Correlation of

Modern Refrigeration and Air Conditioning, **Althouse, Turnquist, Bracciano**
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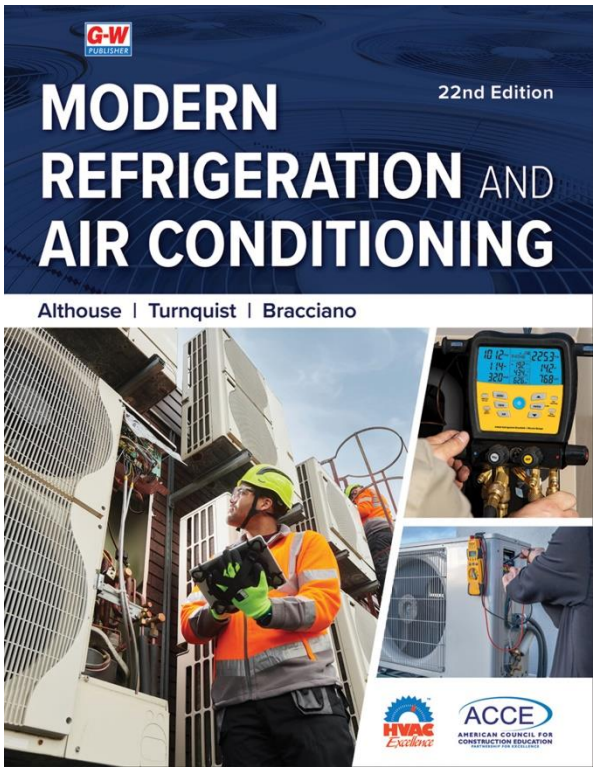
to
AHRI Curriculum Guide XX. Refrigerant Recovery

Goodheart-Willcox is pleased to partner with the Air-Conditioning, Heating, and Refrigeration Institute (AHRI) and the American Council for Construction Education (ACCE) by correlating *Modern Refrigeration and Air Conditioning* to the AHRI Curriculum Guide. The following chart correlates *Modern Refrigeration and Air Conditioning* to a section of the Curriculum Guide developed by AHRI used for ACCE (formerly PAHRA) accreditation.

The chart lists the Curriculum Guide's knowledge and task competency objectives in the left column and the corresponding chapter numbers from *Modern Refrigeration and Air Conditioning* in the right column.

For more information on the American Council for Construction Education (ACCE) and related accreditation, please visit:
www.acce-hq.org



XX.A. Introduction	
Knowledge	**Textbook Chapter(s)**
1. Describe the environmental issues regarding refrigerant, including legislation, protocol, laws, and regulations.	Chapter 10, Appendix F
2. Describe the basic refrigerant cycle.	Chapters 8, 10, 22, 23
3. Determine proper evacuation levels and leak rates.	Chapters 11, 12
4. Identify three different types of technician certification.	Chapter 1, Appendix F

XX.B. Safety	
Knowledge	**Textbook Chapter(s)**
1. Describe the problems associated with mixing of refrigerants.	Chapters 10, 11, 12
2. Describe the methods of determining when a recovery cylinder is full.	Chapters 11, 12
3. Describe the problems associated with component isolation where unsafe hydrostatic pressures can occur.	Chapters 10, 45, 49
4. Describe the problems associated with contaminants left in a refrigerant system after recovery.	Chapters 10, 21, 48, 49, 51
XX.C. Refrigerant Recovery, Recycling, and Reclamation Methods	
Knowledge	**Textbook Chapter(s)**
1. Describe how to manually pump down a system.	Chapters 12, 50
2. Describe how to isolate system components.	Chapters 11, 12, 50
3. Describe system dependent and self-contained recovery equipment.	Chapters 11, 12
4. Describe the push-pull method.	Chapters 11, 12
5. Describe the difference between recycled and reclaimed refrigerant.	Chapters 11, 12
6. Explain options in Industry Recycling Guideline (IRG-2).	Chapters 10, 11, 12
Tasks	**Textbook Chapter(s)**
1. List the advantages/disadvantages and application of liquid and vapor recovery.	Chapters 11, 12, 50
2. List methods for decreasing recovery time.	Chapters 11, 12, 50
XX.D. Refrigerant Recovery, Recycling, and Reclamation Equipment	
Knowledge	**Textbook Chapter(s)**
1. Identify proper equipment for a particular job.	Chapters 4, 5, 10, 11, 12, 21, 48, 49, 50
2. Describe procedures for recovering multiple refrigerants with the same recovery unit.	—
3. Describe maintenance and efficiency testing procedures for recovery units.	Chapters 10, 11, 12
4. Describe maintenance and testing for refrigerant recovery cylinders.	Chapters 10, 11, 12
5. Identify recovery cylinders.	Chapters 10, 11, 12
6. Explain when to change filter-driers in recycling equipment.	Chapters 10, 11, 12

XX.D. Refrigerant Recovery, Recycling, and Reclamation Equipment (continued)	
Knowledge	**Textbook Chapter(s)**
7. Explain methods of purging non-condensables when recycling.	Chapters 10, 11, 12
8. Identify type of refrigerant in a given recovery cycle.	Chapters 10, 11, 12
Tasks	**Textbook Chapter(s)**
1. Perform procedures for recovery.	Chapters 12, 50
2. Perform procedures for recycling.	Chapters 12, 50
3. Perform maintenance on a recovery machine.	Chapter 12
4. Connect and operate recovery equipment.	Chapters 12, 50