Syllabus for Semester: Spring 2009

Course name and number: AST 102 IN

Section code (CRN): 22397

Class Meeting Days/Times: TTh/12:10-2:55

Class Location: STZ 211

Instructor: Dr. Stephen Shawl

Office hours/availability: Immediately after class is best; before class, if needed, is by appointment in advance

Phone/voicemail: Phone/voicemail: 206-6464 ext 73325 (extension may not be right; I will announce correct extension in class)

Email address: sshawl@pima.edu

Class website: Blackboard: https://blackboard.pima.edu/webct/entryPageIns.dowebct

First day of class: January 20, 2009

Add date: January 26, 2009

Drop/Refund date: February 2, 2009

Withdrawal deadline: April 13, 2009

Final exam date: May 14 OR May 19

Last day of class: May 19, 2009

Campus phone number: 206-7171

Course Description
Introduction to the universe beyond the solar system. Includes the nature of light, how astronomers and telescopes work, and the possibilities of alien life in the universe. Also includes the lifetime of stars, exotic objects such as quasars, pulsars and black holes and the origin, nature and future of the universe. Also includes scientific thinking as an application of critical and quantitative thinking and science in contrast to pseudoscience. Also includes in-class measuremental and mathematical exercises, outside observation projects, independent studies, and self-initiated field trips to local astronomy facilities. Information: IN is the integrated version of the course with the lecture and lab taught simultaneously

Course Objectives
Upon completion of the course, the student will be able to do the following:

1. Demonstrate improvement in critical and quantitative thinking by applying the scientific method to fact and theory in classroom learning, activities, some quantitative and mathematical, and assignments, some quantitative and mathematical.

2. Distinguish science from pseudoscience.

3. Induce or expand global awareness with the cosmic perspective on earth offered by describing the general hierarchical structure and individual components of the observable universe.

4. Explain theories of the origin of the universe.

5. Describe the nature of stars and starlight.

6. Delineate the characteristics of galaxies.

7. Indicate major technical developments assisting greater understanding of the universe.

8. Discuss the probabilities of life elsewhere in the universe.
9. Employ, in various in-class activities and outside observation projects, specific concepts, skills or information related to AST 102 lectures.
10. Identify specific aspects of the sky and record common sky phenomena, utilizing the naked eye or binoculars.
11. Examine and describe the sky more closely in at least one telescope viewing experience.
12. Describe astronomical and astronomy-related facilities in the Tucson area.
13. Discuss the Tucson area's importance to the field of astronomy and astronomy's role in the local economy.

The above course objectives are the “official” objectives of the course approved by PCC. I like to state my goals as follows:

Successful education produces changes in the learner. In this course the change should be nothing less than in the way you view the universe and your place in it! The change that occurs may or may not be easy to see or to define. When you have completed the course, I hope there are changes in
1. your **understanding** of what science is and isn't, your understanding of what is and isn't science, and your understanding of how science operates;
2. your overall **appreciation** of the universe and how it works;
3. your **understanding** of **WHAT** astronomers know about the universe and **HOW** we know it;
4. your **thoughts** when you are outside on a clear night;
5. your **understanding** and appreciation of newspaper and magazine articles on astronomy; and
6. your **awareness** of some of the present day problems facing astronomers.

**Course Outline**
(click on “course outline” for this class)
Here is a link to an outline of this class that Pima uses as its basic outline for the course. We will generally be covering approximately these topics, but not necessarily all of them or in the same order.
http://www.pima.edu/aux/course_outlines/ast/ast102in.rtf

**Required Text Book(s)**
The Cosmic Perspective, 5th Edition (2007) by Bennett, Donahue, Schneider, and Voit

**Required Materials**
Downtown Campus AST 102 lab packet (do not buy your packet on another campus as the labs will be different). Scientific calculator, PCC ID in order to use the Computer Commons.
If a used book is bought that does not have online access to “Mastering Astronomy”, the student **must** purchase that access to the 5th edition at http://masteringastronomy.com.

