# Contents

Preface to the Second Edition  xiii  
Note about Companion Web Site  xvi  

**Introduction**  xvii  

## Part 1

### Chapter I: Short Arguments: Some General Rules  3

- Rule 1: Identify premises and conclusion  3  
  
  *Exercise Set 1.1: Distinguishing premises from conclusions*  4  

- Rule 2: Develop your ideas in a natural order  8  
  
  *Exercise Set 1.2: Outlining arguments in premise-and-conclusion form*  10  
  
  *Exercise Set 1.3: Analyzing visual arguments*  15  

- Rule 3: Start from reliable premises  16  
  
  *Exercise Set 1.4: Identifying reliable and unreliable premises*  17  

- Rule 4: Be concrete and concise  22  
  
  *Exercise Set 1.5: Decomplexifying artificially abstruse quotations*  23  

- Rule 5: Build on substance, not overtone  26  
  
  *Exercise Set 1.6: Diagnosing loaded language*  26  

- Rule 6: Use consistent terms  31  
  
  *Exercise Set 1.7: Evaluating letters to the editor*  32  

### Chapter II: Generalizations  38

- Rule 7: Use more than one example  39  
  
  *Exercise Set 2.1: Finding relevant examples*  39  

- Rule 8: Use representative examples  42  
  
  *Exercise Set 2.2: Improving biased samples*  43  

- Rule 9: Background rates may be crucial  49  
  
  *Exercise Set 2.3: Identifying relevant background rates*  50  

- Rule 10: Statistics need a critical eye  54  
  
  *Exercise Set 2.4: Evaluating simple arguments that use numbers*  56
Contents

Rule 11: Consider counterexamples 61
  Exercise Set 2.5: Finding counterexamples 62
Exercise Set 2.6: Evaluating arguments for generalizations 65
Exercise Set 2.7: Arguing for and against generalizations 70

Chapter III: Arguments by Analogy 73
  Rule 12: Analogies require relevantly similar examples 74
    Exercise Set 3.1: Identifying important similarities 76
    Exercise Set 3.2: Identifying important differences 78
Exercise Set 3.3: Evaluating arguments by analogy 79
Exercise Set 3.4: Constructing arguments by analogy 84

Chapter IV: Sources 89
  Rule 13: Cite your sources 89
  Rule 14: Seek informed sources 90
  Rule 15: Seek impartial sources 92
    Exercise Set 4.1: Identifying biased sources 93
  Rule 16: Cross-check sources 96
    Exercise Set 4.2: Identifying independent sources 96
  Rule 17: Use the Web with care 99
Exercise Set 4.3: Evaluating arguments that use sources 100
Exercise Set 4.4: Using sources in arguments 106

Chapter V: Arguments about Causes 108
  Rule 18: Causal arguments start with correlations 108
  Rule 19: Correlations may have alternative explanations 109
    Exercise Set 5.1: Brainstorming explanations for correlations 110
  Rule 20: Work toward the most likely explanation 114
    Exercise Set 5.2: Identifying the most likely explanation 115
  Rule 21: Expect complexity 117
Exercise Set 5.3: Evaluating arguments about causes 118
Exercise Set 5.4: Constructing arguments about causes 123

Chapter VI: Deductive Arguments 126
  Rule 22: Modus ponens 127
  Rule 23: Modus tollens 127
Rule 24: Hypothetical syllogism 128
Rule 25: Disjunctive syllogism 129
Rule 26: Dilemma 130
  Exercise Set 6.1: Identifying deductive argument forms 131
  Exercise Set 6.2: Identifying deductive arguments in more complex passages 135
  Exercise Set 6.3: Drawing conclusions with deductive arguments 140
Rule 27: Reductio ad absurdum 143
  Exercise Set 6.4: Working with reductio ad absurdum 145
Rule 28: Deductive arguments in several steps 150
  Exercise Set 6.5: Identifying deductive arguments in several steps 153

Chapter VII: Extended Arguments 159
Rule 29: Explore the issue 159
  Exercise Set 7.1: Identifying possible positions 160
  Exercise Set 7.2: Exploring issues of your choice 162
Rule 30: Spell out basic ideas as arguments 163
  Exercise Set 7.3: Sketching arguments for and against positions 165
  Exercise Set 7.4: Sketching arguments about your own topic 168
Rule 31: Defend basic premises with arguments of their own 168
  Exercise Set 7.5: Developing arguments in more detail 170
  Exercise Set 7.6: Developing your own arguments 174
Rule 32: Consider objections 175
  Exercise Set 7.7: Working out objections 176
  Exercise Set 7.8: Working out objections to your own arguments 178
Rule 33: Consider alternatives 179
  Exercise Set 7.9: Brainstorming alternatives 180
  Exercise Set 7.10: Considering alternatives to your own conclusions 184

Chapter VIII: Argumentative Essays 186
Rule 34: Jump right in 186
  Exercise Set 8.1: Writing good leads 186
Contents

