I. Course Information

Course Prefix/Number/Course: AST 1002 Astronomy
Credit Hours/Contact Hours: 3 Credit Hours, 45 Contact Hours
Prerequisites for the course: None

II. Course Method

This course is designed as an online course and therefore there are no on-campus meeting dates required. You may access the course on the first day of class at: http://online.fkcc.edu. If you have difficulty in logging in to the course or you do not see the course listed, contact the Office of Distance Learning helpline at 305-809-3177 for assistance.

Synchronous Office Hours - Check the Announcement section of the course for synchronous office hour times. To access office hours click on "Chat" under Course Tools.

Announcements - Weekly Announcements from your instructor will be posted on the announcements page. To access click on "Announcements" under Course Tools.

Classroom Email - All classroom email between students and faculty members should occur within the internal D2L email system. To access click on "Mail" under Course Tools.

III. Instructor Information

Instructor: Erik Christensen
Email: Erik.Christensen@online.fkcc.edu
Office Hours: I will monitor email and the class Discussion Board on a regular basis throughout the week and respond to all emails/posts in a timely manner. If you wish to have a synchronous discussion with me using the D2L Chat function this will be arranged at a mutually agreed upon time.
Phone: 863.784.7363 (yes, this is out of the area - I am in Avon Park, FL)

IV. Description

Descriptive study of the elements of astronomy including the chemical composition and motion of the planets, their moons, comets and asteroids. Theories of solar system formation, the Sun and the universe are discussed and compared based on the physical and the chemical nature of matter. Such current topics as the “Greenhouse Effect” caused the increased levels of carbon dioxide in the atmosphere and “The Hole in the Ozone Layer” caused by the release of fluorocarbons into the atmosphere are used to help understand the chemical nature of the atmospheres of other planets and their moons and the implications for planet Earth. Mathematical procedures are not stressed. Use of telescopic images and computer software enhance the study of celestial objects. Recommended for liberal arts majors.

V. College-level Competencies

Florida Keys Community College graduates who complete the core curriculum possess the knowledge, skills and values associated with college-educated individuals. Our graduates demonstrate mastery of competencies integrated within the academic disciplines, such as the ability to effectively communicate, seek creative solutions to problems, exhibit cultural awareness, and command basic technological skills.
1. **Communication**: Comprehend and articulate effectively – written and oral communication
2. **Critical thinking**: Demonstrate mastery of problem-solving skills in the discipline
3. **Diversity**: Interpret and evaluate societal and ethical issues, problems and values
4. **Technology**: Utilize technology effectively

**VI. Course Calendar**

1. The Course Calendar lists the learning activities and assessment measures that comprise this course on a weekly basis. These activities and assessments are directly related to learning outcomes that support the overall course objectives. There are a total of 1,000 points that can be achieved during this 15-week course, with each week offering a variety of points as noted below. Students are able to gauge their performance according to this grading scale throughout the duration of the course. The “Student Assessment” column lists all of the assignments required by this course and their due dates. I strongly recommend you print this out and refer to it often. For your convenience, I have also included a one-page summary of all course requirements at the end of this syllabus.

2. **Students are responsible for following the course calendar.** Consult your calendar before you start a new chapter or section. (Note: Some sections may not be covered in the same order as in the text). If you ever have a question that begins with “When is ___”, the answer is probably already published in this Course Calendar. Looking here first will probably get you a quick answer to your question.

