Goal  To survey concepts in modern astronomy pertaining to stellar, galactic, and extragalactic research. For each topic, you will be expected to (i) give an accurate description of appearance, and (ii) give the physical cause of this appearance.

Instructor  Name: Dr. Michael L Allen  
Office: Webster 1246  
Lab: Webster 249  
Phone: 509-335-1279  
Email: mlfa@wsu.edu

Course communication  Web Page: http://astro.wsu.edu/allen/courses/astr135/  
Instructor Office Hours: tba  
Bulletin Board: opposite Webster 16 (level G)  
Submission Cabinet: 3rd floor Webster

Right to privacy  The Family Educational Rights and Privacy Act (FERPA) states that academic records are private and can not be revealed to a third party. To ensure your privacy, I will communicate with you ONLY (1) from your WSU email address, and (2) in person. I never post grades electronically. I do make weekly postings of grades, and class statistics, on paper on the class bulletin board. If you wish your grades to be omitted from these postings then please inform me.


Texts  1. 21st century astronomy, by Hester et al. (optional; the bookstore will not buy back books with missing CDROMs)  
2. Lecture-Tutorials for Intro Astronomy, custom edition for WSU (required)  
3. Other items are available on reserve at the Owen Library, http://www.wsulib.wsu.edu → Griffin Catalog → Course Reserves

Meeting Places  Regular Lectures: MWF 9:10 - 10:00 am, in Webster 16  
Planetarium: Sloan Hall 231  
Observatory: on Olympia Ave, near the racetrack and greenhouses, south-east end of campus  
A campus map is available at http://www.campusmap.wsu.edu

Labs  Labs will begin in the second week of class, and are scheduled according to section. Go directly to Webster 249, do not come to the classroom. Attendance at the labs is mandatory. Please bring a calculator to the labs.

If you miss a lab, it is best for you to attend another lab section that same week, and not fall behind schedule (no documentation will be required). You can also attend a make-up lab session; refer to the lab schedule. To attend a make-up lab session you are required to bring a WSU Class Absence Form or similar document.

Lab Section   01 TU 12:10 - 14:00   03 WE 15:10 - 17:00   05 TH 14:10 - 16:00   02 TU 14:10 - 16:00   04 TH 12:10 - 14:00   06 FR 13:10 - 15:00

Lab reports  You are graded on the accuracy of your constructions and your ability to answer the questions in the lab manual. These concepts are explained in more detail in the lab itself. The grading is based upon the WSU Critical Thinking Rubric, http://wauctproject.wsu.edu. All reports are due at 12-noon on the Tuesday of the week following the lab. Submit lab reports to the slots in the wooden cabinet near Webster 341. This cabinet is unlocked M-F 8am - 5pm (holidays excepted). The graded reports will be returned to you by your lab TA. Any report not collected by the student will not count towards the final grade.

Holidays  Labor Day: Mon Sep 5, 2011  
Veteran’s Day: Fri Nov 11, 2011  
Thanksgiving Break: Nov 21 - 25, 2011  
A full academic calendar is available from the web site of the Registrar, http://www.registrar.wsu.edu

Classroom Etiquette  1. The course is conducted mostly by lecture format. There will be in-class learning exercises that will not be graded. You are advised to take advantage of them.  
2. Cell phones are a blight upon the land. If your cell phone rings in class then you will be assigned a 3,000 word essay on some aspect of technology and ethics. Completion of this essay will become a requirement for passing this course.  
3. Please show courtesy to your fellow classmates and do not chat unnecessarily during the lecture. Being disruptive is ground for expulsion. Reference: Academic Regulation 45.
List of possible topics
1. Celestial sphere: rise and set, solar motion, latitude and longitude, constellations
2. Light and light waves: photons, energy, spectra, radiation laws, Doppler effect
3. Stars: formation, evolution, mass loss, remnants, energy flow, classification, HR diagram, star clusters
4. Galaxies: the Milky Way, formation, evolution, morphology
5. Cosmology: beginning of the universe, dynamics of the universe, fate of the universe

Evaluation
40% Lab reports
15% Test #1 Wed Sep 14, 2011 (week 4)
15% Test #2 Wed Oct 12, 2011 (week 8)
30% Final Exam (cumulative): Thu Dec 15, 2011, 8:00 - 10:00am sharp

To receive credit in this course, you must take the final exam. Your grade is based entirely upon your ability to communicate in writing an understanding of the course material. Your grades will be reported on the percentage and 4-point scales. You are allowed to bring a crib sheet to tests and the exam. The crib sheet must be a single-sided sheet of 8.5×11in paper with no attachments.

The following table shows approximately how percentages translate to grade points. These numbers WILL change in a way dependent upon the performance of the class, but never to lower your grade.

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<td>64</td>
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<td>68</td>
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<td>84</td>
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<td>4.0 A</td>
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<td>100</td>
<td>4.3 A+</td>
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Extra credit
Extra credit will be granted for participation in indoor planetarium shows and outdoor sky observing at the WSU Jewett Observatory (http://astro.wsu.edu/observatory.html) or elsewhere, hosted by the Palouse Astronomical Society (http://www.palouseastro.org).

Outdoor observing dates will be announced in class. All observing begins at dusk. Outdoor observing may be cancelled at the last minute if the sky is overcast with clouds.

Final exam policies
WSU Academic Regulations 78-80 state that (1) No final exams will be given at a different time than posted, except (2) an exam date may be changed if a student has 3 or more exams on a single day. (3) No exams shall be given during Dead Week, except make-up exams.

Incomplete grade policy
(1) Students requesting an incomplete or ‘I’ grade must apply to the instructor in writing no later than 5pm on the final day of instruction for the semester or session. (2) In this letter the student must demonstrate an understanding of WSU Academic Regulations 90 and 114. (3) A letter of support from the student’s academic advisor must accompany the request.

Academic Integrity
“Academic dishonesty” is anytime you represent someone else’s work as your own. All forms of cheating, plagiarism, and fabrication, are prohibited. The WSU Academic Integrity Policy is printed in the Student Handbook and Faculty Manual and is available from the Office of Student Affairs. In this course, students receive a 10% final grade reduction for a first offence, and fail the course for subsequent offences. A formal report is sent to the Office of Student Conduct. References: http://www.conduct.wsu.edu, and Academic Regulation 88.

Disability resources
Reasonable accommodations are available for students who have a documented disability. Please visit the WSU Access Center during the first two weeks of every semester to seek information or to qualify for accommodations. All accommodations must be approved through the Access Center, located in Washington Bldg 217, phone 509-335-3417 in Pullman, or http://www.drc.wsu.edu/.

Campus Safety
The current Campus Safety Plan is available at http://safetyplan.wsu.edu. Please look at the general emergency information provided at http://oes.wsu.edu/emergencies from the Emergency Management Office. You can check any campus alerts at http://alert.wsu.edu. This site will have the most current information about any campus emergency. On your Student Information System account http://zzusis.wsu.edu you can register your emergency contact information so you can be notified directly by phone and/or email about any crisis occurring on campus.

Strategies for success
Look up any word you do not understand in a good dictionary. Work with WSU Counseling Services to discover your best study methods and implement them (http://counsel.wsu.edu). Form a weekly study group that can meet for 30-60 minutes. Get an early start on assignments. Make good use of instructor office hours by arriving with a written list of questions. Mental and physical health go hand in hand: eat right, stay active, stop watching TV. Maintain an academic mindset: question everything, be not content with your knowledge.