

Covington Academy of Heritage Trades Curriculum

Based on all the input from the community and beyond, we have determined that the best approach to crafting the Covington Academy of Heritage Trades (CAHT) is to design it as a workshop-based school.

Initially the subjects to be taught include: Preservation Masonry; Wood & Steel Window Restoration & Weatherization; Plaster Repair; Preservation Carpentry; Wood Floor Repair & Restoration; Painting Historic Properties; Stained Glass Repair & Restoration; Box Gutter Repair & Restoration; HVAC for Old and Historic Buildings; Plumbing for Old and Historic Buildings; Electrical for Old and Historic Buildings. As time goes on other disciplines may be added as community needs arise.

In our conversations with local preservation developers, their needs are to train up new and in-house carpenters, masons, concrete flatwork workers, box gutter specialists as well as training small contractors to perform these trades as subcontractors.

Through our research we've determined there are basically four types of students for this endeavor.

- 1) Workshops for specific trades designed for unskilled, underserved people looking to be employed in the field.
- 2) Workshops for people skilled or unskilled wanting to be in business of restoration for themselves.
- 3) Workshops for small contractors already in the trades who want to add restoration to the portfolio of work they do.
- 4) Workshops designed specifically for existing contractor's employees

The purpose of this Curriculum is to establish how the school would be operating once all the funding is in place and you can hire an Executive Director to oversee all the elements involved, in concert with Enzweiler.

For the first year, you can opt to deliver Workshops at any level that works. Mixing and matching different workshops, described below, is acceptable the first year. If done this way the first year, an interim Certificate could be awarded that would go toward the required Workshops in each discipline

Many of these of students may not know which trade they want to pursue. Workshops for these students should start out with some basics.

A) Beginning

- One-day Orientation for Potential Students. Run them through a PowerPoint on how the school operates, the directions they can take and tour them through the Enzweiler Building Institute facility. They can then be counselled on which of the two or both, *B) Deciding which Trade to Pursue*, options.

- Every student who has not been certified in lead paint management must take a one-day EPA approved RRP (Lead Renovation, Repair & Painting) class to learn how to manage lead paint and receive an EPA Certification/License. At Enzweiler.

B) Deciding Which Trade to Pursue

- **Option One:** Three-day workshop at the city owned or a private project house that includes: Masonry Restoration Basics; Plaster Restoration Basics; Exterior Painting of Historic Properties Basics. By the end of this workshop, students should pick the trade they'd like to pursue. There could be one instructor who knows all three disciplines or several depending on who's available.
- **Option Two:** Three-day workshop at the city owned or a private project house that includes: Preservation Carpentry Basics; Window Restoration Basics; Wood Floor Repair & Restoration Basics. By the end of this workshop, students should pick the trade they'd like to pursue. There could be one instructor who knows all three disciplines or several depending on who's available.

Once an unskilled and/or undecided student has picked the trade that interests them, they would be required to take all the workshops in that discipline to obtain a Certificate of Competency and pursue employment.

NOTE: For students in 3) or 4), that are already in the trades, the asterisk (*) Workshops in each discipline are required to obtain a Certificate of Competence.

From an instructor standpoint, the good news is that CAHT will hire professionals to teach each workshop on a fee basis. They would be required to provide all tools, equipment and materials to start out with. CAHT or the property owner would be required to provide funding for the materials to the instructor. The instructor would provide the costs for these materials four weeks in advance of the workshop. The instructors would need to be interviewed in person to assure they follow the Secretary of the Interior's Standards for Rehabilitation, safety regulations & best practices for each trade. The instructor would then be required to submit an outline of how they will teach the class.

Teaching can be a bit messy, so I do not recommend doing the first workshops in or on a home that is occupied. It is infinitely better to have a vacant, historic structure with some electricity and a porta potty (could be a bathroom close by as well) in the first half of most of these trade discipline workshops.

Historic Masonry Restoration Certificate Program

• *Masonry, Best Practices in Preservation	One-Day Classroom
• Jobsite Setup and Safety	One-Day Field
• *Assessing Historic Masonry	One-Day Field
• *Re-pointing Historic Masonry- Brick	Three-Day Field
• Re-pointing Historic Masonry- Brick	Three-Day Field
• *Re-pointing Historic Masonry- Stone	Three-Day Field
• Re-pointing Historic Masonry- Stone	Three-Day Field
• Relaying Historic Masonry	Three-Day Field
• Retaining Wall Restoration- Stone	Three-Day Field
• *Removing Paint from Historic Brick & Stone	Three-Day Field
• *Cleaning Historic Masonry	<u>Three-Day Field</u>
	27 Days, 216 Hours
	(* = 14 Days, 112 Hours)

Note: The instructor is to submit an outline for each workshop that describes, in detail, what will be accomplished. For each workshop, the instructor will evaluate each student on a pass/fail basis. If a student fails to show basic competency, they are required to take the workshop in question again. Students must pass by showing competence to be awarded a "Certificate of Competency in Historic Masonry". You will need to create a pass/fail form for the instructor to submit on each student at the end of each workshop.