### AST 1002 Course Schedule - Fall 2011

<table>
<thead>
<tr>
<th>Competency</th>
<th>Week</th>
<th>Learning Outcomes</th>
<th>Learning Activities</th>
<th>Student Assessments</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Part I - Exploring the Sky</strong></td>
<td></td>
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</tr>
<tr>
<td>1,2,4</td>
<td>Week 1</td>
<td>1. Understand the requirements of the course</td>
<td>1. Watch Introduction Video</td>
<td>1. Question of the Week #0</td>
<td>5</td>
</tr>
<tr>
<td>8/22-8/28</td>
<td></td>
<td>2. Demonstrate the ability to use all the required components of the course</td>
<td>2. Watch Video #1</td>
<td>2. Quiz #0</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Introduction</td>
<td>3. Read textbook Introduction</td>
<td>3. Post Course Expectations to the Discussion Board</td>
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<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Submit your signed Course Contract to the Dropbox</td>
<td>4. Email Instructor</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Due:</strong></td>
<td><strong>8AM on 8/29</strong></td>
<td></td>
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</tr>
<tr>
<td>1,2,4</td>
<td>Week 2</td>
<td>1. Describe Earth’s location in the universe</td>
<td>1. Read Chapters 1 &amp; 2</td>
<td>1. Question of the Week #1</td>
<td>10</td>
</tr>
<tr>
<td>8/29- 9/4</td>
<td>Here and Now</td>
<td>2. Explain how human history fits into the time scale of the universe</td>
<td>2. Complete Active Exploration #1</td>
<td>2. Quiz #1</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>and</td>
<td>3. Know how astronomers refer to</td>
<td>3. Watch Video #2</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>4. Post to Exam Review Wiki</td>
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<td></td>
<td></td>
<td></td>
<td>5. Start on Star Project</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td><strong>Due:</strong></td>
<td><strong>8 AM on 9/5</strong></td>
<td></td>
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</tr>
</tbody>
</table>
| A User’s Guide to the Sky | stars  
4. Know how to compare the brightness of stars  
5. Explain how the sky appear to move as Earth rotates |  
|---|---|
| **Week 3**  
9/5 - 9/11  
Cycles of the Sun and Moon and The Origin of Modern Astronomy | 1. Explain what causes the seasons  
2. Describe how astronomical cycles affect Earth’s climate  
3. Explain why the Moon goes through phases  
4. Explain what causes lunar and solar eclipses  
5. Describe how ancient philosophers described Earth’s place in the universe  
1. Read Chapters 3 & 4  
2. Complete Active Exploration #2  
3. Watch Videos 3 & 4  
4. Post to Exam Review Wiki  
5. Continue on Star Project  
6. Start on Lunar Observation Project  
1. : Question of the Week #2  
2. Quiz #2  
**Due:**  
8 AM on 9/12 | 10  
| 1,2,4 |  
| **Week 4**  
9/12 - 9/18  
Light and Telescopes | 1. Explain what is light  
2. Describe how telescopes work  
3. Explain the powers and limitations of telescopes  
4. Discuss why some telescopes must be located in space  
1. Read Chapter 5  
2. Complete Active Exploration #3  
3. Watch Video 5  
4. Post to Exam Review Wiki  
5. Continue on Star Project  
6. Continue on Lunar Observation Project  
7. Review for Exam I  
1. Question of the Week #3  
2. Quiz #3  
**Due:**  
8 AM on 9/19 | 10  
| 1,2,4 |  
| **Week 5**  
9/19 - 9/25  
Atoms and Spectra | 1. Know how atoms interact with light  
2. Explain what we can learn from spectra of celestial objects  
1. Take Exam I  
2. Read Chapter 6  
3. Complete Active Exploration #4  
4. Watch Video 6  
5. Post to Exam Review Wiki  
1. Exam Review Wiki  
2. Exam I  
3. Question of the Week #4  
4. Quiz #4 | 5  
| 100  
10  
10 |
| 1,2,4 | **Week 6** 9/26 - 10/2 | **The Sun and The Family of Stars** | 6. Continue on Star Project  
7. Continue on Lunar Observation Project | **Due:**  
8 AM on 9/26 |
|-------|------------------------|-----------------------------------|---------------------------------|-----------|
| 1. Explain what we can learn by studying the Sun  
2. Know what sunspots are  
3. Describe the source of the Sun’s energy  
4. Discuss how star spectra relates to temperature  
5. Explain how much mass stars contain | 1. Submit Self-Reflection #1  
2. Read Chapters 7 & 8  
3. Complete Active Exploration #5  
4. Watch Videos 7 & 8  
5. Post to Exam Review Wiki  
6. Continue on Star Project  
7. Continue on Lunar Observation Project  
8. Work on APOD Discussion | 1. Self-Reflection #1  
2. Question of the Week #5  
3. Quiz #5 | 8 AM on 10/3 |

| 1,2,4 | **Week 7** 10/3 - 10/9 | **The Formation and Structure of Stars and The Death of Stars** | 1. Read Chapters 9 & 10  
2. Complete Active Exploration #6  
3. Watch Videos 9 & 10  
4. Post to Exam Review Wiki  
5. Complete Star Project  
6. Continue on Lunar Observation Project | **Due:**  
8 AM on 10/10 |
|-------|------------------------|-----------------------------------|---------------------------------|-----------|
| 1. Describe how stars form  
2. Know how stars maintain their stability  
3. Know how luminosities and lifetimes of stars depend on mass  
4. Know what happens when a star uses up the hydrogen in its core  
5. Discuss what evidence shows that stars really evolve  
6. Explain how the Sun will die  
7. Describe how massive stars die | 1. APOD Discussion  
2. Question of the Week #6  
3. Quiz #6 | | 20 |