**Optional Materials**
one

**ADA Compliance Statement**
Pima Community College in compliance with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act offers reasonable accommodations, including material in alternative formats, to qualified students with appropriate disability documentation. To obtain a reasonable accommodation, students must be registered with a campus Disabled Student Resource Office (DSR) who will verify, identify, and authorize implementation. Accommodations cannot be made without verification of the need. Students are responsible for making all accommodation requests in a timely manner. The Downtown Campus DSR office telephone number is 206-7286.

**Class Preparation and Policies**
Although there are no formal prerequisites, you are expected to have a college reading and writing level. In addition, because mathematics is the language of science, arithmetic, algebra and geometry principles and procedures will be used in the class as needed. There will be help offered to those of you with math weaknesses or anxiety. Please take advantage of it; it is up to you to do so.

You are expected to complete reading assignments **before** coming to class and to complete any online quizzes associated with a reading assignment by the specified time. Otherwise, the quiz grade will be zero. Make-ups are rarely available and only for really well documented situations.
If you must miss class, hand in early any work due. Except for documented emergencies beyond your control, you are expected to contact me before a due date you cannot make. **While no exams can be missed, should an emergency beyond your control result in a missed exam, it must be taken care of in a timely manner.**

While you are encouraged to study with others in the class, **your work must always be your own.** Exams are taken without books, notes or calculator; giving or receiving improper information will be dealt with severely. Neither those past students who were charged with Academic Misconduct, nor I, enjoyed it much.

This section of AST102IN listed as “web and classroom,” because computers are everywhere in our lives today and education is no different. **Thus, computer access prior to nearly each class period is a required part of this course.** If your computer knowledge is lacking, you are expected to ask the instructor and to get whatever help is needed to use them and to be successful at it.

When sending me email, please put AST 102 in the SUBJECT line, as well as something that tells me what the message is about. Subject lines should never be left blank; it’s poor “netiquette.” Please be sure to give your full name in the message; I may not know who “Joe” or “Jennifer” is without it!

**Class Attendance**

**Just as you will not skip work and will not be late for your job, you are to attend every class and be on time.**

Regular attendance, **and arrival in class before it starts,** is expected by you just as it is for me; student attendance is highly correlated with success in any class. Information not in the textbook will sometimes be given in class; certainly, explanations different from those in the textbook will be given to make understanding of concepts easier and clearer. In addition, there may be assignments, notes and announcements that you are responsible for even if you are not there. If you do miss all or some of a class, it is solely your responsibility to obtain missed class material from fellow students. (A word to the wise: Coming in and asking "Did I miss anything important last class?" does not endear you to any instructor. Everything I choose to present is important!)

Although I do not formally take attendance, there are frequent in-class activities that, in effect, provide me with attendance information. While attendance does not specifically enter into the grade (although it could be taken into account if you are borderline at the end of the semester), not being there for an in-class activity will mean a loss of points. **There is no make-up allowed for these activities** and the loss of points for continual absence and/or tardiness and early departure will definitely impact your grade. Many of the in-class and lab activities are done in permanent groups. You may not join your group if it is already working, and you will need to complete the activity alone or with other late comers. Also, homework assignments and labs are due at the beginning of each class and students arriving late may receive a zero as discussed in the Late Assignments policy. I reserve the right to drop you from the class if you miss two of the first three class meetings.

Any situations for which you want to ask for a deviation from the no make-up policy will require contacting me in a timely manner (i.e. immediately) and will require detailed documentation (from a doctor, the police, obituary notice, etc).

**Assignments**

Assignments will be provided as we go and their due-dates will be given at that time.

**Late assignments or labs will not be accepted without documentation that the reason was beyond your control.** (There are two reasons for this: first, it is not fair to the students who did get the work in on time, and secondly, since I plan to grade and return everything the following class if at all possible, it's not fair to me to have to grade late work.) Work may be considered late shortly after class begins.

