

Descriptive Astronomy 2010

Syllabus - Pruneau - Fall 2012

Section 201 Ref#13979 - WEB COURSE

- READ THIS SYLLABUS THOROUGHLY BEFORE WRITING TO OR CALLING THE INSTRUCTOR WITH QUESTIONS ABOUT THE COURSE.
- QUESTIONS SUBMITTED BY EMAIL WILL BE ANSWERED IN BULK - GIVEN THERE ARE APPROXIMATELY 300 STUDENTS IN THIS CLASS, IT MAY NOT ALWAYS BE POSSIBLE FOR THE INSTRUCTOR TO ANSWER QUESTIONS ON AN INDIVIDUAL BASIS -- ALSO READ THE FAQ PAGE ON BLACKBOARD BEFORE AND AFTER WRITING TO THE INSTRUCTOR.

Prerequisites: none

Intended audience:

- General audience including science and non-science majors.
- Minimal knowledge of mathematics (elementary algebra) and sciences.
- Ideal for Students seeking to satisfy their GEN-ED Science requirement.
- Must have access to a computer and be familiar to browser usage.
- Must have email access.
- Must be familiar with the WAYNE STATE BLACKBOARD system.

Synopsis:

This course is an elementary introduction and survey of Astronomy. It covers a very large range of introductory topics including: The Sky, Orbits and Gravity, Earth-Moon-Sun System, Electromagnetic Radiation, Telescopes, The Solar System, Planet Earth, The Moon, Inner Planets, Outer Planets, Minor Bodies of the Solar System, The Sun, The Stars, Stellar Evolution, Relativity and Black Holes, The Milky Way, Galaxies, Quasars and Active Galaxies, Order in the Universe, Big Bang Cosmology.

Course Format:

The course material/content is comprised of reading material from the course textbook (see below) and online material delivered through BLACKBOARD and the Instructor's course website. Online material includes power point lectures, assignments, study guides, self-tests. Home work assignments and exams will all be taken ONLINE through the Blackboard system..

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Instructor/Lecturer:

Professor Claude A Pruneau,

- ◆ E-Mail : aa7526@wayne.edu
- ◆ Website: <http://rhig.physics.wayne.edu/~pruneau/>
- ◆ Office phone: 313 577 1813, FAX: 313 577 3932
- ◆ Office: Room 322, Physics Building, Wayne State University
- ◆ If I cannot be reached at my office, try leaving a message for me at 313 577 2750.
- ◆ Office hours: Monday, Wednesday, 1:00 PM-3:00 PM.
- ◆ Communication via email is preferable.

Course Web Site:

- ◆ <http://ast2010.physics.wayne.edu>
- ◆ Weekly reading assignments and study unit objectives
- ◆ Self-tests questions
- ◆ Link to lecture notes
- ◆ Lexicon/glossary

Blackboard System (<http://blackboard.wayne.edu>)

- ◆ Blackboard is used for course announcements, online quizzes, and general information related to the course. It will also be used to submit course work (essay).
- ◆ If you are not familiar with Blackboard, obtain your login ID, and password as soon as possible and immediately test your ability to log on, navigate, and understand Blackboard's different features.
- ◆ Weekly quizzes (home work assignments) will be taken through Blackboard.

Course ANNOUNCEMENTS:

- ◆ Course related general announcements will be carried out through the Blackboard system, and by email.
- ◆ Logon to the BLACKBOARD website and read your email on a regular basis (e.g. at least every other day) to stay up-to-date with class information.
- ◆ ***Make sure your University E-MAIL BOX is NOT FULL.***

Lectures:

No in-class meeting or lecture for students registered in this section.

Textbook (ABSOLUTELY REQUIRED - NO EXCEPTION):

- ◆ Pathways to Astronomy,
 - ◆ by Schneider and Arny, 3rd Edition, McGraw Hill Publisher,
 - ◆ Older editions acceptable,

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- ◆ 3rd edition available for purchase at Barnes and Nobles on campus - specially priced for Wayne State students.
- ◆ Also available through various ONLINE vendors. -- Do not expect the same discount.
- ◆ Few copies are in reserve at the Adamani Library - but available for few hours at a time only.
- ◆ Consider buying a used copy from past students or resellers. The 1st edition is acceptable. Beware that Schneider and Arny have a two volume edition of the textbook. **DO NOT BUY THAT EDITION.**
- ◆ **The textbook consists of 84 study units.** Each study unit discusses a specific topic. Units are short and easy to read.
- ◆ Not all, but a large fraction of the study units will be covered in this course.
- ◆ **It is imperative you read the textbook on a regular basis and do not wait till the last minute to learn the material.**
- ◆ **IT IS YOUR RESPONSIBILITY TO GET A COPY OF THE TEXTBOOK AS QUICKLY AS POSSIBLE SO YOU CAN READ AND LEARN THE MATERIAL NEEDED TO COMPLETE THE WEEKLY QUIZZES.**

Reading Assignments:

- ◆ Reading Assignments are given weekly
- ◆ Reading material include the textbook units, and the lecture notes posted on the course website.
- ◆ See the course website: <http://ast2010.physics.wayne.edu> for weekly reading assignments. Use pull down menu to select the relevant week index and access the reading assignment.