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<table>
<thead>
<tr>
<th>Week 8</th>
<th>Neutron Stars and Black Holes</th>
<th>1. Explain how theory predicts the existence of neutron stars 2. Discuss how astronomers know that neutron stars really exist 3. Explain how astronomers are sure that black holes really exist</th>
<th>1. Read Chapter 11 2. Complete Active Exploration #7 3. Watch Video 11 4. Post to Exam Review Wiki 5. Continue on Lunar Observation Project 6. Review for Exam II (Chapters 6-11)</th>
<th>1. Star Project 2. Question of the Week #7 3. Quiz #7</th>
<th>Due: 8 AM on 10/17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 9</td>
<td>The Milky Way Galaxy</td>
<td>1. Explain how we know that we live in a galaxy 2. Explain how we know that the Milky Way is a spiral galaxy 3. Describe the center of the Milky Way Galaxy 4. Discuss how the Milky Way Galaxy formed and evolved</td>
<td>1. Read Chapter 12 2. Complete Active Exploration #8 3. Watch Videos 12 &amp; 13 4. Post to Exam Review Wiki 5. Continue on Lunar Observation Project</td>
<td>1. Exam Review Wiki 2. Exam II 3. Question of the Week #8 4. Quiz #8</td>
<td>Due: 8 AM on 10/24</td>
</tr>
<tr>
<td>Week 10</td>
<td>Galaxies: Normal &amp; Active and Modern Cosmology</td>
<td>1. Explain how we know what galaxies are like 2. Explain why there are different types of galaxies 3. Describe the universe 4. Explain how we know that the universe began with a big bang 5. Discuss how the universe has evolved and what will be its fate</td>
<td>1. Submit Self-Reflection #2 2. Read Chapters 13 &amp; 14 3. Complete Active Exploration #9 4. Watch Videos 14 &amp; 15 5. Post to Exam Review Wiki 6. Continue on Lunar Observation Project 7. Review for Exam III (Chapters 12-14)</td>
<td>1. Self-Reflection #2 2. Question of the Week #9 3. Quiz #9</td>
<td>Due: 8 AM on 10/31</td>
</tr>
</tbody>
</table>
## Part IV - The Solar System and Life

### Week 11
10/31 - 11/6

**The Origin of the Solar System**

1. Explain how the solar system formed
2. Describe how planets form
3. Discuss what we know about other planetary systems
4. Read Chapter 15
5. Complete Active Exploration #10
6. Watch Video 16
7. Post to Exam Review Wiki
8. Continue on Lunar Observation Project
9. Exam Review Wiki
10. Exam III
11. Question of the Week #10
12. Quiz #10

**Due:**

8 AM on 11/7

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### Week 12
11/7 - 11/13

**Earth & Moon: Bases for Comparative Planetology and Mercury, Venus, and Mars**

1. Compare the Earth and Moon with other terrestrial worlds
2. Describe how Earth has changed and evolved since it formed
3. Explain why the moon is airless, heavily cratered, and geologically inactive
4. Explain how the histories of Earth and the Moon connected
5. Explain how we know that Venus and Mars were once more Earth-like
6. Read Chapters 16 & 17
7. Complete Active Exploration #11
8. Watch Video 17
9. Post to Exam Review Wiki
10. Complete Lunar Observation Project
11. Self-Reflection #3
12. Question of the Week #11
13. Quiz #11

**Due:**

8 AM on 11/14

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### Week 13
11/14 - 11/20

**The Outer Solar System and Meteorites, Asteroids, and Comets**

1. Describe the properties of the Jovian planets
2. Explain how are planetary rings formed and maintained
3. Explain where meteors and meteorites come from
4. Discuss what asteroids and comets are
5. Read Chapters 18 & 19
6. Complete Active Exploration #12
7. Watch Videos 18 & 19
8. Post to Exam Review Wiki
9. Lunar Observation Project
10. Question of the Week #12
11. Quiz #12

**Due:**

8 AM on 11/21
5. Explain what happens when an asteroid or comet hits Earth

<table>
<thead>
<tr>
<th>Week 14</th>
<th>11/28 - 12/4</th>
<th>Astrobiology: Life on Other Worlds</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Explain what life is</td>
<td></td>
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<td>2. Explain how life originated on Earth</td>
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<tr>
<td>3. Discuss your views on life on other worlds</td>
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<tr>
<td>4. Describe how we can communicate with intelligent beings on other worlds</td>
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<thead>
<tr>
<th>Week 15</th>
<th>12/5 - 12/10</th>
<th>End of Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Review for Exam IV (Chapters 15-20)</td>
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<table>
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<tr>
<th>Thanksgiving Break</th>
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<tbody>
<tr>
<td>Enjoy the holiday. There are no assignments due this week but you should take advantage of any free time to play catch up before the end of the term.</td>
</tr>
</tbody>
</table>