Some of the labs may have a pre-lab worth three of the ten lab points. The pre-lab, which may be online, must be completed prior to doing the lab. If you arrive the day of the lab without the pre-lab completed you will not be allowed to work in a group and you will lose the three points. There is no makeup of the pre-lab points.

All assignments must have your full name attached as well as your student ID number.

If you have questions about any grade, you need to put the question and your reasoning in writing. You are to give it to me, along with the original work, within one week of my returning the work to the class. If you have not picked up the work when originally returned to the class, it will be too late to dispute the grade.

Grading of assignments and labs: Grades for assignments and labs may be arrived at by reading only certain parts of the assignment or lab rather than the entire paper. Thus, make all your work both complete and of high quality—something you can take pride in!!

**Extra Credit Assignments**

None is available; please, do not ask. If you do the work for the course, which has a number of neat options for you, extra credit should not be needed. (I doubt there is extra credit at your job if you do not do the basic job satisfactorily!)
Grading Procedures and Policy

**Assignment grading procedure**

There are five (5) components of work in the course (1) exams, (2) quizzes, in-class activities, and labs, (3) Posters, (4) Individual observation projects, and (5) Outside Projects. You are to complete each of the five components as described in the sections in the table below. **Read that last sentence again!!** If you do not understand it, it is your responsibility to ask until you do understand it.

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
<th>Possible Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Exams</td>
<td>Exams may be a combination of multiple choice, short answer essay, objective and computational questions. Questions and problems will be taken both from the readings, labs, and the materials presented in class. There will be 4 exams plus a comprehensive final. The final exam score will replace a lower score on an earlier exam (but only if all the exams have been taken) and also count as the final. Thus the final can help considerably! Anyone who does extraordinarily well all semester and if well above the rest of the class MAY be excused from the final exam and a course grade of A+!</td>
<td>Each exam is worth from 5-10% of your grade; combined and with the final, they will be 33-50% of the grade. You must pass the comprehensive final exam to pass the course.</td>
</tr>
<tr>
<td>II. Quizzes/ In-Class Activities and homework/Labs</td>
<td>Quizzes will be multiple choice and done online. They will cover the readings due that day. There will be a variety of labs and group activities used in class. Some of these will have results to hand in for assessment and some may have work that must be completed outside of class time for full credit. Lab packets and/or answer sheets will be required for labs. The due date will be clearly stated in class. Many labs require the setup or gathering of specific equipment and there will be no makeup opportunities. There may also be an online pre-lab.</td>
<td>Quizzes will count 10-15%. In-class activities, homework, and participation will count 10-20%. Labs will count 15-25%</td>
</tr>
</tbody>
</table>

Other “required” points will be earned in the following three ways from components III, IV, and V, each component of which is required and worth up to 50 points each and when all are combined will count for 10-15% of your course grade.

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
<th>Possible Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>III. Posters</td>
<td>Each student will produce a research-based poster on one of the objects observed by the Hubble Space Telescope given at the web site <a href="http://heritage.stsci.edu/gallery/gallery.html">http://heritage.stsci.edu/gallery/gallery.html</a>. While the poster must make use of information found on more than this one web site, you are to use the information available on it. You must organize it yourself and in your own words. No more than one student may choose a given image for the poster, so first come, first served on a sign-up sheet and/or on the web. Criteria and requirements for the 50-point poster will be developed in class. All projects must be completed by May 5, 2009.</td>
<td></td>
</tr>
<tr>
<td>IV. Individual Observation Projects</td>
<td>You have some required observations and several options for earning 50 points of your grade from this section. Further information and due dates on these assignments will be given in class. Arizona weather is (generally!) wonderful and the skies are usually clear but don’t wait until the last minute to start and then ask for exceptions due to cloudy weather. Exceptions will not be granted. All projects must be completed by May 5, 2009. Some earlier dates will be given for specific projects.</td>
<td></td>
</tr>
</tbody>
</table>

(Table continues on the next page)
You have many options for earning the 50 “required” points of your grade from this section—Section V. However, you may only turn in one assignment per week from this category and only one more after spring break than before spring break (e.g. if 1 before, then 2 after; 2 before, 3 after; none before, 1 after). So don’t wait until the last minute to start and then ask for exceptions. Exceptions will not be granted. Responsibility for learning includes time management. All assignments must be completed by May 5, 2009.

