# ILM Publishing Report 2022: Plumber

## Quality Assurance (QA) Maintenance Summary

The ILM office held a total of 23 QA Meetings in the 2021/22 academic year, which included over 90 attendees from 8 different institutions across Alberta. With support and feedback from these individuals, we were able to address and resolve over 700 maintenance comments across all ILM trades! We want to acknowledge each of the Programs and instructors that dedicated their time and effort to supporting this important maintenance work and express our gratitude for your support in our continuous improvement of ILM content for students and learners.

For Plumber, there were 14 modules updated due to QA meeting maintenance, and a total of 29 maintenance comments were addressed. As part of this year’s ILM maintenance process, there were also a number of images and graphics within the ILMs reverted to a previous version. After significant consultation/feedback with Programs and stakeholders, the quality and accuracy of images and graphics from previous ILM versions was identified as being important for student learning and success. The *Maintenance Updates* column in the Module List section below indicates modules where this has occurred.

For more information on the ILM Comments and Maintenance process, please visit our website:

* ILM Maintenance: <https://ilm.nait.ca/ilm-maintenance>
* Comments: <https://ilm.nait.ca/comments>

QA Maintenance meeting dates for the 2022/23 academic year will be finalized and shared in September 2022.

## Content Development Projects

#### Common First Period Pipe Trades

This release only includes the *Plumber* modules. The Common First Period Pipe Trades modules, used for Plumber First Period (as well as Gasfitter, Steamfitter/Pipefitter, and Sprinkler Systems Installer), were part of a 2021/22 content development project and will be released as a separate Trade. We will send an email notification to the appropriate stakeholders once the CFP products are live.

#### Plumber Period 2

The Plumber Period 2 content development project is complete. The outcomes, learning objectives and related content in the newly updated Version 24 ILMs for second period are now aligned to the current Alberta course outline. As part of our commitment to continuous improvement, we encourage you to utilize the above ILM Comments page to provide feedback on the new modules. The updated module numbers and names are listed in the Second Period table below.

As part of this update, the old Period 1 and Period 2 modules for Plumber will no longer be available to order from the ILM website. We recognize some of the content in these older modules may still be needed to address content gaps in Period 3 and Period 4, within both Plumber and other trades. If your Program determines, after reviewing the updated Period 2 content, that you may still require access to discontinued Period 1 and Period 2 modules, please contact the ILM office directly ([ilm@nait.ca](mailto:ilm@nait.ca)). We can provide instructor-only, digital PDFs for these older modules over the next year until we have completed development of the new Period 3 and Period 4 module sets.

#### Plumber Period 3 and Period 4

Plumber Period 3 and Period 4 modules are scheduled to be updated as part of a 2022/23 content development project. The tentative timeline for completion of this project is May 2023.

## Brand Refresh

The 2022 ILM publication includes a brand refresh for all (English) ILM files. This brand refresh only impacts the style/format of ILM products. It does not impact the content within the ILMs. Changes for each ILM product type include updates to the front and back covers of ILM files, ILM Graphics PowerPoint template, and both student and instructor Digital ILM templates.

## Module List

\*Maintenance updates include image/graphic updates, addressing of website comments, and changes identified at annual Quality Assurance meetings.