VII. Materials

Publisher: Brooks/Cole - Cengage Learning
ISBN: 978-1-111-43020-7

VIII. Grading Scale

The following grade scale will apply to this class:

- A: 90% or above
- B: 80 - 90%
- C: 70 - 80%
- D: 60 - 70%
- F: below 60%

IX. Class Policies

Communications: All class communications should be conducted via D2L. The online format of this class puts a premium on communications. The prime responsibility for timely communications rests with you - the student. We will use the following methods:
**Discussion Forums:** Each week under the discussion tab, there will be a Question of the Week to which you are to post a response during the week. Make sure that you click on the “respond” button immediately after the question. You are to make appropriate comments; for maximum point you are also to respond to at least one other student’s response that week. You should also check to see who has responded to your comments and respond to this person if it is appropriate to do so. These responses are also to be thought revealing – they are more than “I agree” or “I disagree.” You are expected to provide quality insight citing and documenting your references, in order to demonstrate an understanding of the weekly topic and provide original thought in the posts. Cutting and pasting from the text, websites, or providing a response with limited substance will receive a significantly reduced grade. As with all activities in this class, quality counts and your postings need to add value to the discussion.

In addition, most questions about class policies and subject matter should be posted in the discussion forum to allow the entire class to benefit from the question and the answer. There will often be important information published to the class via the Discussion Forums, such as changes in due dates, exam information, etc. **You are responsible for all information published here.**

Occasionally, time-sensitive announcements will be posted on Discussion Boards. You should logon to D2L 3-4 times each week to check for time-sensitive messages. Before you post a question, look through the Discussion Board. That same question may have already been asked and answered.

**D2L eMail:** The email utility within D2L should not be used for personal items that are not appropriate to share with the entire class.

**What you can expect from me:**
I normally log into D2L and check for messages at least once per day, including weekends and holidays. If you have an urgent message for me, do not post the same message both on a Discussion Forum and in an email. Doing both will waste your time and will not result in my getting the message any faster. If I expect to be out of contact for more than a couple of days, I will inform the class via the Discussion Forum.

**Important Note:** If I have not responded to your email or voicemail message by the end of the day after you left the message, you should assume that I did not receive it and leave another message.

**Logging Off From D2L**
In order to better serve our faculty and students, all D2L users should use the logoff button when completing online course work. By logging off instead of just closing your internet browser window, D2L server space is freed and system performance is optimized. In addition, logging off will more accurately record each student’s time logged into the online course.

**Late Work**
1. Any assignment not submitted by the date and time specified in the Course Calendar is considered late, unless you have contacted me and I have approved an extension in advance.
2. Assignments (other than class participation) will be accepted up to 7 days late unless you have contacted me and we have mutually agreed on an alternate submission date before day that the assignment is due.
3. Late assignments (other than class participation) will be assessed a late penalty equal to 20% of the total point value of the assignment PER DAY. The penalty will be based on the date that the assignment is actually submitted.
4. The above policy does not apply to the final exam or any other assignment that may due during the Final Exam period. No assignments due during the last week of classes will be accepted late to allow me to submit the course grades to the college on time.

5. Class participation will not be accepted late unless you have contacted me and we have mutually agreed on an alternate submission date in advance. Posting class participation messages late will add little to the class discussion of those topics.

6. Internet connection problems are not an acceptable excuse for late work. You should have a plan in place for internet access in case your primary method is unavailable. I strongly recommend submitting assignments at least one full day early to allow time to recover from technical problems.

7. If you are unable to access the online classroom due to a College server outage on the date that an assignment is due, the following guidelines apply. If I have not heard from you before the deadline I will not waive the late penalty described above.
   a. Send me an internet email before the assignment is due and attach the assignment to the email if applicable.
   b. If you don’t have access to the internet, leave a message at the phone number listed at the top of the Syllabus.
   c. If there is a problem with the D2L server that prevents completing an exam or quiz, I will make a reasonable accommodation and publish the information in the online classroom as soon as I am able to log on myself.

8. If you are out of contact and miss a deadline due to an extenuating circumstance, I expect you to contact me as soon as possible to discuss the situation. No exceptions will be made to the above policies unless you can provide documentation of the situation that I consider adequate.

Class Participation

Class participation is defined as posting a minimum number of substantial, separate, and distinct messages to the various Discussion Forums. These discussion board messages must be posted before the deadlines in the Course Calendar to count toward your participation grade.