Self-Study Tests (Self-Tests)

- ◆ Self-test questions are available online on the course website:
 - ◆ <http://ast2010.physics.wayne.edu> for each study unit.
- ◆ The self-tests are provided to help you identify the material to read, focus on, understand, and remember.
- ◆ You do NOT submit your answers to the self-test questions. You will not be graded on the self-tests.
- ◆ Answers to the self-test questions will not be posted. It is your responsibility to find them - and if needed discuss with your peers.

Weekly Quizzes:

- ◆ Weekly quizzes are given ONLINE using the Blackboard automated grading system.
- ◆ Quizzes can be taken from home, campus, or anywhere you have access to a computer equipped with a browser, and connected to the internet. Use of wifi devices (such as iPhone) is **NOT** recommended.
- ◆ Each quiz consists of a few multiple choice questions - typically 4 to 7.
- ◆ You will have typically 8 days to complete each online quiz.
- ◆ There will be one quiz per week.
- ◆ **No partial credit for ONLINE quizzes.**
- ◆ **No makeup for ONLINE quizzes.**

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- ◆ Do not wait till the last minute to complete a quiz. Quizzes **CANNOT** be taken after their due date and time.
- ◆ **Do not forget to press/click the SUBMIT button.** Note that once the SUBMIT button is clicked you answer is submitted and cannot be changed. So **think twice before clicking but do not forget to click...**
- ◆ **Quiz #0 will be a practice quiz** in order for all students to familiarize themselves with the Blackboard system. You get points just for doing it.
- ◆ Lowest quiz score (excluding quiz #0) will be dropped for the calculation of your final grade.

Exams:

- ◆ There will be three hourly exams and one FINAL exam
- ◆ Exams are taken on the web through Blackboard.
- ◆ Partial exams will consist of roughly 50 multiple choice, fill the blank, simple numerical calculations, or true/false questions. The FINAL will consist of 100 multiple choice, or true/false questions.
- ◆ Material covered on each exam will be announced in class, by email, through the Blackboard system, and on the course website. See website for list of units covered on each exam. The final is a cumulative exam i.e. covers all the material seen through the semester.
- ◆ Exam Makeups are restricted to extreme circumstances. "I forgot about the exam" is not an extreme circumstance...
- ◆ See Blackboard for Exam Schedule!
- ◆ The Final exam will be taken during the University Final's week.
- ◆ **If you do not take the final exam, your course final grade will be automatically F -- NO EXCEPTION**
- ◆ **If you do not take two or more exams, your course final grade will automatically be "F" -- NO EXCEPTION**
- ◆ **ONLINE EXAM ARE TAKEN THROUGH BLACKBOARD**
 - ◆ **QUESTIONS ARE RANDOMIZED --- EACH STUDENT GETS DIFFERENT SET AND SEQUENCE OF QUESTIONS.**
 - ◆ **QUESTIONS ARE PRESENTED ONE AT A TIME --- NO BACKTRACKING i.e. YOU MUST ANSWER A QUESTION WHEN IT IS FIRST PRESENTED TO YOU.**
 - ◆ **MAKE SURE YOU USE A RELIABLE, ROBUST, and STABLE INTERNET CONNECTION. DO NOT, UNDER ANY CIRCUMSTANCES, USE A WIFI (CELL PHONE, IPHONE, etc) DEVICE FOR TAKING AN EXAM - WIFI CONNECTIONS ARE OFTEN UNRELIABLE AND YOU WILL NOT BE ABLE TO COMPLETE THE EXAMS SUCCESSFULLY.**
 - ◆ **IF YOUR INTERNET CONNECTION FAILS, YOU WILL BE GIVEN ONE AND ONLY ONE ADDITIONAL ATTEMPT TO TAKE AN EXAM. *IT IS YOUR RESPONSIBILITY TO INSURE YOUR INTERNET CONNECTION IS STABLE.***

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Planetarium Visits

- ◆ **Two** visits to the College of Science and Liberal Arts *planetarium* will be organized.
- ◆ The planetarium has a limited/small number of seats. Many presentations will therefore be scheduled.
- ◆ Date and time of the presentations will be posted by your instructor on Blackboard.

Other Extra-Credit Work

- ◆ Extra credit work will be allowed and scheduled under *very special circumstances only*.
- ◆ If approved, the extra credit work will consist of a 10 page long (double interline) essay on a topic chosen by your instructor.

