

**Description** A descriptive, non-mathematical introduction to the solar system. Particular emphasis on the sun, moon, and planets. Covers planetary satellite systems, planetary ring systems, asteroids, meteorites, comets, meteor showers, planetary motion, Greek astronomy, the Copernican revolution, and the origin of the solar system. (CSU/UC)

*AA/AS area C; CSU area B1; IGETC area 5A*

**Student Learning Outcomes: Upon completion of this course, students will be able to:**

1. Critically analyze arguments from a scientific perspective.
2. Recognize, differentiate, and describe the various astronomical bodies within the Solar System.
3. Explain why some astronomical bodies exhibit phases.
4. Recognize the factors affecting planetary seasons and atmospheres, and relate these to Earth.

\* The entire course outline, along with outcomes, can be found at website listed below:

[https://portal.santarosa.edu/SRweb/SR\\_CourseOutlines.aspx?CVID=25142&Semester=20147](https://portal.santarosa.edu/SRweb/SR_CourseOutlines.aspx?CVID=25142&Semester=20147)

**Attendance** I expect everybody to attend class regularly. My quizzes and exams are based on lectures, readings, homework and in-class exercises. SRJC Attendance Policy states you may be dropped from the class if you miss more than 10% of the class. I strongly recommend you get the e-mail address or phone number of at least 2 students in the class in case you miss a class and need notes. I will not give you my lecture notes or Powerpoints.

**General Outline**

Dates	Topics (Subject to Change)	Reading	Quizzes	Homework
6/20/16	Chapter 1 - Here and Now			
6/21/16	Chapter 2 - The Sky	Chapter 2	Quiz 1	Hmwrk 1
6/22/16	Chapter 2 - The Sky	Finish Chapter 2	Quiz 2	Hmwrk 2
2/26/16	Sunday Night: Lake Sonoma Observation Class			* *Extra Credit
6/27/16	Chapter 3 - Cycles of the Moon	Chapter 3	Quiz 3	Hmwrk 3
6/28/16	Chapters 4 & 5 – The Greeks and Gravity	Chapter 4 and 5	Quiz 4	Hmwrk 4
6/29/16	Chapters 6 and 7 - Light and Spectroscopy	Chapters 6 and 7	Exam 1 (Quiz 5)	Hmwrk 5
7/4/16	Independence Day – No Class			
7/5/16	Chapter 19 - The Origin of the Solar System	Chapter 19	Quiz 6	Hmwrk 6
7/6/16	Chapter 8 – The Sun and the Fate of the Solar System	Chapter 8	Quiz 7	Hmwrk 7
7/11/16	Chapter 20 - The Earth	Chapter 20	Quiz 8	Hmwrk 8
7/12/16	Chapter 21 - The Moon and Mercury	Chapter 21	Quiz 9	
7/13/16	Chapter 22 - Venus and Mars	Chapter 22	Exam 2 (Quiz 10)	Hmwrk 9
7/13/16	The 7 Biological/Geological Barriers to Living on Mars	SRJC Planetarium	7:00-10:00 pm	** Extra Credit
7/18/16	Chapter 23 – Jupiter, Saturn, Uranus and Neptune	Chapter 23	Quiz 11	Hmwrk 10
7/19/16	Chapter 24 –The Jovian Satellites and the Dwarf Planets	Chapter 24	Quiz 12	Hmwrk 11
7/20/16	Chapter 25-Solar Debris (comets, asteroids and meteors)	Chapter 25	Quiz 13	Hmwrk 12
7/27/16	Cumulative Final Exam (150 Questions)	Chapters 1-8, 19-25	Final Exam	

\*\*\* Dates and Topics may vary from the above outline

**Course Data**

Instructor: Michael Healy

Text: The Solar System – Seventh Edition, Seeds and Backman ISBN 978-1-4390-5036-1

Available in SRJC Library: Astronomy 4 - Healy (D), Seeds, Michael A., Solar system / 8th ed. Call # QB501 .S43 2013

Office availability: Mon. 11:00 – 11:45 am, also available via the internet.

**Office:** Lark Hall 2027, Office Phone: 527-4642, ex # 2

E-mail - [capella82@comcast.net](mailto:capella82@comcast.net)

Faculty Home page - <http://online.santarosa.edu/homepage/mhealy>

**Teaching Assistant**

Joe Puccioni

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**GRADING: Grades will be awarded according to the following standards:**

**100% - 90% = A, 89% - 80% = B, 79% - 70% = C, 69% - 55% = D, 0% - 54% = F**

**Grades will be assigned on the following basis:**

a. Quizzes - Approximately 68%. **NO** make-up quizzes will be given.