For the purposes of this class, a substantial message must:
1. Provide a good explanation of a concept or concepts related to the material discussed in the forum, or give a good example of how a concept can be applied, or provide an insightful response to a previous post.
2. Be factually correct. The post should help your classmates, and yourself, learn the material.
3. Be at least 50 words in length. Messages that do not meet this length requirement will earn only a small amount of partial credit, even if they are only one word short.
4. Have acceptable spelling and grammar. Although this is not a writing class, this is College. Students should get into the habit of writing complete sentences that are grammatically correct. I don’t expect your grammar to be perfect, but it should be generally correct. Take advantage of the spell check feature in D2L.
5. Be your own work. Do not plagiarize from any source (internet, textbook, etc) as the body of your post. Study the concept, and then express it in your own words. Make certain to cite and document your references.

Other key points:
1. Only messages that meet all of the requirements of a substantial post listed above will earn full credit for participation.
2. It is acceptable (and encouraged!) for more than one student to respond to the same message. The best way to be sure you understand a topic is to try to explain it to someone else.

3. Please use the discussion forums to ask all of the questions you have about the class material. I want you to ask a lot of questions, and these questions will contribute to your class participation grade.

4. Off-topic messages will not count toward your participation grade.

5. If your final average is on the borderline between two letter grades, active participation (posting several messages to each forum, on average) will work to your advantage as I decide which of the two letter grades you have earned.

6. Messages must have content that contributes to the discussion. Messages that contain a few words and merely say “I agree with you” or something similar will not earn any credit.

7. These participation points are the easiest part of your grade to earn, and also the easiest to forget to do. Don't forget!

8. Copying and pasting from any source, even if you cite the source, is not acceptable. You should study the source document and paraphrase what you learned when typing a message.

**To earn 100% for your class participation grade, you must do the following by the dates published in the Course Calendar:**

1. Post an introductory message to the class in the Introductions forum.

2. Post one substantial message in each discussion forum at any time during the week in which that forum is scheduled.

3. Some extra credit will be given for substantial messages that are posted no later than Wednesday of the week they are due. This is to encourage students to post early in the week, which will help generate a better class discussion within each forum.

4. If no substantial messages are posted on time in a forum, it will not be possible to earn 100% for that forum. A small number of messages that are not substantial but do say more than “I agree” or “Good Post!” and are more than 1 or 2 sentences in length will earn some part credit, but not very much.

**Withdrawal Policy**

1. Students may withdraw without academic penalty from any course by the established deadline published in the College’s calendar. This will result in a grade of 'W' for the course and will not count against the student's GPA.

2. Students will be permitted a maximum of two withdrawals per course. Upon the third attempt, the student WILL NOT be permitted to withdraw in accordance with State of Florida regulations and will receive an earned grade for that course.

3. It is the responsibility of the student wishing to withdraw from the course to do so by the date published in the College Academic Calendar.

4. Students who abandon the course or do not withdraw themselves by the published deadline are subject to receiving a grade of F.

5. An instructor may withdraw a student from courses for excessive absences and/or non-attendance up to the 70% point in the semester.

**Exams and Quizzes**

1. I recommend the following general process for studying each chapter:
a. Initially, read the chapter Guidepost at the beginning, then flip through the chapter taking note of each subsection and looking at the figures and tables. Then read the chapter summary at the end for the chapter to get an idea of its contents.

b. Now, slowly read through the chapter, taking time to stop and think about each concept. Be sure you study each figure as there is a lot of information packed into each figure. Recall the old adage, “a figure is worth 1,000 words!” Either highlight your textbook as you go, or take some notes of key points along with any concepts that are unclear.

c. Click on each of the hyperlinks in the Active Explorations and work through a number of activities and simulations.

d. Watch the videos for each chapter as a way to reinforce some of the key topics. These are linked to our textbook and provided courtesy of Pasadena City College (PCC). Also for each chapter, there are additional hyperlinks to interesting YouTube videos, most of which were posted by the Kurdistan Planetarium which is located in Iraq. These are optional but well worth your time and effort to view them.

e. Post something to the Exam Review Wiki each week. This a collaborative virtual workspace for you to jointly develop an exam study guide with the other members of this class. Feel free to post images and hyperlinks to interesting things you find on the internet to supplement the material in the textbook.

f. Review the PowerPoint slides provided for each chapter. There also is a glossy of terms specific to each chapter to help you with the new vocabulary you will be learning as part of this course.

g. Post any questions you have in the appropriate discussion forum. Either a classmate or I will be sure to help you.

