

ASTRON 3 Distance Education Application

This Distance Education course meets the same standard of course quality as is applied to traditional classroom courses in the following categories, as stated in the official course outline of record:

- Course objectives have not changed
- Course content has not changed
- Method of instruction meets the same standard of course quality
- Outside assignments meet the same standard of course quality
- Serves comparable number of students per section as a traditional course in the same department
- Required texts meet the same standard of course quality

Additional considerations for all distance education courses:

- Determination and judgments about the equality of the distance education course were made with the full involvement of the faculty as defined by Administrative Regulation 5420 and college curriculum approval procedures.
- Adequate technology resources exist to support this course/section
- Library resources are accessible to students
- Specific expectations are set for students with respect to a minimum amount of time per week for student and homework assignments
- Adequately fulfills “effective contact between faculty member and student” required by Title 5.
- Will not affect existing or potential articulation with other colleges
- Special needs (i.e., texts, materials, etc.) are reasonable
- Complies with current access guidelines for students with disabilities
- Evaluation methods are in place to produce an annual report to the Board of Trustee on activity in offering this course or section following the guidelines to Title 5 Section 55317 (see attachment) and to review the impact of distance education on this program through the program review process specified in accreditation standard 2B.2.

Santa Monica College has a legal and ethical obligation to ensure equal access to electronic information technology (e.g., software, computers, web pages) for all students. Consistent with this obligation, the technology-based components of our course will reflect current accessibility design standards. Support in implementing these standards is available through Academic Computing and Disabled Student Services. Evaluation methods are in place to produce an annual report to the Board of Trustee on activity in offering this course or section following the guidelines to Title 5 Section 55317 (see attachment) and to review the impact of distance education on this program through the program review

Guidelines and Questions for Curriculum Approval of a Distance Education Course

1a. Interactions: Describe the nature and expected frequency of instructor-student interactions:

There will be multiple, frequent and on-going communication between the instructor and each student via threaded discussions, email and online chats that occur throughout the course. These communications will be initiated regularly and frequently by the instructor. The instructor will provide on-going feedback, comments and suggestions to assist and improve student performance. The instructor will also provide instructions and support as needed for course navigation. Further clarification will also be provided regarding content, exams and assignments. The instructor will also provide a virtual office and will be available to talk to students over the phone if necessary.

1b. Interactions: Describe the nature and expected frequency of student-student interactions:

Students will participate in student-student interactions using threaded discussions. Using this asynchronous forum, students will be able to communicate with each other throughout the course regarding course material and assignments. A virtual student lounge will also be provided to encourage students to interact with each other on a more personal level.

1c. Interactions: Describe the nature and expected frequency of student-content interactions:

Students will engage with the content regularly throughout the course. Each unit will include online lectures, video links and practice quizzes that will allow the student to assess their comprehension of the course content before they complete a graded assignment. The practice quizzes will provide immediate feedback to support different student learning styles. Students will also be asked to watch online videos and perform exercises on external web sites.

1d. Interactions:

Online class activities that promote class interaction and engagement	Brief Description	Percentage of Online Course Hours
Online Lecture	PowerPoint lectures (which may be audio-narrated) will be provided for each module which will be broken down into short units. Alternative versions of the material will be provided e.g. slides with notes, notes only and podcasts	20.00%

Videos	Links to a wide-range of videos will be embedded within the audio-narrated PowerPoint lectures. A video will be provided in the introductory module to welcome the students to the class. There will also be video at the beginning of each module to outline the material to be covered and the assignments due. All videos will be closed-captioned.	10.00%
Discussion Boards	Two discussions boards will be assigned to each module. One will pose a general question relating to astronomy and the other will be specific to the material contained in the module. The discussions boards will provide ample opportunity for student-student and student-instructor interaction.	10.00%
Exams	There will be brief practice quizzes after each unit and a weekly test at the end of each module.	10.00%
Other (describe)	A hands-on lab will be part of each module which may include observing the sky, analyzing data from the internet and building simple astronomical instruments.	50.00%

2. Instruction: Describe how content will be organized and delivered in the interest of achieving course outcomes/objectives (e.g. what are the methods of instruction being used, technologies used, approximate time schedule, necessary instructional materials.)

The course will be divided into modules. Each module will be broken down into smaller units. Each module will have introductory material in the form of a PowerPoint presentation and/or a reading assignment from an online text, video presentations/animations, a discussion board and a quiz. An exam will be given at the end of each module.

3. Assignments / Assessments: Describe how assignments and assessments are used so that instructor-student contact is maintained and students are given regular, meaningful feedback. Describe interactions that encourage students' participation. Describe assessments that are verifiable, equivalent to on-ground, and appropriate. Describe the criteria used to substantiate student learning; explain how these interactions will be assessed.

% of grade	Activity	Assessment Method
30.00%	Exams	There will be an exam at the end of every module which will be in the form of either a multiple choice test or a paper submitted online
20.00%	Threaded Discussions	Students will be expected to contribute to and respond to posted in threaded discussions placed in each module.
10.00%	Web Discovery	For each module, students will be expected to find web resources for the class and post them in a dedicated threaded discussion board.
30.00%	Lab Reports	A lab will be assigned to each module and a detailed report submitted.
10.00%	Lab Quizzes	A quiz will be administered at the end of each lab to ensure that students have mastered the concepts in that lab.

4. Technology: Describe the technical qualifications an instructor would need and the support that might be necessary for this course to be delivered at a distance (e.g. the college's existing technology, CCCConfer certification, other specialized instructor training, support personnel, materials and resources, technical support, etc.)
Faculty will become familiar with the learning management system in place.

5. Student Support: Describe any student support services one might want or need to integrate into the online classroom for this course (e.g. links to counseling, financial aid, bookstore, library, etc.)
Links to library databases will be provided as an integral part of the course.

6. Accessibility: Describe how the design of the course will ensure access for students with disabilities including compliance with the regulations of Section 508 of the Rehabilitation Act.
Online lecture presentations and assignments will be made accessible by incorporating design features such as alternative text, headings for data tables, and skip navigation. Whenever possible, links to additional materials that are likewise accessible will be chosen; when that is not possible, appropriate alternative accommodations will be made by the instructor.

7. Online Strategies: Using one of the course objectives, describe an online lesson/activity that might be used in the course to facilitate student learning of that objective. Be sure the sample lesson/activity includes reference to the use of online teaching tools (such as drop box or threaded discussion, or multimedia such as Articulate, Flash, Jing, etc.).
Online exercise based on Objective 12: Galaxy Zoo Introduction Galaxy Zoo is an online site on which internet users help astronomers to classify large numbers of galaxies. Even though computers can be used to do this, it has been shown that the human eye is much better at judging galaxy shapes. In this lab you will create an account on the Galaxy Zoo site and attempt to classify galaxies with the rest of the class. Instructions 1. Visit www.galaxyzoo.org 2. Click on the blue Sign Up button at the upper right of the window. Choose a username and then enter your EXACT SMC student email address (e.g. mouse_mickey@student.smc.edu) and choose a password to create an account. 3. Click on the blue ?Sign Out? button at the upper right 4. Now log into your SMC student email account and you should see an email from no-reply@zooniverse.org. Open this email up and click on the Galaxy Zoo link. 5. Now enter your username and password and you will be given a series of galaxies to classify. Just examine the pictures and then answer the questions at the lower right. Make sure the round Group icon is highlighted. 6. Post your experiences on the threaded discussion board for this lab.