### First Period

n/a – see previous info on CFP

### Second Period (new course outline alignment)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Module Number** | **Module Name** | **New Version**1 | **Module Re-development** | **Rebrand Updates** |
| 060201abA | Drainage and Venting Systems: Part A | 24.0 | ✓ | ✓ |
| 060201abB | Drainage and Venting Systems: Part B | 24.0 | ✓ | ✓ |
| 060201abC | Drainage and Venting Systems: Part C | 24.0 | ✓ | ✓ |
| 060201c | Water Distribution | 24.0 | ✓ | ✓ |
| 060201d | Plumbing Fixtures | 24.0 | ✓ | ✓ |
| 060202a | Temperature and Heat Science | 24.0 | ✓ | ✓ |
| 060202b | Expansion and Contraction Control | 24.0 | ✓ | ✓ |
| 060202c | Heat Transfer Equipment | 24.0 | ✓ | ✓ |
| 060202d | Temperature and Heat Calculations | 24.0 | ✓ | ✓ |
| 060202e | Heat Loss Calculations | 24.0 | ✓ | ✓ |
| 060202f | Heat Emission Units | 24.0 | ✓ | ✓ |
| 060202g | Buoyancy | 24.0 | ✓ | ✓ |
| 060203a | Hydronic Heating Systems | 24.0 | ✓ | ✓ |
| 060203b | Hydronic Heating Boilers | 24.0 | ✓ | ✓ |
| 060203c | Boiler Trim | 24.0 | ✓ | ✓ |
| 060203dA | Circulators: Part A | 24.0 | ✓ | ✓ |
| 060203dB | Circulators: Part B | 24.0 | ✓ | ✓ |
| 060203e | Hydronic Heating and Cooling Systems | 24.0 | ✓ | ✓ |
| 060203f | Mechanical Ventilation | 24.0 | ✓ | ✓ |
| 060204a | Plastic and Lined Piping | 24.0 | ✓ | ✓ |
| 060204b | Fiberglass Piping | 24.0 | ✓ | ✓ |
| 060204c | Iron and Glass Piping | 24.0 | ✓ | ✓ |
| 060204d | Alloy Piping | 24.0 | ✓ | ✓ |
| 060204e | Medical Gas Piping | 24.0 | ✓ | ✓ |
| 060204f | Specialty Pipe Joining | 24.0 | ✓ | ✓ |
| 060204g | Hot Tapping and Freeze Isolation | 24.0 | ✓ | ✓ |
| 060204h | Compressed Air Systems | 24.0 | ✓ | ✓ |
| 060205a | Trigonometry | 24.0 | ✓ | ✓ |
| 060205b | Multiple Pipe Offsets | 24.0 | ✓ | ✓ |
| 060205c | Orthographic Projections | 24.0 | ✓ | ✓ |
| 060205d | Piping Isometrics | 24.0 | ✓ | ✓ |
| 060205e | Drawing Specifications | 24.0 | ✓ | ✓ |
| 060205f | Drawing Views | 24.0 | ✓ | ✓ |
| 060205gA | Grades and Elevations: Part A | 24.0 | ✓ | ✓ |
| 060205gB | Grades and Elevations: Part B | 24.0 | ✓ | ✓ |
| 060205hA | Rigging: Part A | 24.0 | ✓ | ✓ |
| 060205hB | Rigging: Part B | 24.0 | ✓ | ✓ |

### Third Period

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Module Number** | **Module Name** | **New Version**1 | **Maintenance Updates\*** | **Rebrand Updates** |
| 060301a | Residential Drainage Waste and Vents Including Subsoil Sumps and Backwater Valves | 24.0 |  | ✓ |
| 060301b | Commercial Floor Drains Gang Showers Washing Machines and Circular Rainwater Leaders | 24.0 | ✓ | ✓ |
| 060301c | Island Vents Vent Stacks and Yoke Vents Between DWV Stacks | 24.0 | ✓ | ✓ |
| 060301d | Commercial Circuit Venting | 24.0 | ✓ | ✓ |
| 060301e | Specialty Water Distribution Control Valves and Equipment | 24.0 | ✓ | ✓ |
| 060301f | Potable Water Distribution Systems | 24.0 |  | ✓ |
| 060301g | Water Heating Appliances and Hot Water Recirculation | 24.0 | ✓ | ✓ |
| 060301h | Pressure-Reducing Valves and Booster Pumps | 24.0 | ✓ | ✓ |
| 060301i | Faucets and Flushometers | 24.0 |  | ✓ |
| 060301j | Plumbing Fixtures | 24.0 | ✓ | ✓ |
| 060301kA | Cross-Connection Control Awareness: Part A | 24.0 | ✓ | ✓ |
| 060301kB | Cross-Connection Control Awareness: Part B | 24.0 |  | ✓ |
| 060302a | Hydronic Radiant Heating and Heat Loss Calculations | 24.0 | ✓ | ✓ |
| 060302bA | Introduction to Hydronic Radiant Heating Design: Part A | 24.0 | ✓ | ✓ |
| 060302bB | Introduction to Hydronic Radiant Heating Design: Part B | 24.0 | ✓ | ✓ |
| 060302c | Boiler Start-Up and Servicing | 24.0 | ✓ | ✓ |
| 060303a | Sizing Vents and Chimneys | 24.0 | ✓ | ✓ |
| 060303b | Air Supply | 24.0 | ✓ | ✓ |
| 060303c | Domestic Gas Fired Appliances | 24.0 | ✓ | ✓ |
| 060303d | Basic Electricity for Gas Appliances and Controls | 24.0 | ✓ | ✓ |
| 060303e | Electrical Circuits for Domestic Gas Appliances and Gas Controls | 24.0 | ✓ | ✓ |
| 060303f | Gas and Electrical Controls | 24.0 | ✓ | ✓ |
| 060303g | Propane Cylinders and Vaporization | 24.0 | ✓ | ✓ |
| 060304a | Volumes Capacities and Surface Areas | 24.0 | ✓ | ✓ |
| 060304b | Square Roots Piping Offsets and Fitting Allowance | 24.0 | ✓ | ✓ |
| 060304c | Fixture Spacing | 24.0 |  | ✓ |
| 060304dA | Grades and Elevations: Part A | 24.0 | ✓ | ✓ |
| 060304dB | Grades and Elevations: Part B | 24.0 | ✓ | ✓ |
| 060304e | Residential DWV Sketching | 24.0 | ✓ | ✓ |
| 060304f | Commercial DWV Sketching and Drawing | 24.0 | ✓ | ✓ |
| DP060304g | Applied Blueprint Reading | 24.0 | ✓ | ✓ |