2. Exams and quizzes may be taken any time during the period listed in the Course Calendar. They will be available beginning on the Monday prior to the due date, unless otherwise specified.

3. All exams and quizzes will be given online via D2L. There is no requirement to take tests on campus.

4. All exams and quizzes are open book and open notes. Calculators may be used.

5. All exams and quizzes will have a time limit. My goal is to test what you have learned, not what you can look up. Every test should automatically submit itself at the end of the scheduled time, but it is your responsibility to track the time you have spent and how much time you have remaining. Exams not submitted by the end of the scheduled time will be penalized:

6. The questions will be challenging. You should study as if the exams and quizzes were closed book, because you won’t have time to look up every answer. If you have to look up more than a few answers, you will run out of time.

7. Question types will mostly be multiple choice with an occasional matching or true/false.

8. On occasion, computer problems will occur during an exam or quiz. If I have to reset your attempt to allow you to complete it, then I have lost control over the time allowed for the assignment. I may, at my discretion, have you take a makeup exam since the original exam environment will have been compromised. If I have to create a makeup exam, be advised that it will be more difficult than the original exam and will likely consist entirely of essay questions. So, you need to be very careful that you don’t inadvertently cause any problems during the exam. If your regular internet access method is not reliable, you need to find a reliable access method for exams. The College has computer labs available for your use.

9. I generally do not reset final exams. If a problem occurs during a final exam, I will create a makeup exam for you as described in the previous paragraph. Be extra careful that you do not inadvertently cause any problems during the exam.
Extra Credit Work

1. There are a number of ways you can earn extra credit in this course:
   a. Submit your completed Star Project at least one week early (NO LATER THAN 8:00 AM on Monday October 3rd) and you will earn 10 points extra credit. This is equivalent to one full letter grade!
   b. Submit your completed Lunar Observation Project at least one week early (NO LATER THAN 8:00 AM on Monday November 7th) and you will earn 15 points extra credit. This is equivalent to one full letter grade!
   c. Complete and submit a star gazing activity. You have the opportunity to complete two of these for a maximum of 10 extra credit points each. This must be completed and submitted PRIOR TO EXAM III. If interested, contact the instructor via email.

How Much Study Time You Should Expect To Devote To This Course

1. Most educators recommend that students spend 1-2 hours outside of class studying and completing assignments for every hour spent in class. For a typical 3 credit hour class, this translates into a total of 6-9 hours every week per course. This same guideline applies to online courses. You should expect to spend a total of 6-9 hours each week studying and completing assignments for each course you take.
   2. This is a guideline. Some classes will require more time and effort than this guideline and some will require less, and the time any individual student will need to spend will vary. You should expect the study time you will need in any class will be toward the high side of the guideline until at least after the first exam or quiz. Then you can compare the effort you expended with the results you earned and make any adjustments necessary.
   3. This class covers a lot of material and there are some concepts that may be difficult to grasp. Experience has shown that students who are successful in this class generally have study time totals on the higher of the scale.
   4. Few students do well in this course if they are spending fewer than 5 or 6 hours studying every week. If you do not have a strong background in this subject, you study time will almost certainly need to be on the higher end of the scale if you want to earn a good grade.

Academic Honesty & Plagiarism

1. Students are expected to respect and uphold the standards of honesty in submitting written work to instructors. Though occurring in many forms, plagiarism in essence involves the presentation of another person’s work as if it were the work of the presenter. Any cheating or plagiarism will result in disciplinary action to be determined by the instructor based on the severity and nature of the offense. It is the student’s responsibility to review the College’s policy on Academic Honesty.
   2. Collaboration and discussion is encouraged in all course aspects other than actually completing the assigned work (quizzes, exams, homework, projects, etc). Indeed, collaboration often leads to increased understanding of the material being covered. If you have questions about an assignment, I encourage you to speak up and ask questions about it.
   3. Plagiarism is a form of fraud and will not be tolerated. You are expected to do your own work. Copying text or images from any source and claiming it as your own is considered plagiarism. Submitting copied text as most or all of your answer on a homework or project is also a form of dishonesty, even if you cite the source. I want to read YOUR words, not someone else’s words. Using quoted text to support your answer will not usually be necessary in this class but if you get your ideas predominately from one source, include a hyperlink to that source.

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4. If I catch you in any form of academic dishonesty, you will receive a grade of zero for that assignment. If I catch you a second time, you will earn a failing grade for this class and be reported to the College.

**Attendance Policy**

1. I will monitor student attendance and participation in educational activities on a weekly basis. Students are required to participate in their online course each week as verified by activity within the D2L Learning Management System.

