Contacting Your Instructor
Instructors typically respond to emails from students within 24 hours. However, over the weekend and holiday periods responses may be delayed. Find out more about contacting your instructor.

Instructor Contact Information
Name: Heather Appleby
Email: H.Appleby@dccc.edu
Office Phone: 972-761-6728 (NOTE: due to COVID-19, campuses are closed & this number is NOT forwarded)
Office Location: SH-273
Office Hours: MWF 1 – 2; TR 2 – 3; via Microsoft Teams
Division Office and Phone: S205, 972-238-6248

Course Information
Course Title: Stars & Galaxies
Course Number: PHYS 1403
Section Number: 81401
Semester/Year: Fall/2020
Credit Hours: 4
Class Meeting Time/Location: Online via eCampus & Microsoft Teams
Certification Date: Saturday, September 5, 2020
Last Day to Withdraw: Thursday, November 12, 2020

Course Prerequisites
None.
Course Description
The study of stars, galaxies, and the universe outside our solar system. Introduces the properties of stars, stellar evolution, black holes, galaxies and current cosmological ideas. Emphasis is on the application of scientific principles and explanation of phenomena in the universe. The laboratory includes outdoor viewing sessions and the use of spectra. (3 Lec., 3 Lab.)

Student Learning Outcomes
None.

Texas Core Objectives
The College defines essential knowledge and skills that students need to develop during their college experience. These general education competencies parallel the Texas Core Objectives for Student Learning. In this course, the activities you engage in will give you the opportunity to practice two or more of the following core competencies:

1. **Critical Thinking Skills** - to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
2. **Communication Skills** - to include effective development, interpretation, and expression of ideas through written, oral, and visual communication
3. **Empirical and Quantitative Skills** - to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
4. **Teamwork** - to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
5. **Personal Responsibility** - to include the ability to connect choices, actions, and consequences to ethical decision-making
6. **Social Responsibility** - to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities

Required Course Materials
If your Dallas College course requires learning materials they will be provided as part of the IncludED program (dcccd.edu/included) or as free materials you can access in your online course shell.
If you opt out of the IncludED program, you are responsible for obtaining all your required learning materials by the first day of the class. For more details, see Institutional Policies.


Smartwork online homework and tutorial system account (free with new textbook)

An up-to-date computer with internet and office software (free Microsoft Office for DCCCD students. See Student Email and Microsoft Office.)

Scientific calculator

**Graded Work**

The tables below provide a summary of the graded work in this course and an explanation of how your final course grade will be calculated.

**Summary of Graded Work**

<table>
<thead>
<tr>
<th>Work</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily Grades</td>
<td>15%</td>
</tr>
<tr>
<td>Labs</td>
<td>20%</td>
</tr>
<tr>
<td>Term Tests (best 3 of 4)</td>
<td>45% (15% each)</td>
</tr>
<tr>
<td>Final Exam</td>
<td>20%</td>
</tr>
</tbody>
</table>

**TOTAL: 100%**

**Final Grade**

<table>
<thead>
<tr>
<th>Percentages</th>
<th>Letter Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>90-100%</td>
<td>A</td>
</tr>
<tr>
<td>80-89%</td>
<td>B</td>
</tr>
<tr>
<td>70-79%</td>
<td>C</td>
</tr>
<tr>
<td>60-69%</td>
<td>D</td>
</tr>
<tr>
<td>0-59%</td>
<td>F</td>
</tr>
</tbody>
</table>

**Description of Graded Work**
**Homework:** We will be utilizing Smartwork for online homework. Its access code packaged with a new textbook. Each chapter will have a homework assignment associated with it. To login, always use the links found on eCampus. Be sure to mark “Problem Type Demo for Students” assignment as “Reviewed” once complete to stay on schedule. The site should only be accessed via eCampus.

**Quizzes:** We will be utilizing Smartwork for online quizzes, utilizing links on eCampus. There will be approximately one per chapter, and no make-ups allowed.

**Discussion Boards:** There will be some discussion board questions. An initial response should be posted soon after it becomes available, with replies to other students following, perhaps 2-3 days later. Part of “Daily Grades”.

**Journal:** Each student will be required to keep a weekly journal. The journal is also part of the overall grade (within “Daily grades”). The journal will only be visible to the student and the instructor and will be held in confidence, so the student should feel free to express themselves without feeling embarrassed or concerned that their personal thoughts will be shared with others. It can be found on eCampus in Tools > Journal. It will have the same foundation questions every week and may have added one-time question(s) as the instructor sees fit.