Below are the 5 types of outside projects.

<table>
<thead>
<tr>
<th>Choices</th>
<th>Description</th>
<th>Point value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Field Trips and lectures</td>
<td>Astronomy is a subject that can be approached in a variety of ways. And because we live in what is sometimes referred to as the &quot;Astronomy Capital of the World&quot;, we should take advantage of some special opportunities here. Possibilities include Kitt Peak National Observatory (<a href="http://www.noao.edu/outreach/kpoutreach.html">http://www.noao.edu/outreach/kpoutreach.html</a>), Whipple Observatory on Mt. Hopkins in the Santa Rita mountains (<a href="http://cfa-www.harvard.edu/flwo/visitcenter.html">http://cfa-www.harvard.edu/flwo/visitcenter.html</a>), and other activities announced through the term that are acceptable. For local astronomy public presentations, look at <a href="http://viking.as.arizona.edu/~taf/pubeve/pub_lect.html">http://viking.as.arizona.edu/~taf/pubeve/pub_lect.html</a>. There will be NO credit without the brochure, agenda, or ticket stub that proves your presence. You must complete the Public Lecture Report Form that will be provided and have it properly stamped at the talk; without the stamp of attendance, it will not be accepted. If you have access to or interest in another field trip location, please see me for approval (which will likely be granted) prior to attending.</td>
<td>Each Field Trip/lecture report is worth 10 points.</td>
</tr>
<tr>
<td>2. Written Projects</td>
<td>You may review scholarly magazine articles, scholarly web sites and scholarly books. Check with me for approval prior to choosing a book or magazine other than Astronomy, Sky and Telescope, Discovery or Scientific American, which are pre-approved. The articles chosen must be major (“feature” articles, not simply short news notes. I reserve the right not to accept something that I feel is overly short. For article summaries, no more than one can be on a topic not covered in the course (i.e. the solar system). The reports need to include complete bibliographic information, a 200-250-word (MAXIMUM!) summary (not book report) of the article or web site and the answers to some questions. Use the Written Project Report Form that will be provided.</td>
<td>Each report is worth 10 points.</td>
</tr>
<tr>
<td>3. Creative projects</td>
<td>Students who have particular talents or interests in the creative arts are welcome to discuss ideas with me about ways to earn points in this area. Some possibilities include posters, poetry, short stories, photography, computer graphics and artwork (jewelry) but I am open to all suggestions. Just come and talk to me and we will develop the project together so that my criteria are clear.</td>
<td>Each project’s point value will be mutually decided with the instructor prior to completion.</td>
</tr>
</tbody>
</table>
Semester grading procedure

Grades will be determined by achievement in two areas: individual performance (largest fraction) and some group performance. Peer evaluation within groups will play a role in the course participation score, as explained below.

Individual work is composed of quizzes, activities, homework assignments, hour-exams, a final exam, some labs, and general participation. Group work will involve some labs, and some in-class activities.