### Fourth Period

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Module Number** | **Module Name** | **New Version**1 | **Maintenance Updates\*** | **Rebrand Updates** |
| 060401a | Introduction to Private Water Supply Systems | 24.0 | ✓ | ✓ |
| 060401b | Pumps for Private Water Supply Systems | 24.0 | ✓ | ✓ |
| 060401c | Private Water Supply Pressure System Components | 24.0 |  | ✓ |
| 060401d | Private Water Supply Pressure System Sizing | 24.0 | ✓ | ✓ |
| 060401e | Introduction to Water Treatment | 24.0 |  | ✓ |
| 060401f | Impurities in Water | 24.0 | ✓ | ✓ |
| 060401gA | Methods of Treatment and Equipment Installation: Part A | 24.0 | ✓ | ✓ |
| 060401gB | Methods of Treatment and Equipment Installation: Part B | 24.0 | ✓ | ✓ |
| 060401h | Introduction to Private Sewage Disposal Systems | 24.0 | ✓ | ✓ |
| 060402a | Sustainable Technologies | 24.0 | ✓ | ✓ |
| 060402b | Introduction to Residential Fire Sprinkler Systems | 24.0 | ✓ | ✓ |
| 060402c | Wet Standpipe and Dry Standpipe Fire Lines | 24.0 | ✓ | ✓ |
| 060402dA | Swimming Pools and Spas: Part A | 24.0 | ✓ | ✓ |
| 060402dB | Swimming Pools and Spas: Part B | 24.0 | ✓ | ✓ |
| 060402e | Compressed Air Systems | 24.0 | ✓ | ✓ |
| 060402f | Medical Gas Piping | 24.0 | ✓ | ✓ |
| 060402g | Lawn Irrigation | 24.0 | ✓ | ✓ |
| 060402h | Hot Tapping and Freeze Isolation | 24.0 | ✓ | ✓ |
| 060403a | Interceptors and Indirect Wastes | 24.0 |  | ✓ |
| 060403b | Sewage Sumps Receiving Tanks and Dumping Stations | 24.0 | ✓ | ✓ |
| 060403c | DWV Water Distribution and Fixtures for Residential Installation | 24.0 | ✓ | ✓ |
| 060403d | Specialty Plumbing Fixtures | 24.0 | ✓ | ✓ |
| 060403e | Commercial Equipment Installation | 24.0 | ✓ | ✓ |
| 060404a | Low-Pressure Gas Line Layout Including Venting and Air Supply | 24.0 | ✓ | ✓ |
| 060404b | 2-PSI Gas Line Layout | 24.0 | ✓ | ✓ |
| 060404c | Customer Bulk Storage Tank Installation and Vaporizers | 24.0 | ✓ | ✓ |
| 060404d | Additional Vents | 24.0 | ✓ | ✓ |
| 060404e | Mid-Efficiency and High-Efficiency Gas-Fired Appliances | 24.0 | ✓ | ✓ |
| 060404f | Electrical Circuits and Controls for Commercial Gas Appliances | 24.0 |  | ✓ |
| 060404g | Combustion Analysis and Heat Exchanger Testing | 24.0 | ✓ | ✓ |
| 060405a | Trade Math and Science | 24.0 | ✓ | ✓ |
| 060405b | Schematics and Waterline Sketching | 24.0 | ✓ | ✓ |
| 060405c | Commercial Kitchen Layout and Barrier-Free Washroom Design | 24.0 | ✓ | ✓ |
| 060405d | Job Estimating | 24.0 | ✓ | ✓ |
| 060405f | Workplace Coaching Skills | 24.0 | ✓ | ✓ |
| 060405g | Alberta’s Industry Network | 24.0 | ✓ | ✓ |
| 060405h | Interprovincial Standards Red Seal Program | 24.0 | ✓ | ✓ |
| DP060405e | Blueprint Package | 24.0 | ✓ | ✓ |

### Additional Modules

n/a