

FLORIDA STATE COLLEGE AT JACKSONVILLE  
COLLEGE CREDIT COURSE OUTLINE

COURSE NUMBER:	AST 1002
COURSE TITLE:	Introduction to Astronomy
PREREQUISITE(S):	None
COREQUISITE(S):	None
STUDENT ADVISING NOTES:	Suggested Course: AST 1002L (Course may be taken following or concurrent with AST 1002L)
CREDIT HOURS:	3
CONTACT HOURS/WEEK:	3
CONTACT HOUR BREAKDOWN:	
Lecture/Discussion:	3
Laboratory:	
Other _____:	
FACULTY WORKLOAD POINTS:	3
STANDARDIZED CLASS SIZE ALLOCATION:	35

**CATALOG COURSE DESCRIPTION:** Students will benefit by taking High School algebra or MAT 0024 prior to enrolling in this course. This is a general education course and is not intended for students who are going to major in astronomy or other sciences. Students will become acquainted with the solar system with emphasis on Earth and its satellite, the moon. Students will also study other planets, satellites, comets, meteors, the Milky Way and other galaxies, and the theories of the universe. The course will discuss the stars and planets relevant to the most modern ideas.

SUGGESTED TEXT(S):	<u>The Essential Cosmic Perspective</u> , Bennett / Donahue / Scheider; Addison Wesley Publishing
	<u>Astronomy: A Beginner's Guide to the Universe</u> , Chaisson / McMillan; Pearson/Prentice-Hall
	<u>Horizons – Exploring the Universe</u> , Seeds; Thomson

IMPLEMENTATION DATE:	November 10, 1984
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REVIEW OR MODIFICATION DATE:	Fall Term, 2002 (20031) Fall Term, 2006 (20071) Fall Term, 2008 (20091) - Outline Review 2007
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COURSE TOPICS		CONTACT HOURS <u>PER TOPIC</u>
I.	Introduction	1
II.	History of Astronomy	3
III.	Light and Telescopes	4
IV.	The Sky	2
V.	The Solar System	13
	A. Structure and Origin	(1)
	B. The Moon	(2)
	C. Planets	(7)
	D. Minor Objects	(1)
	E. The Sun	(2)
VI.	Stars	12
	A. General Properties	(2)
	B. Binaries and Clusters	(2)
	C. Variable Stars	(2)
	D. Stellar Evolution	(6)
VII.	The Milky Way Galaxy	3
	A. Structure	
	B. Interstellar Medium	
VIII.	Galaxies	4
	A. Classification	
	B. Quasars	
IX.	Cosmology	2
X.	Life in the Universe	1



Florida State College  
At Jacksonville

General Education Review Checksheet  
and Learning Outcomes

Course Prefix and Number: <b>AST 1002/1002L</b>	Semester Credit Hours: <b>3/1</b>
Course Title: <b>Introduction to Astronomy/Astronomy Laboratory</b>	

Discipline Area for the Course:

<input type="checkbox"/> Communication	<input type="checkbox"/> Mathematics	<input type="checkbox"/> Social & Behavioral Sciences
<input type="checkbox"/> Humanities & Visual/Performing Arts	<input checked="" type="checkbox"/> Natural Sciences	<input type="checkbox"/> Other-Designated Option

INTELLECTUAL COMPETENCIES:

<input checked="" type="checkbox"/> Reading	<input checked="" type="checkbox"/> Speaking	<input checked="" type="checkbox"/> Critical Analysis	<input checked="" type="checkbox"/> Quantitative Skills	<input checked="" type="checkbox"/> Scientific Method of Inquiry
<input checked="" type="checkbox"/> Writing	<input checked="" type="checkbox"/> Listening	<input checked="" type="checkbox"/> Information Literacy	<input checked="" type="checkbox"/> Ethical Judgment	<input checked="" type="checkbox"/> Working Collaboratively

