IMPERIAL VALLEY COLLEGE

Course Syllabus - Astronomy 100 - Fall 2022

Basic Course Information

Semester:	**Fall 2022**	Instructor Name:	**Dr. Alejandro Cozzani**
Course Title & #:	**Astronomy 100**	Email:	**alex.cozzani@imperial.edu**
CRN #:	**10008/10009**	Webpage (optional):	**Refer to Canvas**
Classroom:	**Online**	Office #:	**2767**
Class Dates:	**August 15-December 10, 2022 Last Day to Add: 08/27/22 Drop Deadline with W: 11/05/22**	Office Hours:	**Monday-Wednesday 10:45-11:15 AM and 3:15-3:45 PM Tuesday-Thursday 10:00-11:00 AM (online) or by appointment**
Class Days:	**Asynchronous Class (no Zoom meetings)**	Office Phone #:	**760-355-5720**
Class Times:	N/A	Emergency Contact:	**Silvia Murray 760-355-6201**
Units:	3.0	Class Format:	**Online (asynchronous)**

Course Description

An introduction to the principles of astronomy, including physical evolution, tools of the astronomer, the sky, the solar system, the stars, the galaxies and the universe. (CSU/UC).

Course Prerequisite(s) and/or Corequisite(s)

None.

Student Learning Outcomes

Upon course completion, the successful student will have acquired new skills, knowledge, and or attitudes as demonstrated by being able to:

1. Comprehend the workings of the seasons around the Earth and their intrinsic cause.
2. Determine the phases of the Moon based on its location with respect to the Earth and the Sun.
3. Conceptualize, both in physical size and in time of formation, the differences between the Solar System and the Universe.

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Course Objectives

Upon satisfactory completion of the course, students will be able to:

1. Demonstrate knowledge of the periodic motions of objects on the celestial sphere and their observable effects.
2. Demonstrate knowledge that astronomers locate objects in the sky through the use of a celestial coordinate system.
3. Demonstrate knowledge of the history and theories of Astronomy. The student will differentiate between the ideas of Brahe, Kepler, Galileo, Newton, and others.
4. Discuss the Sun as the center of our solar system, the scale of our solar system, and the origin of the solar system.
5. Describe the similarities and differences between the terrestrial and jovian planets, both as categories of planets and on an individual basis.
6. Describe the physical evolution of stars: their process of formation, their main-sequence lifetimes and means of energy production, and their final evolutionary processes which lead to the various types of stellar remnants.
7. Describe the basic components of the Milky Way galaxy and demonstrate knowledge of the different types of galaxies, to understand that galaxies are fundamental units of the universe, and the origins of galaxies.
8. Discuss the scientific theory for the physical evolution of the Universe, from its beginning in what is known as the "Big Bang" through to its ultimate fate of being "open" or "closed".

Textbooks & Other Resources or Links

Textbooks (either one):

1. Astronomy Today (9th ed.). Pearson. Chaisson-McMillan. OR
2. The Essential Cosmic Perspective (9th ed.).. Pearson. Bennett-Donahue-Schneider-Voit. OR
3. Pathways to Astronomy (6th ed.). McGraw Hill. Schneider-Arny. OR
4. Astronomy (2nd ed.). Openstax (FREE). Fraknoi-Morrison-Wolff.

Course Requirements and Instructional Methods

1. Homework: The purpose of homework is to provide the student with sufficient practice to master all topics studied in class and to do well on tests. Homework is done online at: https://www.pearsonmylabandmastering.com/northamerica/
   - Course ID: cozzani47672
     - *Enrollment dates: 8/15/22-11/30/22. You will not be able to sign up for HW after this date! Please refer to webpage for details.*
     - *All assignments close on 12/03/22 at 8:59 PM. After this date, the course will be expired, and it cannot be open.*

You need to satisfactorily complete at least an overall 80% to get full credit, otherwise your earned percentage will be converted to points (i.e., 80%=100 points, 72%=72 points).

It is extremely important that you use the same first and last name as in the IVC roster otherwise you may not get credit for HW. You cannot share/use other's person's account to do the HW. No exceptions!

It is extremely important that you use the same first and last name as in the IVC roster otherwise you may not get credit for HW.

2. **Out of Class Assignments**: The Department of Education policy states that one (1) credit hour is the amount of student work that reasonably approximates not less than one hour of class time and two (2) hours of out-of-class time per week over the span of a semester. WASC has adopted a similar requirement.

3. **Computer Simulations** to enhance your learning and comprehension computer simulations have been carefully selected and they are done via Canvas (pay attention to deadlines).

4. **Lecture**: You need to read the chapters or modules because there are assignments aligned to your readings (you can use any textbook of your choice).

5. **Online Discussions**: As part of the course requirements, you need to answer the online discussions found in Canvas, under the "Discussions" tab.

6. **Online Quizzes**: At the end of each chapter, you will take a quiz to check your knowledge. Please refer to specific instructions under the "Quizzes" tab in Canvas.

7. **Tests or Exams:** They may be T/F, multiple choice, open-ended, and free response questions (done in Class).