Peer evaluation:

Each student will (anonymously) rate all other members of their group at the end of the semester. The individual scores within the group will be averaged. This average score will then be used to modify the individual’s raw participation score. The following is an example of how this works. Suppose there are five group members. Then

1. Each group member will assign a total of 40 points among the other four members of the group.
2. Thus, student Louis might be evaluated by his team members with 10, 11, 9, and 10 = 40 points for an average of 10, while Linda might receive 12, 11, 11, and 14 = 48 for an average of 12.
3. The peer evaluation score will then be used to modify the raw participation score, in the following way: If a student’s average peer evaluation is 10, he/she receives 100% of the raw participation score. If the average peer evaluation is 9, he/she receives 90% of the raw participation score. In the example, Louis would get 100% of the raw participation score, but Linda would get 120% of it because her peers felt she contributed significantly more than anyone else. Sam, who received a participation score of 80 would receive only 80% of the raw participation score.
4. Other details: You cannot give anyone more than 15 points. Anyone receiving an average of less than 7 will receive a zero on the participation component of the course grade—no matter what else was one in that area. Don’t give anyone an undeserved grade! Finally, the instructor has the right to overrule any score that’s deemed outlandish.
5. You should assign equal numbers of points to everyone only if everyone made equal contributions. (Do you really want a slacker to receive the same score as someone who contributed more? I hope not!)
6. You do not have to use all the available points if you feel it is not warranted; that is, don’t give away points to poor performers just because you have some extra points.

What constitutes a score of 10 points? Attending class, being prepared, some knowledge of subject matter, and participating in group discussions. Students doing this all the time, going beyond a minimum and doing more than others in the group, and contributing to the success of the group (and students in the group) may receive a higher score. Those missing class often, not being prepared, having little knowledge, and not contributing to the success of the group should receive a lower score.

The following table shows three possible weightings of the various course components. They are subject to small changes. I will compute a course grade using all three, and you will receive the highest grade.

<table>
<thead>
<tr>
<th>Component</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exams (4) + final</td>
<td>40%</td>
<td>33%</td>
<td>50%</td>
</tr>
<tr>
<td>Quizzes</td>
<td>10%</td>
<td>15%</td>
<td>10%</td>
</tr>
<tr>
<td>Homework</td>
<td>7.5</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>In-class Activities + Participation (including attendance)</td>
<td>7.5%</td>
<td>10%</td>
<td>5%</td>
</tr>
<tr>
<td>Labs</td>
<td>25%</td>
<td>20%</td>
<td>15%</td>
</tr>
<tr>
<td>Other and poster</td>
<td>10%</td>
<td>12%</td>
<td>15%</td>
</tr>
</tbody>
</table>

Students with 90% or more are guaranteed a grade of “A;” those with 80% or more are guaranteed a grade of “B;” those with 70% or more are guaranteed a grade of “C.” The lines between grade can be shifted downward, but not up. You must pass the comprehensive final exam to pass the course. The final for a student who has been doing “A” work could, at the option of the instructor, be an oral final for which the questions would be provided beforehand.

Student Withdrawal “W” Grades

Students may withdraw from class without instructor permission and without incurring any grade penalty until April 14, 2009.

This grade may be requested by the student only during the first two-thirds of any session and may be given by the instructor on or before the official census reporting date to students who have ceased attending class before that date. Students who stop attending class after this date may receive a grade of “F.”

You must initiate the paperwork for a W (Withdrawal) grade by April 13, 2009. In my classes W’s after the official student withdrawal date will only be given at the instructor’s discretion under emergency situations where the student submits a written request. Failure to drop the class by the withdrawal deadline and/or failure to earn enough points for a passing grade are NOT emergency situations.
Incomplete “I” Grades
Incompletees are considered only in extremely rare cases because the instructor is not a fulltime employee of Pima Community College. You may request a grade of “I” only if all of the following conditions are met: you have earned at least 70% of the available points at the time of your request, your request is made in writing to the instructor and is received by the instructor on or before May 5, 2009, and the instructor gives permission to do so.

“AU” Audit Grades
Auditing a PCC class means that you enroll, attend and do work for the class but do not expect to receive credit or a grade. To audit the class, you need the instructor’s permission and signature on an audit request form from any campus admissions office. This form and appropriate payment must be returned to the admissions office for admission. An audit registration cannot be completed until the first day of class. You must complete your audit registration by the end of the add period for the class you wish to audit. The instructor is not required to grade assignments submitted by students who are auditing the class.

