

Possible ways to use this Text

This book can be used to teach a number of different courses. Some easy, others much harder. Many of the chapters are virtually independent. For example, Chapters 9, 11, and 12 only need very little of the comprehensive treatment of calculus in Chapters 8 and 10. There are several hundred exercises, many of which are suitable as collaborative learning projects. Some suggestions for one semester courses are these:

Trigonometry, Analytic Geometry, and Astronomy: Slow paced, covering Chapters 1, 2, and 4 (and possibly Chapter 3)

Basic Calculus and Pre-calculus: Chapters 1, 4, 5, and 6

Calculus and Astronomy: Faster paced, covering Chapters 1, 2, 4, 5, 6, and 7. If the students understand basic trigonometry and analytic geometry, most of Chapters 1 and 4 could be left to the students, and some sections of Chapter 14 could be added.

Calculus and Basic Science: Chapters 5, 6, 8, 9, 10, and 11. This would assume that the students understand basic trigonometry and analytic geometry (and that they could be asked to review these matters from Chapters 1 and 4). Because only a few elements are needed from Chapters 8 and 10, a slower version of this course can focus on these elements, before going into Chapters 9 and 11. Depending on taste and purpose, some sections of Chapter 9 can be omitted.

Calculus and Business: Chapters 5, 6, 8, 10, 12. This too would assume that the students understand basic trigonometry and analytic geometry (and they could be asked to review these matters from Chapters 1 and 4). Because only a few elements are needed from Chapters 8 and 10, a slower version of this course can focus on these elements only, before proceeding to Chapter 12.

Calculus and Applications to Physics: Chapters 8, 9, 10, 11, 13, and 14. This would be a sophisticated, demanding, fast paced course. Some things would have to be left to the students. It can be slowed down and made easier if parts of Chapters 9, 11, and 14 are omitted. By doing this, the course could be adjusted along the way.

Various components of the book could be combined into a two semester calculus sequence in similar ways.