# Table of Contents

**Introduction and grading**

- Telescope Operating Instructions 4
- Night Observing 5
- Taylor Planetarium 6
- Luminosity 7
- Spectra I 9
- Spectra II 11
- Size 13
- The Hertzprung-Russel Diagram 15
- Herschel Experiment 17
- Solar Observation 20
- Stellar Structure 23
- Stellar Evolution 25
- Neutron Stars 27
- Cosmology: The Expansion of the Universe 28
- Planets Outside Our Solar System: Is there life on other worlds? 31
- What is the Universe Made of? 33
- Star Chart Lab 36
- **Appendix A (The Equatorial System)** 39
- **Sources** 42
- **Appendix A (The Equatorial System)** 45