

Contents

Acknowledgments ix

Preface xi

- 1 Triumphs of Natural Philosophy 3
- 2 Emergence of Science 30
- 3 Failures of Philosophy, Part I 58
- 4 Failures of Philosophy, Part II 95
- 5 Why Science Needs Philosophy, Part I: Physics 115
- 6 Why Science Needs Philosophy, Part II: Natural Science 181
- 7 Why Philosophy Needs Science 209
- 8 Implications of Natural Philosophy for the Problems
of Civilization 218

APPENDICES

- I Degrees of Theory Unity 243
- II The Problem of Induction 248

Notes 271

References 317

Index 331