weatherization skills training program should consist of the following:**

*Approximate time 40-60 hours*

- A) Building science
  - House types
  - Construction types
  - Building history
  - HVAC
- B) Installation / repair of all portals
  - Caulking – the proper use and types for all portals
    - Windows
    - Doors
    - Holes (penetrations)
- C) Air sealing: conditioned / unconditioned spaces
  - Foam
    - (1) Rigid
    - (2) 2 part
  - Insulation
    - Open cell / closed cell
    - Different types of insulation
    - Proper installation
- D) Roof and general repairs
- E) Beyond weatherization. *Proper removal of hazardous material(s)*
  - Asbestos
  - Lead
  - Mold

**5) Soft skills development**

*Approximate time 24-30 hours*

- A) Customer service orientation
  - Internal
  - External
- B) Job readiness
  - Interviewing
  - Resume writing
  - Application writing
  - Job research strategies
- C) Business procedures

**Student Motivators:**

What is going to motivate the student?

1. Positive impact this program will have – changing their life
2. Ability to take care of their family
3. Upward career opportunities
  - Pre-apprenticeship programs
  - Technical track (science & engineering)
4. Earning potential
5. Transfer skills
6. Allow individual(s) to select skill set which determines the amount of training they will need
7. Once ARRA funds run out: What will the employee do?
  - Additional courses to allow upward mobility
  - Asbestos removal
  - Lead
  - Apprenticeship program
  - Market for weatherization and construction will create more jobs

**Program Management**

- A. Entrance requirements
  1. Assessment of students: TABE / Compass (*6<sup>th</sup> grade or above preferred*)
  2. Interviewing to identify individual(s) motivation
  3. Evaluation / Pre-Post Testing
- B. Learning environment
  1. Room size: student/teacher ratio
  2. Space and equipment requirement
  3. Field work
  4. Text books
- C. Drug screening and/or waiver?
  1. Have a waiver for drug testing. *“I am clean and sober”*
  2. LEED Council guidelines: *advise that we’re a drug free environment*
  3. Perform random drug screening; this is at the judgment of staff before the job interview
  4. Drug testing as criteria for exiting the program?
- D. Criminal background

What are the liabilities for the employer when employees have criminal backgrounds?

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1. Bonding program for ex-offenders
2. Fewer job opportunities
3. Literacy
- E. What are faculty credentials?
  1. Ideal to have one master teacher with assistance from:
    - Contractor
    - Trade person with experience
    - Sales people
    - Suppliers
  2. Train the trainer methodology
- F. Student Testing on Content
  - Demonstrate competencies and job skills
  - Internships
  - Project based skills training
  - Classroom testing
  - Attendance
  - Checklists of requirements
  - Pre and post testing

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