Historic Plaster Restoration Certificate Program

• *Plaster, Best Practices in Preservation	One-Day Classroom
• Jobsite Setup and Safety	One-Day Field
• *Assessing Historic Plaster- Flat & Decorative	One-Day Field
• *Historic Plaster Crack & Hole Repair	Three-Day Field
• Historic Plaster Crack & Hole Repair	Three-Day Field

- *Historic Plaster Flatwork Three-Day Field
- Historic Plaster Flatwork Three-Day Field
- *Decorative Plaster Repair & Restoration Three-Day Field
- *Decorative Plaster Repair & Restoration Three-Day Field
21 Days, 168 Hours
(* = 14 Days, 112 Hours)

Note: The instructor is to submit an outline for each workshop that describes, in detail, what will be accomplished. For each workshop, the instructor will evaluate each student on a pass/ fail basis. If a student fails to show basic competency, they are required to take the workshop in question again. Students must pass by showing competence to be awarded a "Certificate of Competency in Historic Plaster". You will need to create a pass/fail form for the instructor to submit on each student at the end of each workshop.

Exterior Painting of Historic Properties Certificate Program

- *Exterior Painting, Best Practices in Preservation One-Day Classroom
- Jobsite Setup and Safety One-Day Field
- *Assessing Historic Exterior Paint & Wood One-Day Field
- *Paint Removal for Historic Exteriors Three-Day Field
- Paint Removal for Historic Exteriors Three-Day Field
- *Exterior Wood Repair for Historic Exteriors Three-Day Field
- *Prepping Historic Exteriors for Paint Three-Day Field
- Prepping Historic Exteriors for Paint Three-Day Field
- *Priming & Caulking Historic Exteriors Three-Day Field & Class
- *Applying Topcoats to Historic Exteriors Three-Day Field
24 Days, 192 Hours
(* = 17 Days, 136 Hours)

Note: The instructor is to submit an outline for each workshop that describes, in detail, what will be accomplished. For each workshop, the instructor will evaluate each student on a pass/fail basis. If a student fails to show basic competency, they are required to take the workshop in question again. Students must pass by showing competence to be awarded a “Certificate of Competency in Exterior Painting of Historic Properties “. You will need to create a pass/fail form for the instructor to submit on each student at the end of each workshop.

Preservation Carpentry Certificate Program

• *Preservation Carpentry, Best Practices	One-Day Classroom/Shop
• Jobsite Setup and Safety	One-Day Shop
• *Building Codes for Carpentry	One-Day Shop
• *Tool & Machine Usage	Two-Day Shop
• *Identifying Wood Species	One-Day- Shop
• *Understanding Historic Carpentry Techniques	Two-Day Shop & Field
• *Repairing Existing Historic Framing	Three-Day Field
• New Framing in Historic Properties	Three-Days Field/Shop
• *Trim Carpentry for Historic Properties	Three-Day Field & Shop
• Trim Carpentry for Historic Properties	Three-Day Field & Shop
• *Sources for and Reproducing Historic Trim	<u>Three-Day Shop</u>
	23 Days, 184 Hours
	(* = 16 Days, 128 Hours)

Note: The instructor is to submit an outline for each workshop that describes, in detail, what will be accomplished. For each workshop, the instructor will evaluate each student on a pass/fail basis. If a student fails to show basic competency, they are required to take the workshop in question again. Students must pass by showing competence to be awarded a “Certificate of Competency in Preservation Carpentry“. You will need to create a pass/fail form for the instructor to submit on each student at the end of each workshop.