2. There will be at least one assignment in this course that is due every week of the semester, unless the College is officially closed for the entire week. These may include discussion forum posts for class participation, exams and quizzes, homework, projects, or a combination of these. I will take attendance each week based on your submission of the assignments that are due that week, so it is important that you submit every assignment on time. If you submit all of the week’s assignments late, you will be marked as absent from class for that week. If at least one assignment is submitted on time each week, you will be marked as present.

3. Simply logging into the online classroom without submitting any of the assignments due is not sufficient to count for attendance purposes.

4. Students who do not regularly participate in class by submitting the assignments that are due each week are considered absent from the class.

5. An instructor may withdraw a student from courses for excessive absences and/or non-attendance up to the 70% point in the semester.

**Delays in Getting the Textbook**

Having regular access to the textbook is a requirement for this class. Whenever possible students should have the text in hand before the first day of class each semester, but there will be times that students are unable to get the text until after the class begins. If you are in this situation, follow the guidelines below. These guidelines are intended to be general enough to apply to all classes you take, and they may not all apply to this class. **Not having the text is not an acceptable excuse for doing no work at all in this class.**

1. The FKCC library has reserve copies of the textbook available for student use. These textbook copies cannot be removed from the library.

2. During the first week of the semester, complete all of the administrative items. This includes printing the Syllabus and the Course Calendar and Assessment Measures, posting an introduction to the class, and returning the Class Contract. The text is not needed for any of these tasks.

3. Print out the study guide I prepared for this class. This will give you a good idea what topics are covered in each chapter. You should do some internet or library research on some of these topics to minimize how far you get behind. This research should also help you learn enough to participate in the class discussions.

4. Use any resources that are available in the online classroom. This includes links to web sites, review activities, handouts, PowerPoint slide shows, and anything else that may be available.

5. Reading all messages posted in the discussion forums may be the best way to keep up until you have the book in hand.

6. Look at the publisher’s web site for the text. Most publisher text sites have student resources that can help you, and many of these are available even if you do not have the text. As a minimum, the web sites usually have a Table of Contents, which can also help you get an idea what topics we will cover.

7. Please let me know if you don’t have the text by the end of the first week of class. I will not be sympathetic if you wait until after the first week of the semester to tell me you don’t have the text.
The above guidelines will probably not be enough to replace the text entirely, but they will allow you to learn enough to participate in the discussion forums each week. This participation is critical to your grade and also for attendance purposes.

**Sources of Technical Assistance**

If you are having any technical difficulties (e.g., logging in, accessing the discussion board, etc.) please contact the Office of Distance Learning helpline at 305-809-3177 Monday—Friday 8:00AM to 4:00PM or email your question to FKCC.helpdesk@online.fkcc.edu.

**Special Needs**

If you have any special needs or requirements pertaining to this course, please discuss them with the instructor early in the term. If you have special needs as addressed by the Americans with Disabilities Act (ADA) and need assistance, please notify the Office for Students with Disabilities at 305-809-3292 via email at: karla.malsheimer@fkcc.edu or the course instructor immediately. Reasonable efforts will be made to accommodate your special needs.

**Community Decorum**

A positive learning experience depends upon respect among all members of this classroom community. Disregard or disrespect for the process, the group or toward any individual will result in removal from the class and may result in you being dropped from the course. Respectful discourse in discussion and email areas is expected and anonymous posting will not be tolerated.

**Sexual Predators**

Federal and State law requires a person designated as a “sexual predator or offender” to register with the Florida Department of Law Enforcement (FDLE). The FDLE then is required to notify the local law enforcement agency where the registrant resides, attends or is employed by an institution of higher learning. Information regarding sexual predators or offenders attending or employed by an institution of higher learning may be obtained from the local law enforcement agency with jurisdiction for the particular campus, by calling the FDLE hotline (1-888-FL-PREDATOR) or (1-888-357-7332), or by visiting the FDLE website at www.fdle.state.fl.us/sexual_predators. If there are questions or concerns regarding personal safety, please contact the Campus Security Officer on your campus.

**Copyright Notice**

The materials and content provided on this password-protected instructional website is intended only for registered Florida Keys Community College students who have paid their tuition and fees to attend this course. Materials that are affected include, but are not limited to, text, still images, audio recordings, video recordings, simulations, animations, diagrams, charts, and graphs. Every effort has been made to insure these materials are not disseminated to anyone beyond those who have legally registered for this course. Download, revision, or distribution of course material with anyone other than registered classmates and the instructor is strictly prohibited.

