Correlation of

Modern Refrigeration and Air Conditioning, **Althouse, Turnquist, Bracciano**
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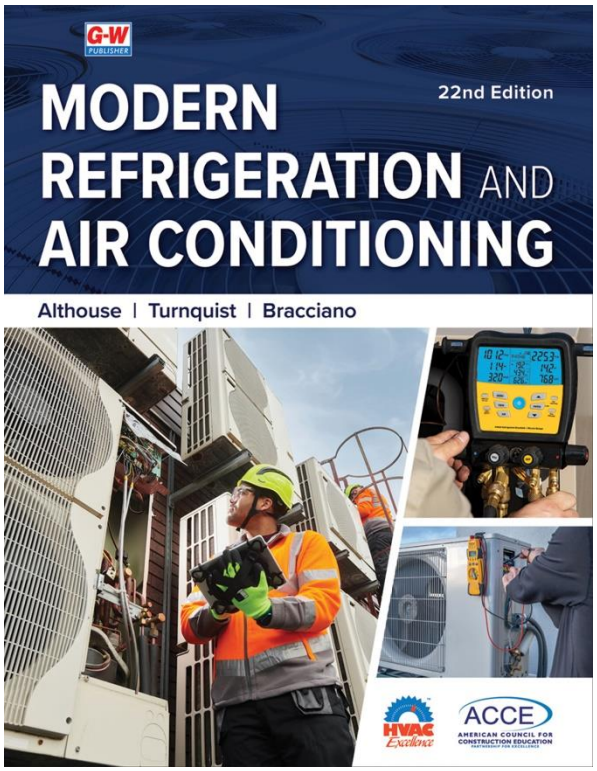
to

AHRI Curriculum Guide I. Introduction to Heating

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



I.A. Introduction to Refrigeration	
Knowledge	**Textbook Chapter(s)**
1. Explain the history of air-conditioning and refrigeration.	Chapters 6, 7, 8, 41
2. Define air-conditioning and refrigeration.	Chapters 28, 23, 41
3. Explain the differences between air-conditioning and refrigeration.	Chapters 8, 41
4. Determine career opportunities in the HVACR industry.	Chapter 1
5. Describe the role of trade associations.	Chapter 1

I.B. Introduction to Air Conditioning	
Knowledge	**Textbook Chapter(s)**
1. Understand the historical development of air-conditioning.	Chapters 6, 7, 8
2. Define “air-conditioning” and relate to human comfort conditions.	Chapters 22, 23, 24, 28
3. Discuss the differences between air-conditioning and heating.	Chapters 23, 32, 33
4. Discuss the various systems of air-conditioning:	Chapters 22, 23, 25, 27
a. mechanical compression cycle	Chapters 6, 31, 32, 33
b. evaporative cooling	Chapters 33, 34, 46
c. desiccant dehumidification	Chapters 8, 24, 28
d. absorption cycle	Chapter 27
5. Explain why ventilation is often inadequate.	Chapters 22, 23, 24, 28, 29, 30, 31, 32, 33
I.C. Introduction to Heating	
Knowledge	**Textbook Chapter(s)**
1. Understand the historical development of heating.	Chapter 33
2. Define *heating*.	Chapters 6, 33
3. Discuss the differences between air-conditioning and heating.	Chapters 23, 32, 33
4. Explain the various heating systems:	Chapters 33, 34, 35, 36, 37, 38, 39, 40
a. gas	Chapter 33
b. oil	Chapter 34
c. heat pump	Chapters 36, 37
d. electric resistance	Chapter 35
e. hydronics	Chapter 38
f. solar	Chapters 39, 40