

CONTENT IN TERMS OF SPECIFIC BODY OF KNOWLEDGE:

- I. Newton's Gravitational Theory
- II. Interaction of Light
- III. Electromagnetic Radiation
- IV. Spectroscopy
- V. Spectra of Stars
- VI. Stellar Magnitude
- VII. Distances to Stars - Trigonometric Parallax
- VIII. Motion of Stars
- IX. Binary Stars
- X. Properties of a star
- XI. Interstellar Material
- XII. Stellar Structure
- XIII. Birth and Evolution to Main Sequence of a One Solar Mass Star
- XIV. Evolution Beyond M.S. of a One Solar Mass Star
- XV. Evolution of Massive Stars
- XVI. Death of Stars - White Dwarfs, Neutron Stars, and Black Holes
- XVII. Variable Stars - Usually Massive Stars on the Horizontal Branch
- XVIII. Stellar Populations
- XIX. Star Clusters
- XX. The Galaxy (Milky Way)
- XXI. Galaxies
- XXII. Cosmology
- XXIII. Special theory of relativity - Uniform Velocity
- XXIV. General Theory - Acceleration

REQUIRED READING:

Abell, George O., David Morrison, and Sidney C. Wolff. Exploration of the Universe. 6th edition. Philadelphia: Saunders College Publishing, 1995.

SUGGESTED READING: Various articles from scientific journals

REQUIRED WRITING:

Three take-home essays of at least 2 typed pages each as part of the two midterm and final exams.

OUTSIDE ASSIGNMENTS:

Students are expected to spend a minimum of three hours per unit per week in class and on outside assignments, prorated for short-term classes.

Reading assignments of appropriate chapters will be given. Homework sets will be assigned. Three take-home essays may be given. A Saturday field trip may be planned.

INSTRUCTIONAL METHODOLOGY:

Check all that apply:

- lecture
- laboratory
- lecture-laboratory combination
- directed study

DISTANCE LEARNING:

This course may be offered as a distance learning course and meets Title 5 regulations 55370, 55372, 55374, 55376, 55378, and 55380.

Yes No

If yes, check all that apply:

- Television Course (Video one-way, e.g. ITV, video cassette, etc.)
- Online Course (Text one-way, e.g. newspaper, correspondence, electronic file, etc.)
- Two-Way Video Conferencing (Two-way interactive video and audio)
- One-Way Video Conferencing (One-way interactive video and two-way interactive audio)
- Computer Assisted Instruction (A specialized form of mediated instruction relying primarily on student access to information and prepared lessons or teaching materials through a computer terminal, but not under immediate supervision of a qualified instructor.)

GRADING POLICY AND STANDARDS (include methods of determining whether the stated objectives have been met by students):

100 points	quizzes	Quizzes	= 20%
100 points	First exam	First exam	= 20%
100 points	Second exam	Second exam	= 20%
<u>200 points</u>	Final exam	Final exam	= <u>40%</u>
500 points	Total	Total grade	= 100%

Less than 50% is failing. Letter grades are assigned using a statistical curve.

IS COURSE REPEATABLE FOR REASON(S) OTHER THAN DEFICIENT GRADE?

Yes No Number of times course may be taken for credit: _____

If yes, identify specific provision of Title 5 Division 2 section(s), 55761-55763 and 58161 which qualifies course as repeatable:

CONTACT PERSON:

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SIGNATURES ON FILE