

LIU – POST

AST 10

Introductory Astronomy II, Spring 2018

3 credits

Classes Tu/Th §2: 9:30–10:50, PH202.

Website <http://arvind-borde.org/courses/ast10/>

Instructor Arvind Borde | arvind.borde@liu.edu | <http://arvind-borde.org/>

Office LS 239; telephone: (516) 299 2447. Hours: T, Th, 12:30–2:00 pm, or by appointment.

Bulletin Astronomy 10 is half of a one-year course in introductory astronomy. Topics include the origin, nature, and evolution of stars, nebulae, galaxies, and the universe. No pre- or co-requisites. Students taking this course to fulfill the science core requirement must take AST 10A - Astronomy Lab.

Text, etc. Class notes, handouts, and <http://www.nasa.gov/topics/universe/>.

Rules **Do:** attend all classes, come on time, stay for the duration, pay attention.
Don't: talk among yourselves, be disruptive, text, have your cell phone out. Violating any of these will be marked as an absence and will lead to further disciplinary action. Three or more violations will lead to an automatic F. You may use a computer or tablet to take notes, but must be prepared to sit in the first row if asked.

Homework & Tests Weekly homework is on the website. You must attempt it the day it is assigned. If you have difficulties, see me or a tutor *that week itself*. HW will be discussed in the class immediately following. Specific questions will be answered in class, but not general ones about the whole assignment. You must have the homework available in a separate notebook or folder, with your name on each assignment, or clearly marked as such in the class notebook. You must bring the homework and class notebook with you if you want extra help in my office. It is your responsibility to catch up on material you miss for any reason. You should expect to spend 6 hours a week on this course outside class.

You may use one 3 × 5 index card (both sides) on tests and must submit it if asked at any point. Tests will be based mainly on material and homework covered since the previous test, but familiarity with all material covered up to that point is expected. You may use a dedicated calculator (not cell phone or tablet computer) on all tests. *There are no make-up tests. If you miss a test for any reason you will get a score of –1 on it.* You must keep all your tests through the term.

Grades First see the rules above. There will be 13 tests. Your 11 best scores will each count 9% toward your grade. The remaining 1% is for overall attendance and class performance.

Note Last day to drop: February 2. Last day to withdraw: April 6.

I have understood the syllabus, course requirements, grading method, and rules, and agree to abide by them. I have retained a copy of this syllabus for my records. I have filled out the form overleaf.

Signature: _____ Date: _____

Name: _____

Name (print clearly):

Major:

Last 2 science classes class taken (what? when? where?):

Career goals:

Dream goals (If earning money were not an issue what would your perfect life be like?):

Science weaknesses (if any):

Science strengths:

Anything in particular that you wish to learn in this course:

LIU – POST

AST 10

Introductory Astronomy II, Spring 2018

3 credits

Classes Tu/Th §2: 9:30–10:50, PH202.

Website <http://arvind-borde.org/courses/ast10/>

Instructor Arvind Borde | arvind.borde@liu.edu | <http://arvind-borde.org/>

Office LS 239; telephone: (516) 299 2447. Hours: T, Th, 12:30–2:00 pm, or by appointment.

Bulletin Astronomy 10 is half of a one-year course in introductory astronomy. Topics include the origin, nature, and evolution of stars, nebulae, galaxies, and the universe. No pre- or co-requisites. Students taking this course to fulfill the science core requirement must take AST 10A - Astronomy Lab.

Text, etc. Class notes, handouts, and <http://www.nasa.gov/topics/universe/>.

Rules **Do:** attend all classes, come on time, stay for the duration, pay attention.
Don't: talk among yourselves, be disruptive, text, have your cell phone out.
Violating any of these will be marked as an absence and will lead to further disciplinary action. Three or more violations will lead to an automatic F. You may use a computer or tablet to take notes, but must be prepared to sit in the first row if asked.

Homework & Tests Weekly homework is on the website. You must attempt it the day it is assigned. If you have difficulties, see me or a tutor *that week itself*. HW will be discussed in the class immediately following. Specific questions will be answered in class, but not general ones about the whole assignment. You must have the homework available in a separate notebook or folder, with your name on each assignment, or clearly marked as such in the class notebook. You must bring the homework and class notebook with you if you want extra help in my office. It is your responsibility to catch up on material you miss for any reason. You should expect to spend 6 hours a week on this course outside class.