Final Grades
For privacy and security reasons, instructors are advised NOT to give grades over the telephone or via email unless the student signs the exception box on the acknowledgment page of this syllabus. Students who wish to check grades may call MAX 2000 at 206-4880 or may access grades online using Banner Online at http://bannerweb.pima.edu
## Class Calendar

**TENTATIVE schedule of assigned readings from textbook: subject to change**

<table>
<thead>
<tr>
<th>Week</th>
<th>Day</th>
<th>Date</th>
<th>Chapter title</th>
<th>Chapter #</th>
<th>Lab</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>T</td>
<td>20-Jan</td>
<td>Our Place in the Universe</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>R</td>
<td>22-Jan</td>
<td>Our Place in the Universe</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>T</td>
<td>27-Jan</td>
<td>The Science of Astronomy</td>
<td>3.3-3.4</td>
<td>Math review lab (KU)</td>
</tr>
<tr>
<td>2</td>
<td>R</td>
<td>29-Jan</td>
<td>The Science of Astronomy</td>
<td>3.3-3.4</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>T</td>
<td>3-Feb</td>
<td>Discovering the Univ.</td>
<td>2</td>
<td>ATPI#15: Constellations</td>
</tr>
<tr>
<td>3</td>
<td>R</td>
<td>5-Feb</td>
<td>Discovering the Univ.</td>
<td>2</td>
<td>Celestial sphere AND Starry Night (KU)??</td>
</tr>
<tr>
<td>4</td>
<td>T</td>
<td>10-Feb</td>
<td>Discovering the Univ.</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>R</td>
<td>12-Feb</td>
<td>Discovering the Univ.</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>T</td>
<td>17-Feb</td>
<td></td>
<td>Exam 1 (Ch 1, 2, 3)</td>
<td>Exam 1 (Ch 1, 2, 3)</td>
</tr>
<tr>
<td>5</td>
<td>R</td>
<td>19-Feb</td>
<td>Light &amp; Matter</td>
<td>5</td>
<td>ATPI 22: Light</td>
</tr>
<tr>
<td>6</td>
<td>T</td>
<td>24-Feb</td>
<td>Light &amp; Matter</td>
<td>5</td>
<td>Rodeo day: no class</td>
</tr>
<tr>
<td>6</td>
<td>R</td>
<td>26-Feb</td>
<td>Rodeo day: no class</td>
<td>Rodeo day: no class</td>
<td>Rodeo day: no class</td>
</tr>
<tr>
<td>7</td>
<td>T</td>
<td>3-Mar</td>
<td>Light &amp; Matter</td>
<td>5</td>
<td>Telescopes &amp; Lenses</td>
</tr>
<tr>
<td>7</td>
<td>R</td>
<td>5-Mar</td>
<td>Telescopes</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>T</td>
<td>10-Mar</td>
<td>Telescopes</td>
<td>6</td>
<td>CLEA spectral classification</td>
</tr>
<tr>
<td>8</td>
<td>R</td>
<td>12-Mar</td>
<td></td>
<td></td>
<td>Angles &amp; Parallax (KU)</td>
</tr>
<tr>
<td>9</td>
<td>T</td>
<td>17-Mar</td>
<td>Spring Break!!!</td>