Rule 35: Make a definite claim or proposal 192
   Exercise Set 8.2: Making definite claims and proposals 193
Rule 36: Your argument is your outline 195
   Exercise Set 8.3: Writing out your arguments 196
Rule 37: Detail objections and meet them 199
   Exercise Set 8.4: Detailing and meeting objections 200
   Exercise Set 8.5: Considering objections to your own arguments 205
Rule 38: Get feedback and use it 206
Rule 39. Modesty, please! 207

Chapter IX: Oral Arguments 209
Rule 40: Reach out to your audience 209
   Exercise Set 9.1: Reaching out to your audience 210
Rule 41: Be fully present 213
Rule 42: Signpost your argument
   Exercise Set 9.2: Signposting your own arguments 214
Rule 43: Offer something positive
   Exercise Set 9.3: Reframing arguments in a positive way 217
Rule 44: Use visual aids sparingly 222
Rule 45: End in style
   Exercise Set 9.4: Ending in style 224
Exercise Set 9.5: Evaluating oral presentations 225

Appendix I: Some Common Fallacies 227
Exercise Set 10.1: Identifying fallacies (part 1) 232
Exercise Set 10.2: Reinterpreting and revising fallacious arguments (part 1) 238
Exercise Set 10.3: Identifying fallacies (part 2) 241
Exercise Set 10.4: Reinterpreting and revising fallacious arguments (part 2) 246
Exercise Set 10.5: Two deductive fallacies 249
Exercise Set 10.6: Constructing fallacious arguments 253

Appendix II: Definitions 256
Rule D1: When terms are unclear, get specific 256
   Exercise Set 11.1: Making definitions more precise 258
Contents

Model responses for Exercise Set 4.3 344
Model responses for Exercise Set 4.4 347

Model Responses for Chapter V: Arguments about Causes 349
Model responses for Exercise Set 5.1 349
Model responses for Exercise Set 5.2 351
Model responses for Exercise Set 5.3 354
Model responses for Exercise Set 5.4 359

Model Responses for Chapter VI: Deductive Arguments 362
Model responses for Exercise Set 6.1 362
Model responses for Exercise Set 6.2 364
Model responses for Exercise Set 6.3 366
Model responses for Exercise Set 6.4 368
Model responses for Exercise Set 6.5 372

Model Responses for Chapter VII: Extended Arguments 376
Model responses for Exercise Set 7.1 376
Model responses for Exercise Set 7.3 378
Model responses for Exercise Set 7.5 381
Model responses for Exercise Set 7.7 384
Model responses for Exercise Set 7.9 385

Model Responses for Chapter VIII: Argumentative Essays 388
Model responses for Exercise Set 8.1 388
Model responses for Exercise Set 8.2 390
Model responses for Exercise Set 8.4 393

Model Responses for Chapter IX: Oral Arguments 397
Model responses for Exercise Set 9.1 397
Model responses for Exercise Set 9.3 400
Model responses for Exercise Set 9.4 405

Model Responses for Appendix I: Some Common Fallacies 407
Model responses for Exercise Set 10.1 407
Model responses for Exercise Set 10.2 409
Model responses for Exercise Set 10.3 411
Contents

Model responses for Exercise Set 10.4 414
Model responses for Exercise Set 10.5 416
Model responses for Exercise Set 10.6 418

Model Responses for Appendix II: Definitions 421
Model responses for Exercise Set 11.1 421
Model responses for Exercise Set 11.2 427

Model Responses for Appendix III: Argument Mapping 430
Model responses for Exercise Set 12.1 430
Model responses for Exercise Set 12.2 434

Part 3

Critical Thinking Activities 441
Activities for Chapter I
  Found arguments 441
  Creating a visual argument 442
  Writing a letter to the editor 443
  Analyzing unadapted arguments 444
Activities for Chapter II
  Finding misleading statistics 449
  Generalizations about your classroom 450
Activities for Chapter III
  Using analogies to understand unusual objects 452
  Using analogies in ethical reasoning 453
Activities for Chapter IV
  Recognizing reliable Web sources 454
  Finding good sources 455
Activities for Chapter V
  Bluffing about causal explanations 456
  Reconstructing scientific reasoning 457
  Analyzing arguments in scientific reasoning 458
Activities for Chapter VI
  Recognizing deductive argument forms 466
Contents

Activities for Chapter VII

  Compiling your research into an extended outline 470

Activities for Chapter VIII

  Improving a sample paper 471
  Compiling a draft of an argumentative essay 474
  Peer-review workshop 475

Activities for Chapter IX

  Writing opening lines 478
  Creating a visual aid 479
  Oral presentations 480
  In-class debates 481
  Extended in-class group debates 483

Activities for Appendix I

  Relating rules and fallacies 485
  Identifying, reinterpreting, and revising fallacies 486
  Critical-thinking public service announcements 487

Activities for Appendix II

  Defining key terms in an essay 488
  Defining difficult terms 489

Activities for Appendix III

  Argument mapping workshop 490
  Developing your own arguments using argument maps 492

Index 493