## MAKING GOOD CHOICES: AN INTRODUCTION TO PRACTICAL REASONING

## CONTENTS:

PagesPREFACE:v-xv
CHAPTER 1: Introduction: Choosing and Reasoning ..... 1-14
CHAPTER 2: Agents and Goals ..... $15-50$
2.1 Agents
2.2 Goals
2.3 Goal identification
2.4 Goal analysis
2.5 Summary
CHAPTER 3: Framing Decisions and Evaluating Options, Simple Goals ..... 51-70
3.1 Options and outcomes
3.2 States of the world
3.3 Certainty
3.4 Forming options
3.5 Individual decision under certainty: decision by single criterion

CHAPTER 4: Framing Decisions and Evaluating Options: Complex Goals
4.1 Working through an example, decision using two criteria
4.2 Forming criteria and evaluating options
4.3 Working through an example, decisions by multi-criteria
4.4 Summary and Review

CHAPTER 5: Risk and Probability 104-133
5.1 Risky decisions
5.2 Belief and belief strength
5.3 Belief and risk
5.4 Estimating and combining initial probability, avoiding errors

CHAPTER 6: Individual Decisions Under Risk, Simple Goals
6.1 Single criterion, decision by dominance
6.2 Single criterion, single and multi-stage states: decision by expected monetary value
6.3 Single criterion decision by expected utility, single and multi-stage states

CHAPTER 7: Risky Decisions by Expected Utility, Complex Goals
7.1 Review: multi-criteria risky decisions
7.2 Single stage; working through an example
7.3 Multi-stage: working through an example
7.4 Risk aversion

CHAPTER 8: Individual Decision Under Ignorance
8.1 Ignorance in decision making
8.2 Painful choices: decision by maximin reasoning
8.3 Can't lose choices: decision by maximax reasoning
8.4 Decisions with incomplete information: decision by ordinal ranking
8.5 Practical reason within bounds: decision by satisficing
CHAPTER 9: Practical Reasoning in Competitive Interdependent Decisions 203-235
9.1 Basic concepts and framework for interdependent decisions: game theory
9.2 Analyzing competitive decisions
9.3 Zero sum, competitive games: decision by dominance
9.4 Decision by maximin reasoning
CHAPTER 10: Practical Reasoning in Competitive Decisions 236-247
10.1 Decision by mixed strategy reasoning
10.2 Mixed strategy concepts: common ignorance, fairness, bias
10.3 Summary: strategic reasoning in competitive decision making
CHAPTER 11: Practical Reasoning in Potentially Cooperative Interdependent Decisions 248-283
11.1 Potentially cooperative games: general features
11.2 Framing and evaluating five examples - Harmony
11.3 Clash of wills
11.4 Chicken
11.5 Summary, equilibrium selection problem as a challenge for practical reasoning
CHAPTER 12: Potentially Cooperative Decisions (continued) 284-316
12.1 Stag hunt
12.2 Prisoners' dilemma
12.3 The iterated prisoners' dilemma
12.4 Summary, sub-optimal outcome problem as a challenge for practical reasoning
CHAPTER 13: Bargaining and Negotiations within Cooperative Games ..... $317-371$
13.1 Bargaining and negotiations: basic concepts13.2 Negotiations and the decision to cooperate13.3 Bargaining and the bargaining problem: decision by arbitration
13.4 Bargaining and negotiations: working through examples
CHAPTER 14: Irrational Choices: Some Common Fallacies of Practical Reasoning ..... 372-411
14.1 Four categories of practical fallacies
14.2 Social nature fallacies
14.3 Decisional conflict fallacies
14.4 Personality weakness fallacies
14.5 Value distortion fallacies
14.6 Summary
BIBLIOGRAPHY: ..... 412-414