<td>Exam 2 (Ch 5, 6)</td>
<td>Spring Break!!!</td>
</tr>
<tr>
<td>9</td>
<td>R</td>
<td>19-Mar</td>
<td>Spring Break!!!</td>
<td>Spring Break!!!</td>
<td>Spring Break!!!</td>
</tr>
<tr>
<td>10</td>
<td>T</td>
<td>21-Mar</td>
<td>Spring Break!!!</td>
<td>Spring Break!!!</td>
<td>Spring Break!!!</td>
</tr>
<tr>
<td>10</td>
<td>R</td>
<td>23-Mar</td>
<td>Spring Break!!!</td>
<td>Spring Break!!!</td>
<td>Spring Break!!!</td>
</tr>
<tr>
<td>11</td>
<td>T</td>
<td>24-Mar</td>
<td>Surveying the Stars</td>
<td>15</td>
<td>CLEA spectal classification</td>
</tr>
<tr>
<td>11</td>
<td>R</td>
<td>26-Mar</td>
<td>Surveying the Stars</td>
<td>15</td>
<td>Angles &amp; Parallax (KU)</td>
</tr>
<tr>
<td>12</td>
<td>T</td>
<td>31-Mar</td>
<td>Surveying the Stars</td>
<td>15</td>
<td>ATPI#31:H-R diagram</td>
</tr>
<tr>
<td>12</td>
<td>R</td>
<td>2-Apr</td>
<td>Surveying the Stars</td>
<td>4, 15</td>
<td>Discovery 15-1, 15-2</td>
</tr>
<tr>
<td>13</td>
<td>T</td>
<td>7-Apr</td>
<td>Flex-time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>R</td>
<td>9-Apr</td>
<td></td>
<td>Exam 3 (Ch 4, 15)</td>
<td>Exam 3 (Ch 4, 15)</td>
</tr>
<tr>
<td>14</td>
<td>T</td>
<td>14-Apr</td>
<td>Our Sun</td>
<td>14.1-14.2</td>
<td>ATPI #32: Variable Stars /KU Cepheid P-L relation</td>
</tr>
<tr>
<td>14</td>
<td>R</td>
<td>16-Apr</td>
<td>Star Birth</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>T</td>
<td>21-Apr</td>
<td>Star Birth</td>
<td>16</td>
<td>ATPI 33: ISM or Proper Motions</td>
</tr>
<tr>
<td>15</td>
<td>R</td>
<td>23-Apr</td>
<td>Star Stuff</td>
<td>17</td>
<td>CLEA: Photometry of Pleiades</td>
</tr>
<tr>
<td>16</td>
<td>T</td>
<td>28-Apr</td>
<td>Star Stuff</td>
<td>17</td>
<td>CLEA pulsars</td>
</tr>
<tr>
<td>16</td>
<td>R</td>
<td>30-Apr</td>
<td>The Bizarre Stellar Graveyard</td>
<td>18</td>
<td>Exam 4 (Ch 14, 16, 17, 18)</td>
</tr>
<tr>
<td>15</td>
<td>T</td>
<td>5-May</td>
<td>The Bizarre Stellar Graveyard</td>
<td>18</td>
<td>Exam 4 (Ch 14, 16, 17, 18)</td>
</tr>
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<td>15</td>
<td>R</td>
<td>7-May</td>
<td></td>
<td></td>
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<tr>
<td>16</td>
<td>T</td>
<td>12-May</td>
<td>Flex-time!</td>
<td></td>
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</tr>
<tr>
<td>16</td>
<td>R</td>
<td>14-May</td>
<td></td>
<td>Review or final</td>
<td>Final if not May 14</td>
</tr>
<tr>
<td></td>
<td>T</td>
<td>19-May</td>
<td></td>
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</table>