Journal questions (from the Orientation video):

1. What did you learn this week?
2. What did you find difficult to learn this week?
3. How did you overcome the difficulty? (i.e. how did you resolve the problem? If you did not resolve it, explain what you tried.)
4. Did you use any “outside resources”?
   a) If so, what was it/were they?
   b) Where/How did you find it/them?
   c) If it was a web page, was it one listed in a lecture or elsewhere in the course?
5. Did you have an “A-ha!” moment where you overcame a difficulty with the material? Or found a way to describe something to someone?
6. Any astronomy in the news you found this week?
7. Do you have any questions you would like to ask your instructor concerning the week’s material?
8. Did you find any web links in the power point that were broken? (extra credit)
Labs: Each lab will consist of an experiment or activity and a submitted lab report, which is due each Friday, normally after a week. The report must include the completed lab results with math work shown and questions answered.

Note: The lab for this class is online and is to be done by the student at home. A computer and internet connection will be needed. The lab grade IS PART OF the lecture grade.

Exams: There will be 3 term exams. Each test will need to be completed within the 90 minute time limit.

Final Exam: The final exam is comprehensive and required. Tues., Dec. 8th

Extra Credit: Should you feel your score on one of the tests (#1, 2, 3 or 4) was not as good as you desired, one extra credit paper MAY be done, due by 11:59 p.m., Nov. 13th, 2020, Friday. The specifics are: read one, 5 or more page article from Scientific American, American Scientist, or Discover magazine (PUBLISHED version – NOT internet) or similar magazine on a topic relevant to material in Chapters 1 – 5, 7, 13 – 24. Then write a one-page summary using single spacing; 11 or 12 point font; Arial, Century, Garamond, Times New Roman, or similar font; and using no more than 2 short quotes (2 lines or less). Up to 10 points may be added to your lowest test score this way. Be sure not to plagiarize. Include a cover sheet containing your name, “1403.81401,” and a small bibliography (author's name, article title, magazine name, publish date, page numbers). No late work accepted

Attendance and Your Final Grade
I highly recommend “attending” all classes. That is to say, I recommend devoting at least 1.5 hours per day to this class, either reading the textbook; completing homework assignments, module quizzes, and lab work; taking tests; et cetera. That is the same expectation as an on-campus class. “Attendance” prior to the Certification Date will be determined by participation in the Ice Breaker Discussion Board. Otherwise, “attendance” will be considered to be both time logged-in, AND completion and submission of work.

Late Work Policy
Late work will only be accepted on rare occasion, with permission, and will not be accepted once it has been graded and returned to the rest of class.
Other Course Policies

Etiquette: Professional and mature behavior is expected at all times, both in and out of class, towards all members of the class.

Electronic devices policies: During testing (term tests or Final Exam), NO cell phone OR tablet use of ANY KIND is allowed. The student should be ALONE, and not use any notes, texts, or any other aides or assistance. Students who have official accommodations should make sure the instructor has received the proper paperwork from the office.

eCampus Gradebook: grades on SmartWork post after the due date. Both the module homework (HW) and Quiz grades will post in SmartWork. The grades will be downloaded into eCampus at the end of the semester. Other grades will post as soon as possible.

Communications: All emails sent between 8 a.m. Monday and noon Friday will be answered within 48 hours. Those sent between noon Friday and 8 a.m. Monday will be answered within 72 hours. If you do not receive a response within the posted timeframe, please re-send your email as I may have overlooked it or it may have become “lost” in transit. Also, please begin the subject line with “Phys1403.”

Institutional Policies

Institutional Policies include information about tutoring, Disabilities Services, class drop and repeat options, Title IX, and more.

Course Schedule

<table>
<thead>
<tr>
<th>Topic</th>
<th>Readings &amp; Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module 0</td>
<td>Class Prep., Introductory &amp; Course Orientation materials, SmartWork material</td>
</tr>
<tr>
<td>Module 1</td>
<td>Background: Ch. 1, Ch. 2, Ch. 3.2 &amp; 3.4, Ch. 4, Ch. 5</td>
</tr>
<tr>
<td>Module 2</td>
<td>Stellar Birth &amp; Basics: Ch. 7, Ch. 13, Ch. 14, Ch. 15</td>
</tr>
<tr>
<td>Module 3</td>
<td>Stellar Stages: Ch. 16, Ch. 17, Ch. 18</td>
</tr>
<tr>
<td>Module 4</td>
<td>Galactic Basics: Ch. 19, Ch. 20, Ch. 21</td>
</tr>
<tr>
<td>Module 5</td>
<td>Cosmology: Ch. 22, Ch. 23</td>
</tr>
<tr>
<td>Module 6</td>
<td>Life “Out There”: Ch. 24</td>
</tr>
</tbody>
</table>

8/1/20 Version