You may use one 3×5 index card (both sides) on tests and must submit it if asked at any point. Tests will be based mainly on material and homework covered since the previous test, but familiarity with all material covered up to that point is expected. You may use a dedicated calculator (not cell phone or tablet computer) on all tests. *There are no make-up tests. If you miss a test for any reason you will get a score of -1 on it.* You must keep all your tests through the term.

Grades First see the rules above. There will be 13 tests. Your 11 best scores will each count 9% toward your grade. The remaining 1% is for overall attendance and class performance.

Note Last day to drop: February 2. Last day to withdraw: April 6.

**PLEASE PLACE THIS COPY AT THE FRONT OF YOUR NOTEBOOK/FOLDER
YOU MUST HAVE IT WITH YOU IN EVERY CLASS**

Week 1	Tuesday, January 23 Background and overview	Thursday, January 25 Homework 1a review Topic continues		
Week 2	Tuesday, January 30 Our home: The Milky Way Homework 1b review (if needed) <input type="text" value="Test 1"/>	Thursday, February 1 Homework 2a review Topic continues	<input type="text" value="score"/>	<input style="width: 20px;" type="text" value="%"/>
Week 3	Tuesday, February 6 The life of stars Homework 2b review (if needed) <input type="text" value="Test 2"/>	Thursday, February 8 Homework 3a review Topic continues	<input type="text" value="score"/>	<input style="width: 20px;" type="text" value="%"/>
Week 4	Tuesday, February 13 The death of stars Homework 3b review (if needed) <input type="text" value="Test 3"/>	Thursday, February 15 Homework 4a review Topic continues	<input type="text" value="score"/>	<input style="width: 20px;" type="text" value="%"/>
Week 5	Tuesday, February 20 Black holes Homework 4b review (if needed) <input type="text" value="Test 4"/>	Thursday, February 22 Homework 5a review Topic continues	<input type="text" value="score"/>	<input style="width: 20px;" type="text" value="%"/>
Week 6	Tuesday, February 27 The theory of relativity Homework 5b review (if needed) <input type="text" value="Test 5"/>	Thursday, March 1 Homework 6a review Topic continues	<input type="text" value="score"/>	<input style="width: 20px;" type="text" value="%"/>
Week 7	Tuesday, March 6 Light Homework 6b review (if needed) <input type="text" value="Test 6"/>	Thursday, March 8 Homework 7a review Topic continues	<input type="text" value="score"/>	<input style="width: 20px;" type="text" value="%"/>
Spring Break				
Week 8	Tuesday, March 20 Other galaxies I Homework 7b review (if needed) <input type="text" value="Test 7"/>	Thursday, March 22 Homework 8a review Topic continues	<input type="text" value="score"/>	<input style="width: 20px;" type="text" value="%"/>
Week 9	Tuesday, March 27 Other galaxies II Homework 8b review (if needed) <input type="text" value="Test 8"/>	Thursday, March 29 Homework 9a review Topic continues	<input type="text" value="score"/>	<input style="width: 20px;" type="text" value="%"/>
Week 10	Tuesday, April 3 The expansion of the universe Homework 9b review (if needed) <input type="text" value="Test 9"/>	Thursday, April 5 Homework 10a review Topic continues	<input type="text" value="score"/>	<input style="width: 20px;" type="text" value="%"/>
Week 11	Tuesday, April 10 The big bang theory Homework 10b review (if needed) <input type="text" value="Test 10"/>	Thursday, April 12 Homework 11a review Topic continues	<input type="text" value="score"/>	<input style="width: 20px;" type="text" value="%"/>
Week 12	Tuesday, April 17 Cosmic inflation Homework 11b review (if needed) <input type="text" value="Test 11"/>	Thursday, April 19 Homework 12a review Topic continues	<input type="text" value="score"/>	<input style="width: 20px;" type="text" value="%"/>
Week 13	Tuesday, April 24 Accelerated expansion and dark energy Homework 12b review (if needed) <input type="text" value="Test 12"/>	Thursday, April 26 Homework 13a review Topic continues	<input type="text" value="score"/>	<input style="width: 20px;" type="text" value="%"/>
Week 14	Tuesday, May 1 Homework 13b review (if needed) <input type="text" value="Test 13"/>	Final appointments: TBA	<input type="text" value="score"/>	<input style="width: 20px;" type="text" value="%"/>

Letter Grade Key

%:	50–64	65–71	72–77	78–79	80–83	84–87	88–89	90–93	94+
Grade:	D	C ⁻	C	C ⁺	B ⁻	B	B ⁺	A ⁻	A