Instructor Information

Instructor:  Greg Eberhardt       Phone: 214-394-6039
Office:     STEM Division Office (A546)   Email: g.eberhardt@dcccd.edu
Office hours: I do not have an office at the college; however, you may leave a message for me in my mailbox in room A546 or at the number listed above. If you need additional help, please see me before or after class.

Course Information

COURSE TITLE:   Astronomy: The Stars and Galaxies
COURSE NUMBER:  PHYS 1403
CREDIT HOURS:   Four Credit Hours

COURSE PREREQUISITE: Successful completion of high school algebra

COURSE DESCRIPTION: The course supports students in developing understanding of the structures of the solar system as well as the science used in learning from object millions of years

REQUIRED TEXTBOOK AND SOFTWARE:

Pathways to Astronomy Connect Access
ISBN-10: 0077515323
5th Edition
Lab delivered by Starrynight


A student of this institution is not under any obligation to purchase a textbook from a university affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.
OTHER REQUIRED MATERIALS:
- Valid and monitored e-mail address, access to eCampus*, and access to computers.
- Lab notebook with grid lined pages

DCCCD/State of Texas LEARNING OUTCOMES related to the book above:

<table>
<thead>
<tr>
<th>Learning Outcomes (as listed in the ACGM)</th>
<th>Units(s) from textbook – Pathways to Astronomy by Schneider</th>
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<tbody>
<tr>
<td>1. Understand and recognizing the structures that populate the universe.</td>
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<td>2. Develop an astronomical structure understanding, Integrate mathematics in to this understanding</td>
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<td>3. Apply the underlying basic sciences to develop Astronomical concepts. Develop the underlying science to improve empirical understanding and relationships</td>
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<td>4. Determine the nature of light (wave particle duality, velocity, and the spectrum), and especially in understanding objects very far away.</td>
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<td>5. Develop a formalism to better visualize the science within astronomy. Solve problems using principles of proportionality.</td>
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<td>5. Applying these principles to the make calculations and improve problem solving skills.</td>
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*eCampus username:* MUST be in the format: `e#######@student.dcccd.edu`

Use YOUR student ID number for the seven digits before @

*eCampus password:* Use your new 12 character eConnect password

For password instructions, see [https://www.dcccd.edu/services/onlineservices/pass/pages/default.aspx](https://www.dcccd.edu/services/onlineservices/pass/pages/default.aspx)

eCampus help desk number for students: 1-866-374-7169 or 972-669-6402

Course Activities and Evaluation Procedures:

I. **Unit Quizzes**: There will be five quizzes will be composed of 12-20 problems that are all taken online. Each quiz, you will be allowed to take it twice.

II. **Homework**: This will be comprised of 12-20 problems from the unit that represent what I feel is very important in our development of these materials. I will select problems from this problem set to put on the exam. Each problem will be submitted on blackboard, take a picture of each problem, and place into homework in Blackboard
III. Laboratory Experiments: This semester there will be 8-12 experiments to be completed online using simulations, or at your house. The final grade depends on answering the questions and the completeness of several essay questions associated with each lab.

IV. Final Exam: A class project that will test your understanding on how the science developed is used to understand the objects you have studied in this course and will be worth 100 points. The final exam will be started in after two week and be the final phase due before finals week.

Grading Policy:

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<th>Maximum number of points that can be earned per activity.</th>
<th>Final grades will be recorded using the following scale:</th>
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<tbody>
<tr>
<td>Highest Exam .............................................450</td>
<td>A: 1100-1350 points (80% and up)</td>
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<tr>
<td>Problem Sets............................................. 450</td>
<td>B: 850-1099 points (80 +%)</td>
</tr>
<tr>
<td>Virtual Labs &amp; Reports.........................450</td>
<td>C: 700-849 points (60+)</td>
</tr>
<tr>
<td>Total Points:.........1350</td>
<td>E* or F: Below 700 points (below 60%)</td>
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Points must be revised if using Instructor’s choice, grade / points correlation may be adjusted or scaled.

*E can be awarded based on the instructor’s discretion. An “E” grade means that the student MUST retake PHYS 1402. The “E” grade has some implications with Financial Aid. The student MUST discuss this with the Financial Aid office and alert the instructor BEFORE the final exam.

Attendance Policy: Not Applicable

Cell Phone Use in the Classroom: Not applicable

eConnect Progress Reports: Not applicable to summer courses

eConnect Progress Report #1) is anticipated at about week five. The first eConnect progress report will be based solely on the score you made on your first exam, completion of homework for first 4 weeks. Progress Check #1 will be a letter grade A, B, C or F and will be issued according to your score on EXAM #1 you’re your completed homework. Please know that this is just a progress grade check. Your final, transcript grade is not input into eConnect until after the final exam in week #16. If your Progress Check #1 is a "C" or an "F", you should make an appointment with your instructor immediately. This individual time spent with your
instructor can benefit you greatly; you should set some new goals for how you do homework and quizzes and how you study for tests.

**eConnect progress report #2** will occur about week #10 of the course. The 2nd eConnect progress report will be based on the average of your scores for EXAM #1 and EXAM #2. Progress Report #2 will be a letter grade A, B, C or F. Remember that this is ONLY a progress letter grade. It is NOT your final letter grade for the class. Your final, transcripted letter grade is not input into eConnect until after the final exam in Week #16. If your Progress Check #2 is a "C" or an "F", you should make an appointment with your instructor immediately. There will still be some time to make improvements to your work habits and help you be successful in the class.

**Institutional Policies:**

Institutional Policies relating to this course can be accessed from the following link: www.elcentrocollege.edu/syllabipolicies