# **Clackamas Community College**

Online Course/Outline Submission System

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Section #1 General Course Information
Department:Sciences
Submitter
First Name: James Last Name: Dickinson Phone: 3350 Email: jamesd
Course Prefix and Number:PH - 121
# Credits:4
Contact hours
Lecture (# of hours): 33 Lec/lab (# of hours): 33 Lab (# of hours): 33 Total course hours: 66
For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.
Course Title:General Astronomy
Course Description:
A lab course discussing the history of astronomy, the Earth and moon, all planets in our solar system, along with asteroids, meteors and comets.
Type of Course:Lower Division Collegiate
Is this class challengeable?
Yes
Can this course be repeated for credit in a degree?
No

Is general education certification being sought at this time?
Yes
Check which General Education requirement:
✓ Science & Computer Science
In this course part of an AAS or related cartificate of completion?
Is this course part of an AAS or related certificate of completion?
No
Are there prerequisites to this course?
No
Are there corequisites to this course?
No
Are there any requirements or recommendations for students taken this course?
Yes
<b>Recommendations:</b> Pass RD-090 or placement in RD-115; pass WR-095 or placement in WR-121; pass MTH-095 with a C or bettre or placement in MTH-105 or MTH-111.
Requirements: None
Are there similar courses existing in other programs or disciplines at CCC?
No
Will this class use library resources?
No
Is there any other potential impact on another department?
No
Does this course belong on the Related Instruction list?
No
GRADING METHOD:
A-F or Pass/No Pass
Audit:Yes

When do you plan to offer this course?

/	Fall

✓ Winter

✓ Spring

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

Yes

Course Number: GS-107 Title: Astronomy

Will this course appear in the college catalog?

Yes

Will this course appear in the schedule?

Yes

**Student Learning Outcomes:** 

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

- 1. demonstrate knowledge of the nature of scientific knowledge and the scientific method, including assessing the strengths and weaknesses of scientific studies; (SC1) (SC2) (SC3)
- 2. demonstrate knowledge of the vocabulary necessary to comprehend and analyze astronomy articles in newspapers, magazines, Internet, etc.; (SC1)
- 3. demonstrate knowledge of the changes in scientific models of the solar system and examine the influence of these models on human society, (SC1) (SC2) (SC3)
- 4. demonstrate knowledge of phases of the moon and be able to compare and contrast theories about the origin of the moon, (SC1) (SC2)
- 5. compare and contrast the planets and moons in our solar system, (SC1) (SC2)
- 6. demonstrate knowledge of comets, asteroids, meteorites and theories of formation of solar systems. (SC1) (SC2)

# AAOT/ASOT GENERAL EDUCATION OUTCOMES COURSE OUTLINE MAPPING CHART

# Mark outcomes addressed by the course:

- Mark "C" if this course completely addresses the outcome. Students who successfully complete this course are likely to have attained this learning outcome.
- Mark "S" if this course substantially addresses the outcome. More than one course is required for the outcome to be completely addressed. Students who successfully complete all of the required courses are likely to have attained this learning outcome.
- Mark "P" if this course partially addresses the outcome. Students will have been exposed to the outcome as part of the class, but the class is not a primary means for attaining the outcome and assessment for general education purposes may not be necessary.

# As a result of completing the AAOT/ASOT general education requirements, students will be able to:

#### **WR: Writing Outcomes**

- 1. Read actively, think critically, and write purposefully and capably for academic and, in some cases, professional audiences.
- 2. Locate, evaluate, and ethically utilize information to communicate effectively.
- 3. Demonstrate appropriate reasoning in response to complex issues.

# SP: Speech/Oral Communication Outcomes

- 1. Engage in ethical communication processes that accomplish goals.
- 2. Respond to the needs of diverse audiences and contexts.
- 3. Build and manage relationships.

### **MA: Mathematics Outcomes:**

- 1. Use appropriate mathematics to solve problems.
- 2. Recognize which mathematical concepts are applicable to a scenario, apply appropriate mathematics and technology in its analysis, and then accurately interpret, validate, and communicate the results.

## AL: Arts and Letters Outcomes

- 1. Interpret and engage in the Arts & Letters, making use of the creative process to enrich the quality of life.
- 2. Critically analyze values and ethics within range of human experience and expression to engage more fully in local and global issues.

# SS: Social Science Outcomes

- 1. Apply analytical skills to social phenomena in order to understand human behavior.
- 2. Apply knowledge and experience to foster personal growth and better appreciate the diverse social world in which we live.

### SC: Science or Computer Science Outcomes

- S 1. Gather, comprehend, and communicate scientific and technical information in order to explore ideas, models, and solutions and generate further questions.
- **S** 2. Apply scientific and technical modes of inquiry, individually, and collaboratively, to critically examine the influence of scientific and technical knowledge on human society and the environment.

**s** 3. Assess the strengths and weaknesses of scientific studies and critically examine the influence of scientific and technical knowledge on human society and the environment.

# CL: Cultural Literacy Outcome

1. Identify and analyze complex practices, values, and beliefs and the culturally and historically defined meanings of difference.

#### **Outcomes Assessment Strategies:**

- ✓ Writing Assignments
- ✓ Multiple Choice Test
- ✓ Performances/Simulation
- ✓ Other Assessment Tools: Laboratory assignments

#### **Major Topic Outline:**

- 1. The night sky and the history of astronomy.
- 2. Telescopes and light; the electromagnetic spectrum.
- 3. The Earth and our moon.
- 4. Mercury.
- 5. Venus.
- 6. Mars.
- 7. Jupiter.
- 8. Saturn.
- 9. Uranus.
- 10. Neptune.
- 11. Comets, meteorites and asteroids.
- 12. Formation of our solar systems and detection of other solar systems.

# Does the content of this class relate to job skills in any of the following areas:

Increased energy efficiency
 Produce renewable energy
 Prevent environmental degradation
 Clean up natural environment
 Supports green services

Percent of course:0%

# Section #2 Course Transferability

Concern over students taking many courses that do not have a high transfer value has led to increasing attention to the transferability of LDC courses. The state currently requires us to certify that at least one OUS school will accept a new LDC course in transfer. Faculty should communicate with colleagues at one or more OUS schools to ascertain how the course will transfer by answering these questions.

- 1. Is there an equivalent lower division course at the University?
- 2. Will a department accept the course for its major or minor requirements?
- 3. Will the course be accepted as part of the University's distribution requirements?

If a course transfers as an elective only, it may still be accepted or approved as an LDC course, depending on the nature of the course, though it will likely not be eligible for Gen Ed status.

Which OUS schools will the course transfer to? (Check all that apply)
Identify comparable course(s) at OUS school(s)
How does it transfer? (Check all that apply)
Provide evidence of transferability: (minimum one, more preferred)
First term to be offered:
Next available term after approval