8. **Mid-term:** It may include questions from the first exam (recycled questions) and new questions (you have not seen them before but with similar level of difficulty). No makeup! (Done in Class).

9. **Final Exam:** It may include questions from the tests (recycled questions) and new questions (you have not seen them before but with similar level of difficulty). The MC section will include ALL chapters. No makeup! (Done in Class).

10. Students will not be allowed to make up any exam or assignment unless they have a powerful reason (e.g., hospitalization) and send the corresponding paperwork as evidence; it is students 'responsibility to notify the instructor via e-mail to make arrangements.

Course Grading Based on Course Objectives

The student's grade will depend on the following areas (not on total points) and is displayed in Canvas:

➢ Homework (Pearson)	20%
➢ Discussions / Simulations	15%
➢ Exams (2)	20%
➢ Quizzes / Research Project-Presentation	15%
➢ Mid-term / Final Exam	30%
➢ **TOTAL**	**100%**

All grades are calculated by using the standard scale of:

A = 100-90% ***B = 89-80%*** ***C = 79-70%*** D = 69-60% F = 59% and below

Course Policies

ATTENDANCE

- A student who fails to attend the first meeting of a class or does not complete the first mandatory activity of an online class will be dropped by the instructor as of the first official meeting of that class. Should readmission be desired, the student's status will be the same as that of any other student who desires to add a class. It is the student's responsibility to drop or officially withdraw from the class. See General Catalog for details.
- Regular attendance in all classes is expected of all students. A student whose continuous, unexcused absence exceed the number of hours the class is scheduled to meet per week may be dropped. For online courses, students who fail to complete required activities for two consecutive weeks may be considered to have excessive absences and may be dropped.
- Absences attributed to the representation of the college at officially approved events (conferences, contests, and field trips) will be counted as 'excused' absences.

CLASSROOM ETIQUETTE

- Electronic Devices: Cell phones and electronic devices must be turned off and put away during class, unless otherwise directed by the instructor.
- Food and Drink are prohibited in all classrooms. Water bottles with lids/caps are the only exception. Additional restrictions will apply in labs. Please comply as directed by the instructor.
- Disruptive Students: Students who disrupt or interfere with a class may be sent out of the room and told to meet with the Campus Disciplinary Officer before returning to continue with coursework. Disciplinary procedures will be followed as outlined in the General Catalog.
- Children in the classroom: Due to college rules and state laws, no one who is not enrolled in the class may attend, including children.

ONLINE NETIQUETTE

- What is netiquette? Netiquette is internet manners, online etiquette, and digital etiquette all rolled into one word. Basically, netiquette is a set of rules for behaving properly online.
- Students are to comply with the following rules of netiquette: (1) identify yourself, (2) include a subject line, (3) avoid sarcasm, (4) respect others' opinions and privacy, (5) acknowledge and return messages promptly, (6) copy with caution, (7) do not spam or junk mail, (8) be concise, (9) use appropriate language, (10) use appropriate emoticons (emotional icons) to help convey meaning, and (11) use appropriate intensifiers to help convey meaning [do not use ALL CAPS or multiple exclamation marks (!!!!)].

ACADEMIC HONESTY

Academic honesty in the advancement of knowledge requires that all students and instructors respect the integrity of one another's work and recognize the important of acknowledging and safeguarding intellectual property.

There are many different forms of academic dishonesty. The following kinds of honesty violations and their definitions are not meant to be exhaustive. Rather, they are intended to serve as examples of unacceptable academic conduct.

PLAGIARISM

- Plagiarism is taking and presenting as one's own the writings or ideas of others, without citing the source. You should understand the concept of plagiarism and keep it in mind when taking exams and preparing written materials. If you do not understand how to "cite a source" correctly, you must ask for help.
- Cheating is defined as fraud, deceit, or dishonesty in an academic assignment, or using or attempting to use materials, or assisting others in using materials that are prohibited or inappropriate in the context of the academic assignment in question.

Anyone caught cheating or plagiarizing will receive a zero (0) on the exam or assignment, and the instructor may report the incident to the Campus Disciplinary Officer, who may place related documentation in a file. Repeated acts of cheating may result in an F in the course and/or disciplinary action. Please refer to the General Catalog for more information on academic dishonesty or other misconduct. Acts of cheating include, but are not limited to, the following: (a) plagiarism; (b) copying or attempting to

copy from others during an examination or on an assignment; (c) communicating test information with another person during an examination; (d) allowing others to do an assignment or portion of an assignment; (e) using a commercial term paper service.

Other Course Information

Imperial Valley College offers various services in support of student success. The following are some of the services available for students. Please speak to your instructor about additional services which may be available.