**Course Resources**

http://online.FKCC.edu – our course D2L website.

http://hyperphysics.phy-astr.gsu.edu/hbase/astro/astcon.html#astcon – astrophysics

http://www.sunrisesunset.com – great source for Moonrise and Moonset information

http://aa.usno.navy.mil – a great source for Moonrise and Moonset information
http://www.saltwatertides.com – a great source for tidal information
http://www.freetidetables.com – another great source for tidal information
http://www.tides4fishing.com - good tidal information

Disclaimer

Course policies, procedures, and schedule may be changed at any time at the discretion of the instructor. You will be advised of any changes in writing.
The Class Contract assignment is my method of ensuring you know what you should expect from me, and what I expect from you. By returning the Class Contract to me, you are acknowledging that you:

a. Understand the policies detailed in this syllabus.

b. Understand the expectations and due dates listed in the Course Calendar.

c. Understand that you will be held accountable to the standards published in this document.

d. This Class Contract must be submitted via the D2L Dropbox by the end of the first week of class.

By signing my name I acknowledge the above.

Print Name: ________________________________ Date: ____________

Signature: ______________________________________
# AST 1002 ASTRONOMY SCHEDULE – Fall 2011

Weeks run from 8:00 AM Monday to 8:00 AM the following Monday  
Use this guide to know what is due each week

<table>
<thead>
<tr>
<th>Dates</th>
<th>Topic</th>
<th>Textbook Chapter</th>
<th>Active Exploration</th>
<th>Video</th>
<th>Power Point</th>
<th>Question of the Week</th>
<th>Quiz Number</th>
<th>Additional Assignments</th>
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</thead>
<tbody>
<tr>
<td><strong>Week 1</strong> 8/22 – 8/28</td>
<td>Orientation</td>
<td>Introduction</td>
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<td>Introduction &amp; 1</td>
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<td><strong>Week 2</strong> 8/29 – 9/4</td>
<td>Here and Now</td>
<td>1 &amp; 2</td>
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<td>1 &amp; 2</td>
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<tr>
<td></td>
<td>A User’s Guide to the Sky</td>
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<td><strong>Week 3</strong> 9/5 – 9/11</td>
<td>Cycles of the Sun &amp; Moon</td>
<td>3 &amp; 4</td>
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<td>3 &amp; 4</td>
<td>3 &amp; 4</td>
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<td>The Origin of Modern Astronomy</td>
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<td>Light &amp; Telescopes</td>
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<td>Star Project</td>
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<td><strong>Week 5</strong> 9/19 – 9/25</td>
<td>Atoms &amp; Spectra</td>
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<td><strong>Week 6</strong> 9/26 – 10/2</td>
<td>The Sun</td>
<td>7 &amp; 8</td>
<td>5</td>
<td>7 &amp; 8</td>
<td>7 &amp; 8</td>
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<td>The Family of Stars</td>
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<td><strong>Week 7</strong> 10/3 – 10/9</td>
<td>The Formation &amp; Structure of Stars</td>
<td>9 &amp; 10</td>
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<td>9 &amp; 10</td>
<td>9 &amp; 10</td>
<td>6</td>
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<td>The Death of Stars</td>
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<td><strong>Week 8</strong> 10/10 – 10/16</td>
<td>Neutron Stars &amp; Black Holes</td>
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<td><strong>Week 9</strong> 10/17 – 10/23</td>
<td>The Milky Way Galaxy</td>
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<td>12 &amp; 13</td>
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<td><strong>Week 10</strong> 10/24 – 10/30</td>
<td>Galaxies: Normal and Active</td>
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<td>14 &amp; 15</td>
<td>13 &amp; 14</td>
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<td><strong>Week 11</strong> 10/31 – 11/6</td>
<td>The Origin of the Solar System</td>
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<td>16</td>
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<td><strong>Week 12</strong> 11/7 – 11/13</td>
<td>Earth &amp; Moon</td>
<td>16 &amp; 17</td>
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<td>17</td>
<td>16 &amp; 17</td>
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<td>Mercury, Venus, &amp; Mars</td>
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<td><strong>Week 13</strong> 11/14 – 11/20</td>
<td>The Outer Solar System</td>
<td>18 &amp; 19</td>
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<td>18 &amp; 19</td>
<td>18 &amp; 19</td>
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<td>Meteorites, Asteroids, and Comets</td>
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<td>11/21 – 11/27</td>
<td>Thanksgiving Break</td>
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<td><strong>Week 15</strong> 12/5 – 12/10</td>
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**To earn EXTRA CREDIT POINTS:**  
Your Star Project must be completed and submitted no later than 8:00 AM October 3rd.  
Your Lunar Observation Project must be completed and submitted before 8:00 AM November 7th.