



Correlation of
Modern Refrigeration and Air Conditioning, by Althouse, Turnquist, Bracciano
(Goodheart-Willcox Publisher ©2021)
to
AHRI Curriculum Guide: XXIII. Regulations

The following chart correlates the *Modern Refrigeration and Air Conditioning* textbook (©2021) to a section of the Curriculum Guide developed by Air-Conditioning, Heating, and Refrigeration Institute (AHRI) and used for PAHRA accreditation.

The chart lists the Curriculum Guide’s knowledge and task competency objectives and the corresponding chapter numbers from *Modern Refrigeration and Air Conditioning*.

For more information on the Partnership for Air-Conditioning, Heating, Refrigeration Accreditation (PAHRA) and related accreditation, please visit: www.pahrahvacr.org



| XXIII.A. Codes and Standards | |
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| Knowledge | Textbook Chapter(s) |
| 1. Describe the reasons for codes. | Chapters 1, 8, 9, 10, 13, 15, 16, 17, 18, 22, 23, 28, 29, 30, 31, 32, 33, 41, 52, Appendix |
| 2. Describe the three model codes: | |
| a. Building Officials and Code Administrators (BOCA), National Mechanical Code | |
| b. Southern Building Code Congress International (SBCCI), Standard Mechanical Code | |
| c. International Conference of Building Officials (ICBO), Uniform Mechanical Code | |
| 3. Identify the codes and standards for the applicable area, locality, and state. | Chapters 9, 13, 15, 16, 41, 52 |
| 4. Discuss the relationship between codes and manufacturers’ installation instructions. | Chapters 9, 13, 15, 16, 41, 52, Appendix |

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| XXIII.A. Codes and Standards (continued) | |
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| Knowledge | Textbook Chapter(s) |
| 5. Identify pertinent standards published by the following organizations: | |
| a. AGA | Chapter 41 |
| b. AMCA | Chapter 29 |
| c. ANSI | Chapters 9, 23, 41, Appendix |
| d. ARI | Chapters 2, 10, 11, 33, 36, 37, Appendix |
| e. ASHRAE | Chapters 2, 9, 23, 27, 28, 29, 37, 41, 45, 47, 50, 52, 53, Appendix |
| f. IEC | |
| g. ISO | Chapter 7 |
| h. SMACNA | Chapter 29 |
| i. UL | Chapters 9, 16, Appendix |
| XXIII.B. Regulations Affecting Ozone Depletion | |
| Knowledge | Textbook Chapter(s) |
| 1. Explain ozone depletion. | Chapters 9, 28, Appendix |
| 2. Explain significance of the Montreal Protocol. | Chapter 9, Appendix |
| 3. Explain significance of the Clean Air Act. | Chapters 9, 10, Appendix |
| 4. Explain EPA requirements: | |
| a. technician certification | Chapter 1, Appendix |
| b. refrigerant recover, recycle, and reclaim | Chapters 1, 9, 10, 11, Appendix |
| c. disposal of systems | Chapter 1, Appendix |
| d. labeling | Chapter 1, Appendix |
| e. shipping | Chapter 1, Appendix |
| f. leak detection | Chapters 1, 10, 11, Appendix |
| g. Significant New Alternatives Policy Program (SNAP) | Chapters 1, 9, Appendix |
| h. Recordkeeping | Chapter 1, Appendix |
| 5. Know Department of Transportation (DOT) requirements concerning transportation of refrigerants. | Chapters 9, 10, 55, Appendix |
| 6. Determine if refrigerant container is DOT-approved and whether it needs to be retested. | Chapters 9, 10, 55, Appendix |
| 7. Determine if recovery/recycle equipment is certified and meets requirements. | Chapters 9, 10, 11, Appendix |

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| XXIII.B. Regulations Affecting Ozone Depletion (continued) | |
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| Tasks | Textbook Chapter(s) |
| 1. Dispose of empty nonrefillable cylinders. | Chapters 9, 10, 11, Appendix |
| 2. Use recovery equipment and prepare system for disposal. | Chapters 9, 10, 11, Appendix |
| 3. Obtain federal EPA technician certification. | Chapter 9, Appendix |
| XXIII.C. Other Regulations | |
| Knowledge | Textbook Chapter(s) |
| 1. Explain global warming. | Chapter 9 |
| 2. Know OSHA work rules. | Chapters 9, 28 |
| 3. Explain indoor air quality (IAQ) standards (ASHRAE Std. 62). | Chapters 27, 28, 29 |
| 4. Explain impact of state and local codes on system application and retrofit. | Chapters 9, 10, 52, Appendix |
| 5. Explain proper disposal of oil, components, and other materials. | Chapters 9, 10, Appendix |
| 6. Explain state and local licensing requirements. | Chapters 9, 10, Appendix |
| 7. Explain DOT regulations. | Chapters 9, 10, Appendix |