- CANVAS LMS. Canvas is Imperial Valley College's main Learning Management System. To log onto Canvas, use this link: Canvas Student Login. The Canvas Student Guides Site provides a variety of support available to students 24 hours per day. Additionally, a 24/7 Canvas Support Hotline is available for students to use: 877-893-9853.
- Learning Services. There are several learning labs on campus to assist students through the use of computers and tutors. Please consult your Campus Map for the Math Lab; Reading, Writing & Language Labs; and the Study Skills Center.
- Library Services. There is more to our library than just books. You have access to tutors in the Study Skills Center, study rooms for small groups, and online access to a wealth of resources.
- CANVAS LMS. Canvas is Imperial Valley College's Learning Management System. To log onto Canvas, use this link: Canvas Student Login. The Canvas Student Guides Site provides a variety of support available to students 24 hours per day. Additionally, a 24/7 Canvas Support Hotline is available for students to use: 877-893-9853.
- Any student with a documented disability who may need educational accommodations should notify the instructor or the Disabled Student Programs and Services (DSP&S) office as soon as possible. The DSP&S office is located in Building 2100, telephone 760-355-6313. Please contact them if you feel you need to be evaluated for educational accommodations.

IVC Student Resources

IVC wants you to be successful in all aspects of your education. For help, resources, services, and an explanation of policies, visit http://www.imperial.edu/studentresources or click the heart icon in Canvas.

Anticipated Class Schedule/Calendar

*****Subject to change without prior notice*****

WEEK OF	ACTIVITY, ASSIGNMENT, TOPIC	READING	ASSIGMENT DUE
1-August 15	Syllabus / HW/Canvas Module 0: Meet and Greet	Read Content Module 0	*Refer to Canvas and Mastering Physics for due dates*
2- August 22	MODULE 1: The Celestial Sphere	Read Content Module 1	*Refer to Canvas and Mastering Physics for due dates*
3 – August 29	MODULE 2: Historical Astronomy	Read Content Module 2	*Refer to Canvas and Mastering Physics for due dates*
4- September 05 ***Holiday Monday 9/05/22***	MODULE 3: The Solar System	Read Content Module 3	*Refer to Canvas and Mastering Physics for due dates*
5- September 12	MODULE 4: Tools of the Astronomer **Exam # 1-Modules 1-2-3**	Read Content Module 4	*Refer to Canvas and Mastering Physics for due dates*
6- September 19	MODULE 5: Physical Evolution of the Stars (Part 1)	Read Content Module 5	*Refer to Canvas and Mastering Physics for due dates*

7- September 26	MODULE 5: Physical Evolution of the Stars (Part 2)	Read Content Module 5	*Refer to Canvas and Mastering Physics for due dates*
8- October 03	**Mid-term (Modules 1-5)**		**Done in Class**
9- October 10	MODULE 6: Galactic and Extragalactic Space (Part 1)	Read Content Module 6	*Refer to Canvas and Mastering Physics for due dates*
10-October 17	MODULE 6: Galactic and Extragalactic Space (Part 2)	Read Content Module 6	*Refer to Canvas and Mastering Physics for due dates*
11- October 24	MODULE 7: Physical Evolution of the Universe (Part 1)	Read Content Module 7	*Refer to Canvas and Mastering Physics for due dates*
12- October 31	MODULE 7: Physical Evolution of the Universe (Part 2)	Read Content Module 7	*Refer to Canvas and Mastering Physics for due dates*
13- November 07	MODULE 8: Life in the Universe **Exam # 2-Modules 6-7**	Read Content Module 8	*Refer to Canvas and Mastering Physics for due dates*
14-November 14	MODULE 9: Major advances in Astronomy	Read Content Module 9	*Refer to Canvas and Mastering Physics for due dates*
November 21	***Thanksgiving Break***	***No Class***	
15- November 28	***Research Project-Presentation***		*Refer to Canvas and Mastering Physics for due dates*
16-December 05	**Final Exam *(All Modules)***		**Done in Class**

Comparison among textbooks:

CANVAS	OPENSTAX Chapter(s)	CHAISSON Chapter(s)	BENNETT Chapter(s)
Module 1	**1/4**	**1**	**1/2**
Module 2	**2**	**2**	**3**
Module 3	**7/13**	**6/14**	**6/10**
Module 4	**6**	**5**	**5**
Module 5	**17 through 24**	**18 through 22**	**12/13/14**
Module 6	**25/26/27/28**	**23/24/25**	**15/16**
Module 7	**29**	**26/27**	**17/18**
Module 8	**30**	**28**	**19**
Module 9	**Refer to Canvas**	**Refer to Canvas**	**Refer to Canvas**

Mastering Physics - Student Registration Instructions

To register for Astronomy 100 CRN 10008 or 10009 Fall 2022:
Go to https://mlm.pearson.com/enrollment/cozzani47672

1.
2. Sign in with your Pearson student account or create your account.
3. Select any available access option, if asked.
    a. Enter a prepaid access code that came with your textbook or from the bookstore.
    b. Buy instant access using a credit card or PayPal.
    c. Select Get temporary access without payment for 14 days. 4.
4. Select Go to my course.
5. Select Astronomy 100 CRN 10008 or 10009 Fall 2022 from My Courses.

If you contact Pearson Support, give them the course ID: **cozzani47672**

To sign in later:

1. Go to https://mlm.pearson.com
2. Sign in with the same Pearson account you used before.
3. Select Astronomy 100 CRN 10008 or 10009 Fall 2022 from My Courses.