All quizzes will begin at 12:00 noon and end at 12:10 PM.

**There will be approximately 11 quizzes/2 exams (13 total) - 50 points each.** Your 2 lowest quiz/exam scores will be dropped.

b. Homework and In-class assignments - approximately 12%. Homework assignments are due at the beginning of class and **WILL**

**NOT** be accepted late. In class assignments will be collected at the end of class. **There will be approximately 12 homework assignments worth 10 points each.** Your 2 lowest homework scores will be dropped.

c. The Final Exam - Approximately 20%. **The Final Exam is worth 150 points.**

The Final exam will be given 12:00 noon – 2:50 pm, July 27nd, 2016.

d. Each student is allowed to earn a **maximum** of 30 points extra credit. 15 points extra credit can be obtained by attending

Planetarium shows or by attending other, instructor approved, science exhibits or presentations. Check my web page for Extra Credit opportunities. No points will be allowed for individual shows seen more than once. There may extra credit opportunities available in class. **First Friday Night shows will NOT be counted as extra credit.**

**Classroom Manners**

**Late Arrivals or Early Exit: If you arrive late or plan to leave early, please sit near the back of the class, or side of the room where you can leave without creating too much of a distraction.**

**Use of cell phones**

Using cell phones for text messaging, web access, pictures, etc. is distracting to me and to others. Therefore, once class starts, all cell phones must be **turned off**. Violators may be asked to leave class and will not be allowed to make-up any missed assignments.

**The use of computers is NOT allowed.**

Notes on quizzes/exams:

- Leaving the room during a quiz/exam is NOT recommended. If you do so, you must turn your quiz in to me, and consider yourself finished. Quizzes are approximately 10 minutes in length – there should be no reason for you to leave and come back.
- You will not be allowed to start a quiz/exam once another student has finished and left the room. These measures are not designed to be mean, they merely discourage cheating.
- Any assignments, quizzes or exams missed because of participation in a SRJC sponsored event may be made up.
- \* Any quiz/exam score of 0 due to a quiz/exam protocol infraction may NOT be dropped.

**Suggestions for Success** Makeup quizzes and late homework assignments will not be accepted. READ AHEAD and stay on top of the material. Be prepared to devote the time necessary to succeed in this course - do the assigned reading, review and recopy lecture notes, take advantage of online and textbook resources, study for quizzes, do the required homework assignments. Everyone can succeed in this class, so set high expectations. Do not hesitate to ask questions. Class participation is encouraged. Get to know your instructor and your classmates. You are fully expected to abide by the Code of Student Conduct while in class and on campus, including cheating and plagiarism. You are encouraged to read the code in its entirety... it is found at the following web address:

**[http://www.santarosa.edu/for\\_students/rules-regulations/student-conduct.shtml](http://www.santarosa.edu/for_students/rules-regulations/student-conduct.shtml)**

**Additional Important Information** Safety/Emergency information: Please note the location of the red Emergency Preparedness Handbook in the classroom. In an emergency situation, immediately contact **Campus Police at 527-1000 or dial 1000 from any campus phone**. In the event of an emergency during class that requires evacuation from the building, please leave the class immediately, but calmly. Our class will meet on the practice football field to make sure everyone got out of the building safely and to receive further instructions. If you are a student with a disability who may need assistance in an evacuation, please see me during my office hours as soon as possible so we can discuss an evacuation plan. **Disability Resources information** If you need disability related accommodations for this class, such as a note taker, test taking services, special furniture, use of service animal, etc., please provide the Authorization for Academic Accommodations (AAA letter) from the Disability Resources Department (DRD) to me as soon as possible. You may also speak with me privately during office hours about your accommodations. If you have not received authorization from DRD, it is recommended that you contact them directly. DRD is located in Analy Village on the Santa Rosa campus, and Petaluma Village on the Petaluma Campus.

**ACADEMIC INTEGRITY STATEMENT:** Santa Rosa Junior College holds that its primary function is the development of intellectual curiosity, integrity, and accomplishment in an atmosphere that upholds the principles of academic freedom. All members of the academic community - student, faculty, staff, and administrator - must assume responsibility for providing an environment of the highest standards, characterized by a spirit of academic honesty and mutual respect. Because personal accountability is inherent in an academic community of integrity, this institution will not tolerate or ignore any form of academic dishonesty.