Window Restoration & Weatherization Certificate Program

• *Window Restoration, Best Practices	One-Day Class/Shop
• *Workshop Setup and Safety	One-Day Shop
• *Jobsite Setup and Safety	One-Day Field
• *Anatomy of a Window & Building Code for Windows	One-Day Shop
• *Tool & Machine Usage	Two-Day Shop
• *Assessing Historic Windows-Wood	One-Day Field
• *Assessing Historic Windows-Steel	One-Day Field
• *Removing Wood Windows & Securing the Opening	One-Day Field
• *Repairing, Restoring & Weatherizing Wood Sash & Parts	Three-Day Shop
• *Repairing, Restoring & Weatherizing Wood Sash & Parts	Three-Day Shop
• *Repairing & Restoring Existing Wood Window Jambs	Three-Day Field
• *Repairing & Restoring Steel Casement Windows in Place	Three-Days Field
• *Repairing & Restoring Steel Casement Windows in Place T	Three-Days Field
• *Re-installing Wood Windows Sash with Weather Stripping	<u>Three-Days Field</u> 27 Days, 216 Hours (* = 27 Days, 216 Hours)

Note: The instructor is to submit an outline for each workshop that describes, in detail, what will be accomplished. For each workshop, the instructor will evaluate each student on a pass/ fail basis. If a student fails to show basic competency, they are required to take the workshop in question again. Students must pass by showing competence to be awarded a "Certificate of Competency in Window Restoration & Weatherization ". You will need to create a pass/fail form for the instructor to submit on each student at the end of each workshop.

Wood Floor Repair & Restoration Certificate Program

• *Wood Flooring, Best Practices	One-Day Classroom/Shop
• Workshop Setup and Safety	One-Day Shop
• Jobsite Setup and Safety	One-Day Field
• Tool & Machine Usage	Two-Day Shop
• *Anatomy of Wood Flooring & Building Codes	One-Day Shop
• *Identifying Wood Species	One-Day Shop
• *Assessing Historic Wood Floor Conditions	One-Day Field
• *Removing Finish from Wood Flooring	Three-Day Field
• *Patching & Repair of Wood Flooring	Three-Day Field
• *Applying Finishes to Wood Flooring	<u>Three-Day Field</u>
	17 Days, 136 Hours
	(* = 13 Days, 104 Hours)

Note: The instructor is to submit an outline for each workshop that describes, in detail, what will be accomplished. For each workshop, the instructor will evaluate each student on a pass/fail basis. If a student fails to show basic competency, they are required to take the workshop in question again. Students must pass by showing competence to be awarded a "Certificate of Competency in Wood Floor Repair & Restoration ". You will need to create a pass/fail form for the instructor to submit on each student at the end of each workshop.

Box Gutter Repair & Restoration Certificate Program

▪ *Box Gutter Repair & Restoration- Best Practices	One-Day Classroom/Shop
▪ OSHA Safety & Requirements	One-Day Classroom/Shop
▪ *Working with Copper & Terne Metal	One-Day Classroom/Shop
▪ *Soldering	One-Day Classroom/Shop
▪ *Creating a Box Gutter Example-Wood & Metal	Two-Day Classroom/Shop
▪ Jobsite Setup and Safety- Scaffolding & Lifts etc.	One-Day Field

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| ▪ *Repairing an Existing Box Gutter | Two-Days Field |
| ▪ *Complete Rebuilding of a Box Gutter-Wood Portion | Two-Days Field |
| ▪ *Complete Rebuilding of a Box Gutter-Wood Portion | Two-Days Field |
| ▪ *Relining the Repaired Wooden Portion of a Box Gutter | Two-Days Field |
| ▪ *Relining the Repaired Wooden Portion of a Box Gutter | <u>Two-Days Field</u>
17 Days, 136 Hours
(*= 15 Days, 120 Hours) |

Note: The instructor is to submit an outline for each workshop that describes, in detail, what will be accomplished. For each workshop, the instructor will evaluate each student on a pass/fail basis. If a student fails to show basic competency, they are required to take the workshop in question again. Students must pass by showing competence to be awarded a “Certificate of Competency in Box Gutter Repair and Restoration “. You will need to create a pass/fail form for the instructor to submit on each student at the end of each workshop.