Student e-Mails:

- ◆ **Look for announcements on BLACKBOARD, or BLACKBOARD FAQ PAGE (FREQUENTLY ASKED QUESTION), or read your email before sending e-mails to your instructor about quizzes due dates, exam dates, etc.**
- ◆ EMAIL WILL NOT ALWAYS BE ANSWERED ON AN INDIVIDUAL BASIS - CONSULT YOUR UNIVERSITY EMAIL, or BLACKBOARD FAQ (FREQUENTLY ASKED QUESTION) AND ANNOUNCEMENTS FOR ANSWER TO YOUR QUESTIONS.
- ◆ Please follow proper etiquette in your emails... Please address your instructor as "Professor Pruneau" or "Mr. Pruneau". Rude or improper emails will not be answered...
- ◆ Be patient - there are many students in this class...

Class Schedule -- Quiz, Exams dates, etc.

The schedule will be posted on BLACKBOARD

Frequently Asked Questions (FAQ)

A list of frequently asked questions is posted on Blackboard and the instructor web site. Use either of the following links:

<http://ast2010.physics.wayne.edu/faq.htm>

Password required.

<http://rhig.physics.wayne.edu/~pruneau/faq.htm>

No password required.

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Performance Evaluation

Your final grade in this course will be based on the following items:

Home-works/Blackboard Quizzes:	30%
Three hourly exams:	30% - Each counts for 10%
Final exam:	30%
Planetarium Visits	10%
Total	100%
Extra credit work:	Maximum 5%. (under very special circumstances ONLY)

Final grades letters will be attributed according to the following table.

A	95 - 100 %
A-	90 - 94
B+	85 - 89
B	80 - 84
B-	75 - 79
C+	70 - 74
C	65 - 69
C-	60 - 64
D+	50 - 59
D-	<50
F	if two or more exams are missing or if one exam and the essay are missing.

Notes:

- ◆ All quizzes, hourly exams and final exam scores will be posted in the Blackboard Grade book.
- ◆ Final grades will posted in pipeline ONLY.

Laboratory:

- ◆ The laboratory is a separate course (AST2011) - graded separately/independently - with a different instructor.
- ◆ The laboratory is required for all students taking Astronomy 2010+2011 for 4+1=5 credits.
- ◆ The astronomy 2010 laboratory manual must be purchased by those registered for Astronomy 2010+2011 for 4+1=5 credits.
- ◆ While the lab is not required for all programs, it is **highly** recommended.

Observation of the Sky - LABORATORY COURSE ONLY

- ◆ Three evenings of observation are scheduled during the semester.
- ◆ Observations are carried on the roof of the Physics building during clear nights.
- ◆ It is extremely valuable to study the manual prior to coming to the laboratory.
- ◆ Laboratory reports are due at the start of the following week lab.
- ◆ For further details, please inquire with Dr. Scott Payson at 313-577-3280

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Important Notes:

- ◆ There is a large amount of material in this class.
- ◆ It is absolutely critical you do not wait till the last minute to prepare for the exams.
- ◆ Read the chapters in the text book weekly.
- ◆ Solve the quiz questions/problems weekly.
- ◆ Try all self-test questions.

Other textbooks of interest

- ◆ Voyages Through the Universe, Fraknoi, Morrison, and Wolff, Saunders Publisher.
- ◆ The Cosmic Perspective, Bennett, Donahue, Schneider, Voit, Addison-Wesley Publisher.
- ◆ The Origin and Evolution of the Universe, Zuckerman, Matthew, Malkan, Jones and Bartlett Publisher.
- ◆ Astronomy, A beginner's Guide to the Universe, Chaisson and McMillan, Pearson Prentice Hall Publisher.
- ◆ Astronomy Journey to the Cosmic Frontier, J. D. Fix, McGrawHill Publisher, 2nd edition.
- ◆ Redshift, B. Walker, Harcourt.
- ◆ Discovering the Universe, Comins and Kaufmann III, Freeman Publisher.

Attention Students with Disabilities

If you have a documented disability that requires accommodations, you will need to register with Student Disability Services for coordination of your academic accommodations. The Student Disability Services (SDS) office is located at 1600 David Adamany Undergraduate Library in the Student Academic Success Services department. SDS telephone number is 313-577-1851 or 313-577-3365 (TTY: telecommunication device for the deaf; phone for hearing impaired students only). Once you have your accommodations in place, I will be glad to meet with you privately during my office hours to discuss your special needs. Student Disability Services' mission is to assist the university in creating an accessible community where students with disabilities have an equal opportunity to fully participate in their educational experience at Wayne State University.

See the SDS website for more information: <http://studentdisability.wayne.edu/>