

INTRODUCTION TO THE SOLAR SYSTEM

An introduction to the fundamental principles of science as associated with the observable night sky and the physical characteristics of the solar system. Course transferable: UC, CSU

INSTRUCTOR Louise Daniels, M.S. Physics
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TEXTBOOK **Foundations of Astronomy 12th Ed. Seeds/Backman (required)**
The Solar System 8th Ed. Seeds/Backman (recommended)

Prerequisite: None.

Advisory: REA-82 or qualifying placement level and MAT-35.

STUDENT LEARNING OUTCOMES

Upon successful completion of the course, students should be able to:

- ❖ Describe the basic aspects of the observable sky including the ecliptic, meridian, celestial north and south, seasonal changes, lunar phases, tides, and eclipses.
- ❖ Outline the basic historical observations and explanations leading to the current theories of planetary motion.
- ❖ Describe the properties of light, matter, and telescopes and how astronomers use these to determine the properties of distant objects.
- ❖ Distinguish the primary similarities and differences in physical properties between the planets and outline the currently accepted theory for the formation of solar systems.

TUTORIAL SERVICES

Tutorial Services is found on the second floor of the Martin Luther King (MLK) Building.
For information: <http://www.rcc.edu/services/tutoring/Pages/TutoringHome.aspx>

TENTATIVE SCHEDULE

Chapter 1	Jan 2	Intro to Astronomy
Chapter 2	Jan 3, 4	A User's Guide to the Sky
Chapter 3	Jan 8, 9, 10	Cycles of the Moon
<u>Exam #1</u>	<u>Jan 11</u>	<u>(Ch 1-3)</u>
Holiday	Jan 15	Martin Luther King, Jr. Day
Chapter 4	Jan 16, 17, 18	The Origin of Modern Astronomy
Chapter 5	Jan 22, 23	Gravity
Chapter 6	Jan 24, 25	Light and Telescopes
<u>Exam #2</u>	<u>Jan 29</u>	<u>(Ch 4-6)</u>
Chapter 7	Jan 30, 31	Atoms and Spectra
Chapter 19	Feb 1, 5, 6	The Origin of the Solar System
<u>Exam #3</u>	<u>Feb 7</u>	<u>(Ch 7, 19)</u>
Final Exam	Feb 8	The final will be cumulative.

ABSENCES

Any student may be dropped for "inactive participation." To be successful and complete this course with a passing grade you will need to be in class on time and be actively involved in the discussions occurring in lecture.

NO CELL PHONE USE OR TEXT MESSAGING IN CLASS The use of ANY electronic devices without the explicit permission of the instructor is a violation of the student code of conduct and an offense for which I may expel you from class.

VOCABULARY

You are responsible for knowing the definitions of the terms found in bold within the summary at the end of each chapter. You are responsible for turning in written vocabulary definitions with the homework for each chapter. Your vocabulary assignment will be reviewed for completeness and will account for 10% of your course grade. Your success on tests will depend, partially, on your knowledge of terms used in this subject.

HOMEWORK You will be assigned selected "Review Questions" and "Problems" from each chapter. Your homework will be graded for completeness, and your score will reflect any missing work. Your homework will account for 20% of your course grade. Students who do not participate in completing and turning in homework on time will be dropped. Late homework will not be accepted.

EXAMS

Semester exam scores will account for 40% of your course grade. The final exam is mandatory, cumulative, and will account for 30% of your course grade. You will need a No. 882-E Scantron form for each semester exam and for the final, for a total of 4 Scantrons. No make up exams will be allowed without prior approval. If you cannot make a scheduled exam, then it is your responsibility to make alternative arrangements for examination prior to the scheduled date of the exam.

EXTRA CREDIT Extra credit can be achieved by attending/completing an approved extra credit event/activity and submitting a written report on the event/activity. Each report is worth 1 point (6 max). All extra credit is due the day before the final exam.

DIGITAL LIBRARY RESOURCES

HOURS OF OPERATION

Monday – Thursday 7:30am to 7:00pm Friday 7:30am to 4:00pm

CONTACT INFORMATION

Circulation: (951) 222-8651 Reference: (951) 222-8652 [file://localhost/email/ library@rcc.edu](mailto:library@rcc.edu)

ACCOMMODATIONS FOR DISABILITIES

Riverside City College provides services to students with disabilities through the Disability Resource Center (DRC), located in the new Charles A. Kane building (CAK) in Room 130. To request academic accommodations due to a disability, please visit the DRC or contact the DRC staff at 222-8060. A DRC staff member will confidentially review your concerns with you to determine any required accommodations. Once your accommodations are approved through DRC, please bring your DRC documentation(s) to me so that we may discuss your accommodations.

VETERANS SERVICES

VA-related concerns should be referred to a Certifying Official at the Veterans Services Office in CAK 104. The contact number is 951-222-8607. For student questions regarding pay, the Certificate of Eligibility, or VA Benefits, the contact number is 888-GIBILL1 (442-4551).

IN AN EMERGENCY CALL 911 or CALL RCCD SAFETY AND POLICE DISPATCH at (951) 222-8171 OR 222-8172.

The College has 24-hour coverage. If you would like to be escorted to your vehicle after dark, notify Dispatch at (951) 222-8171 or (951) 222-8172. Be advised that RCCD officers will ticket for moving violations on and near the college.

You are expected to abide by all student conduct policies as outlined in the Student Handbook.