AST1004 ASTRONOMY OF STARS AND GALAXIES

Summer 2018

Instructor: Douglas H. Laurence Time: MW 1:30PM – 2:55PM

Email: dlaurenc@broward.edu Room: 7/277

Course Website: AST1004 Course Website

Office: Room 7/135.

Office hours: M, T, W, R from 3:00P - 4:30P

Required Materials: You are required to buy:

• Textbook: Astronomy Today, Volume 2: Stars and Galaxies, 9th ed., Chaisson & McMillan.

• Materials: Scantron sheets for the two exams, the midterm and the final. Must be long enough to answer 30 questions.

Objectives: During the semester, we will cover the following topics:

- Introduction to Astronomy
- Stars
- Galaxies
- Cosmology & the Evolution of the Universe

Prerequisites/Co-requisites: MAT0028C.

Tentative Course Outline: This syllabus is subject to change with prior notification from the professor. The Course Website (see the top of the syllabus) has the most recent course information, so check it frequently! (* Blue days are days off, red days are exam dates.)

| Week of | Monday | Wednesday | Week of | Monday | Wednesday |
|---------|-----------------|-----------------|----------|------------|-----------------|
| May 14 | Ch. 1 | Ch. 2 | July 2 | Ch. 22 | July 4th |
| May 21 | Ch. 2 | Ch. 3 | July 9 | Ch. 22 | Ch. 23 |
| May 28 | Memorial Day | Ch. 3 / Ch. 4 | July 16 | Ch. 24 | Ch. 25 |
| June 4 | Ch. 5 | Ch. 16 | July 23 | Ch. 26 | Ch. 26 / Ch. 27 |
| June 11 | Ch. 16 / Ch. 17 | Ch. 17 | July 30 | Ch. 27 | Final Review |
| June 18 | Midterm Review | Midterm | August 6 | Final Exam | End of Class |
| June 25 | Ch. 19 / Ch. 20 | Ch. 20 / Ch. 21 | | | |

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Exam Structure: Each exam will consist of around 30 multiple choice questions. The exam solutions **must be recorded on scantron sheets**, so make sure you buy at least 2 for this class! The midterm will cover roughly the first half of the material, while the final exam will cover roughly the second half of the material. The final exam **will not be cumulative**; it will only be on material covered after the midterm. Before each exam, there will be a review of the material. The review will consist of roughly 40 multiple choice questions that I will write, which represent the types of questions you could expect to see on the upcoming exam. The exam content will break down in the following way:

• **Midterm**: Chapters 1 – 5, 16 – 17

• **Final**: Chapters 19 – 27

Exam Dates: I gave the exam dates above, but here they are in a way that's quick to reference:

| Midterm | | June 20, | 2018 |
|---------|------|----------|------|
| Final | | | 2018 |

Grading Rubric: There will be 5 factors that contribute to your grade, each contributing 20% of your grade. We will have weekly quizzes, two projects, and two exams. Your grade breaks down as follows:

| Quizzes | 20 points | |
|------------|------------|--|
| Project 1 | 20 points | |
| Project 2 | 20 points | |
| Midterm | 20 points | |
| Final Exam | 20 points | |
| Total | 100 points | |

You can use the following formula to compute your grade in the class (the grading scale follows this section):

Points Earned =
$$(\%QZ * 20) + (\%P1 * 20) + (\%P2 * 20) + (\%ME * 20) + (\%FE * 20)$$

where QZ is your quizz grade, P1 is your project 1 grade, P2 is your project 2 grade, ME is your midterm exam grade, and FE is your final exam grade; the % signs indicate to write your scores out in percentages (as decimals), instead of total number of points.

Quizzes: Every Monday, unless states otherwise in class, we will have a short, 5 minute quiz at the end of class on the material covered the previous week. In order to take the quiz, you must still be present at the end of lecture. If you're running late, and you only show up to take the quiz, you will still be allowed to take the quiz; I would rather you show up at the end of class and take the quiz than miss the entire class.

Grading Scale: The following table tells you how many points are required to earn a particular letter grade. Notice how I display the points: I always round to **first decimal point**, which means that if you score a 64.94, that equals 64.9, which is a D; if you score a 64.96, that's a 65.0, which is a C. The full grading scale is:

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| A | 85.0 - 100.0 |
|---|--------------|
| В | 75.0 - 84.9 |
| C | 65.0 - 74.9 |
| D | 55.0 - 64.9 |
| F | < 54.9 |

Course Policies:

- Attendance: Attendance isn't taken, but you should absolutely attend every lecture. Physics is a very difficult subject, and the lectures are going to help you learn it; not attending a lecture means forfeiting the main help you have in learning the subject.
- Classroom Conduct: As long as your behavior isn't disruptive or disrespectful to your classmates, I generally don't care how you spend your time during lecture. I'm fine with arriving late or leaving early (coming to a portion of the lecture is better than missing it entirely), as long as you don't disrupt class when you do so; you are free to bring your laptop to class or use your phone, but I would recommend only doing so in the pursuit of understanding the material we're covering. Essentially, you're an adult and I will allow you to make your own decisions, as long as they don't affect anyone else in class, but I strongly encourage you to participate in the class and take full advantage of the professor.
- Religious Holidays: If there is a scheduling conflict for a major religious holiday, it is your responsibility to coordinate with me in advance to get an extension or re-schedule an exam. A religious holiday is not an acceptable excuse to miss an assignment without talking to me first.
- Excused Absences: As defined by the Broward College Student Handbook, 2017-2018 ed., found at this link, an excused absence is an "[absence] from academic activities because of observances of major religious holy days in his/her own faith, the student's serious illness, death in the immediate family*, or attendance to statutory governmental responsibilities**." The immediate family is defined as "mother, father, spouse/domestic partner, child, brother, sister, grandparents or grandchildren." A statutory governmental responsibility is defined as "such matters as jury duty, subpoena for court appearance, or unplanned military obligation." As discussed in the previous section, religious holidays need to be discussed prior to their occurrence in order to receive an excused absence. The same applies to any foreseen absence, such as a doctor's appoint, a planned military obligation, a scheduled court appearance for a civil matter (or a matter such as a parking ticket), etc. You are responsible for learning all material covered in your absence, even if it's excused, meaning that material cannot be removed from an upcoming exam if you have an excused absence; you still need to learn what you missed.
- Academic Dishonesty: Lack of knowledge of the academic honesty policy is not a reasonable explanation for a violation. The Academic Dishonesty policies of the Student Handbook apply to this course; see above policy on Excused Absences to find the link to the current edition of the handbook.
- Code of Conduct: The College has a strict Student Code of Conduct to make the College a safe learning environment for everyone. The Student Code of Conduct of the Student Handbook apply to this course; see above policy on Excused Absences to find the link to the current edition of the handbook.