**Caveats**

The instructor reserves the right to make changes to the syllabus and this calendar and will notify students of those changes in class. The course schedule and material to be covered given here is **NOT** to be considered a binding contract.
PCC Student Code of Conduct & Scholastic Ethics

STUDENT RESPONSIBILITIES

By enrolling at Pima Community College, a student assumes the obligation to be a responsible member of the College community. All students are responsible to:

1. Contribute to a climate of academic integrity; rational, critical, and creative inquiry; freedom of individual thought and expression consistent with the rights of others; and commitment to the well-being of society as a whole.
2. Adhere to course requirements as specified by instructor(s) in the course syllabus, and follow all written and/or verbal instructions given by instructors or designated College representatives.
3. Obey all duly established College, local, state, and federal policies, regulations, and laws.
4. Refrain from actions that deny other members of the College community their rights as described herein.
5. Refrain from acts of violence, intimidation, or degradation toward any person.
6. Cooperate with College administrators, faculty, and staff in the performance of their authorized duties.
7. Give and maintain accurate and complete information for all official records required by the College.
8. Meet all financial obligations to the College.
9. Carry personal picture identification at all times while on College property or at College functions.
10. Attend all judicial proceedings when issued notice to do so.
11. Maintain the highest ethical standards in academic achievement.

Students admitted to both PCC and UA through the Program for Joint Admissions and Enrollment will be subject to codes of conduct at both institutions.

SCHOLASTIC ETHICS CODE

The purpose of the Scholastics Ethics Code is to:
• encourage and promote positive learning and ethical scholarly behavior,
• define behavior violating scholastic ethics,
• specify procedures for the determination of the facts of the alleged violations, and to define penalties.

Guidelines for Scholastic Ethics

Students assume full responsibility for the content and integrity of the coursework they submit. The following is a guide to assist students in observing positive behavior in scholastic ethics:

1. Students must do their own work and submit only their own work on essays, examinations, reports, and projects, unless otherwise permitted by the instructor.
2. Students can benefit from working in groups. They may collaborate or cooperate with other students during take-home examinations or projects only if specifically authorized by the instructor in the class syllabus or at the time of the examination.

CODE OF ACADEMIC ETHICS: VIOLATIONS

Students enrolled in the College assume the obligation of conducting themselves in accordance with the highest scholarly ethics. Actions constituting violations of academic integrity will be considered a violation of the Student Code of Conduct and include, but are not limited to the following:

1. Cheating
Intentional deceit during the pursuit of academic coursework, tests, class assignments, activities in any testing area, learning center, clinical setting, tutoring session, or in the gathering of research materials is considered cheating. “Cheating” includes, but is not limited to, the following:
   a) Copying from another student’s test paper or knowingly allowing your test to be copied.
   b) Using materials during a test that were not clearly authorized by the person giving the test.
   c) Collaborating with another student during a test without permission.
   d) Knowingly using, buying, selling, offering, transporting, or soliciting any of the contents of a test.
   e) Taking a test for another student or permitting another student to take a test for you.
   f) Bribing or attempting to bribe another person to obtain a passing grade or a better grade on a test or for a course.
   g) Intentional misrepresenting of facts or incidents relating to an evaluated exercise or assignment that would change the grade given.

2. Plagiarism
The representing of the work of other persons as one’s own, including the use of term papers written by others and information downloaded from the Internet, is plagiarism. The use of another person’s words, ideas, or information without proper acknowledgement is also plagiarism. The student should seek guidance from the instructor about acceptable methods to be used to acknowledge the work and ideas of others.

3. Collusion
Obtaining from or giving to another student unauthorized assistance on material in any course work is collusion.

4. Compromising Instructional and Test Materials
Unauthorized acquisition of instructional and/or testing materials from desks, cabinets, work rooms, classrooms, laboratories, instructors’ offices, tutoring labs, testing areas, assessment areas, secretarial offices, college offices, and/or other areas is compromising test materials.

5. Misrepresentation/Fraud
Using false records, false identification papers, unauthorized I.D. cards, or computer access to official college documents or to services such as testing areas, placement assessments, tutoring services, and/or tests or test banks of any type constitutes misrepresentation/fraud.
Acknowledgment of Receipt of Syllabus

Student Name ____________________________________________________________

E-mail ________________________________________________________________

Please complete and return the following acknowledgment to your instructor in class.

I, (print name)__________________________________________________________, have received my AST 102IN syllabus (including course objectives, policies, requirements and schedule), and have read and understand all the enclosed materials, including the course/instructor expectations and deadlines.

Please read the following statements and check all that apply:

_____ I understand that I will receive email from the instructor for which I am responsible.

_____ I give permission for my instructor to e-mail any grades and materials associated with my student record for this course during this semester to the email address listed above.

Student Signature:________________________________ Date:________________________