Learning Outcomes		Method Of Assessment
1	Explain and apply major concepts in astronomy including planets, satellites, stars, meteors, galaxies and theories of the universe.	Written tests, reports and/or use of equipment to demonstrate student competency in field.
2	Demonstrate knowledge of scientific method.	Formulate problem, make observations, derive and test hypothesis and make conclusions.
3	Communicate scientific ideas through oral or written assignments.	Students use analytical reasoning skills to solve problems on written tests and/or laboratory work.
4	Interpret scientific models such as formulas, graphs, tables and schematics, draw inferences from them and recognize their limitations.	Written reports of lab experiments and/or written tests demonstrate student competency in the application of scientific knowledge.
5	Demonstrate problem solving methods in situations that are encountered outside of the classroom.	Students use demonstrations, group discussions, written tests, laboratory reports, research projects and/or field experiences to illustrate competence in recognizing and evaluating various scientific processes.
6	Demonstrate proper laboratory technique including safety in the use and care of laboratory equipment and materials.	Results from laboratory work and experiments demonstrate student awareness of science and society.
7		
8		
9		
10		

Name of Person Completing This Form: Hamid Aidinejad/Mike Renolds

Signature: \_\_\_\_\_ Date: 11/20/2007



**Florida State College  
At Jacksonville**

**General Education Requirements  
Categories & Courses Review Checksheet**

Course Prefix and Number: AST 1002/1002L	Semester Credit Hours: 3/1
Course Title: Introduction to Astronomy / Astronomy Laboratory (to be taken with or following AST 1002)	

Discipline Area for the Course:

<input type="checkbox"/> <b>Communication</b>	<input type="checkbox"/> <b>Mathematics</b>	<input type="checkbox"/> <b>Social &amp; Behavioral Sciences</b>
<input type="checkbox"/> <b>Humanities &amp; Visual/Performing Arts</b>	<input checked="" type="checkbox"/> <b>Natural Sciences</b>	<input type="checkbox"/> <b>Other-Designated Option</b>

INTELLECTUAL COMPETENCIES:

<input checked="" type="checkbox"/> <b>Reading</b>	<input checked="" type="checkbox"/> <b>Speaking</b>	<input checked="" type="checkbox"/> <b>Critical Analysis</b>	<input checked="" type="checkbox"/> <b>Quantitative Skills</b>	<input checked="" type="checkbox"/> <b>Scientific Method of Inquiry</b>
<input checked="" type="checkbox"/> <b>Writing</b>	<input checked="" type="checkbox"/> <b>Listening</b>	<input checked="" type="checkbox"/> <b>Information Literacy</b>	<input checked="" type="checkbox"/> <b>Ethical Judgment</b>	<input checked="" type="checkbox"/> <b>Working Collaboratively</b>

KNOWLEDGE	Primary	Secondary	N/A	VALUE	Primary	Secondary	N/A
A. Global and Historical Knowledge & Understanding				Intellectual honesty	<input checked="" type="checkbox"/>		
• Comprehends a general knowledge of the nature, origins and contributions of major civilizations		<input checked="" type="checkbox"/>		Curiosity and openness to new ideas	<input checked="" type="checkbox"/>		
• Comprehends the workings and interrelations of personal, business and government economies			<input checked="" type="checkbox"/>	Recognition of one's own creative potential		<input checked="" type="checkbox"/>	
• Comprehends political, social and economic systems and their effects upon society			<input checked="" type="checkbox"/>	Acceptance of and respect for differences among people and cultures		<input checked="" type="checkbox"/>	
B. Cultural and Aesthetic Knowledge and Understanding							
• Comprehends the contributions of the arts and humanities to the human experience on a personal, national or global level			<input checked="" type="checkbox"/>	Civic Engagement			<input checked="" type="checkbox"/>
• Comprehends the historical development of the arts and sciences		<input checked="" type="checkbox"/>		Lifelong Learning		<input checked="" type="checkbox"/>	
• Comprehends religious and cultural systems and their effects upon society		<input checked="" type="checkbox"/>					
C. Human Awareness and Understanding							
• Comprehends the dynamics of human behavior and the process of increasing self-awareness, growth and development			<input checked="" type="checkbox"/>				
• Comprehends the stages of human development and the dynamics of human relationships in diverse cultures			<input checked="" type="checkbox"/>				
• Comprehends the factors that promote physical, mental and social well-being			<input checked="" type="checkbox"/>				
D. Mathematics, Science and Technology							
• Comprehends the basic concepts and investigative processes of the natural sciences	<input checked="" type="checkbox"/>						
• Comprehends the breadth, significance and development of the mathematical sciences	<input checked="" type="checkbox"/>						
• Comprehends the ways science and technology have shaped and continue to reshape human cultures and the environment	<input checked="" type="checkbox"/>						

Name of Person Completing This Form: Hamid Aidinejad/Mike Reynolds

Signature: \_\_\_\_\_ Date: 11/20/2007