Stained & Decorative Glass Repair & Restoration

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| • *History, Best Practices & Safety for Stained Glass | One-Day Classroom/Shop |
| • *Introduction to Glass & Lead Caming | One-Day Classroom/Shop |
| • *Identifying Issues with Old & Historic Stained Glass | One-Day Classroom/Shop |
| • *Removing Leaded Glass Windows from Structures | One Day-Field |
| • *Making Small Repairs-Glass, Grouting & Soldering | Two-Days Classroom/Shop |
| • *Major Restoration of Stained & Decorative Leaded Glass | Three-Days Classroom/Shop |
| • *Major Restoration of Stained & Decorative Leaded Glass | Three-Days Classroom/Shop |
| • *Major Restoration of Stained & Decorative Leaded Glass | Three-Days Classroom/Shop |
| • Safe Paint Removal from Wooden Sashes & Stops | One-Day-Classroom/Shop |
| • Repairing Wooden Sashes-Repairing Rot, Setting Glass | Two-Days-Classroom/Shop |
| • Re-Installing Leaded Glass Windows in Structures | <u>One-Day-Field</u>
19 Days- 152 Hours
(*= 15 Days- 120 Hours) |

Note: The instructor is to submit an outline for each workshop that describes, in detail, what will be accomplished. For each workshop, the instructor will evaluate each student on a pass/fail basis. If a student fails to show basic competency, they are required to take the workshop in question again. Students must pass by showing competence to be awarded a “Certificate of Competency in Stained & Decorative Glass Repair & Restoration”. You will need to create a pass/fail form for the instructor to submit on each student at the end of each workshop.

HVAC for Old & Historic Buildings (For employees of HVAC companies)

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| ▪ Mechanical & Energy Codes for HVAC in Historic Properties | Two-Days-Classroom/Shop |
| ▪ Historic Construction Techniques-Framing & Masonry | One-Day-Shop & Field |
| ▪ Working With & Around Historic Materials-Plaster & Wood etc. | One-Day-Field |
| ▪ Calculating HVAC for Historic Properties-Furnace, AC & Ducting | One-Day-Classroom/Shop |
| ▪ Determining the Best System- Forced Air, Hot Water, Steam, High Pressure/High Velocity, Geothermal, Zoning etc. | One-Day-Classroom/Shop |
| ▪ Adding Air Conditioning with an Existing Heating System | <u>One-Day-Shop & Field</u>
7 Days- 56 Hours |

Note: The instructor is to submit an outline for each workshop that describes, in detail, what will be accomplished. For each workshop, the instructor will evaluate each student on a pass/fail basis. If a student fails to show basic competency, they are required to take the workshop in question again. Students must pass by showing competence to be awarded a “Certificate of Competency in HVAC for Old & Historic Buildings”. You will need to create a pass/fail form for the instructor to submit on each student at the end of each workshop.

Plumbing for Old & Historic Buildings (For Employees of Plumbing Companies)

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| Plumbing Codes & How They Relate to Historic Properties | One-Day-Classroom/Shop |
| Historic Construction Techniques-Framing & Masonry | One-Day-Shop & Field |
| Working With & Around Historic Materials-Plaster, Wood & Masonry, Tile, etc. | One-Day-Field |

Working with Existing & New Waste Systems-Cast, Copper & PVC

Two-Days-Shop & Field

Working with Existing & New Supply Lines-PEX, Copper & PVC

Two-Days-Shop & Field
7 Days- 56 Hours

Note: The instructor is to submit an outline for each workshop that describes, in detail, what will be accomplished. For each workshop, the instructor will evaluate each student on a pass/fail basis. If a student fails to show basic competency, they are required to take the workshop in question again. Students must pass by showing competence to be awarded a "Certificate of Competency in Plumbing for Old & Historic Buildings". You will need to create a pass/fail form for the instructor to submit on each student at the end of each workshop.

Electrical Work for Old and Historic Buildings (For Employees of Electrical Companies)

Electrical Codes & How They Relate to Historic Properties

One-Day-Classroom/Shop

Historic Construction Techniques-Framing & Masonry

One-Day-Shop & Field

Calculating Electrical Needs for Historic Properties

One-Day-Classroom/Shop

Working With & Around Historic Materials-Fishing Through Plaster, Framing & Masonry, Tile, etc.

Two-Days-Shop & Field
5 Days-40 Hours

Note: The instructor is to submit an outline for each workshop that describes, in detail, what will be accomplished. For each workshop, the instructor will evaluate each student on a pass/fail basis. If a student fails to show basic competency, they are required to take the workshop in question again. Students must pass by showing competence to be awarded a "Certificate of Competency in Electrical Work for Old & Historic Buildings". You will need to create a pass/fail form for the instructor to submit on each student at the end of each workshop.

Students fitting into 2) and wanting to start their own business must also take the following Workshops:

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| • Introduction to Managing a Small Contracting Business | One-Day Classroom |
| • Accounting and the IRS | One-Day Classroom |
| • Contracts for Small Business | One-Day Classroom |
| • Customer Relations & Marketing | One-Day Classroom |