ASTRONOMY 100: Unveiling the Universe, sections 5-9

Fall 2017 Course Schedule Syllabus: http://www.uwsp.edu/physastr/Documents/kmenning/Astr100.pdf Desire2Learn: http://www.uwsp.edu/d2l/

Instructor:	Dr. Ken Menningen	Office hours:	<u>M</u>	<u>T</u>	W	<u>R</u>	<u>F</u>
Office:	B101 Science Building	10:00am – 11:00am	\odot	\odot	\odot	\odot	☺
Phone:	(715) 346-4871	2:00pm - 3:00pm	\odot	\odot			
email:	Ken.Menningen@uwsp.edu	By appointment	\odot	\odot	\odot	\odot	\odot



Course Prerequisites: None.

Required text: The Essential Cosmic Perspective, Bennett et al., 7th edition (available at

Text Rental)

Other required materials: Scientific calculator (graphing capability is not necessary), TurningPoint clicker (\$8 rental fee, available at the IT Help desk), \$9 lab manual (buy at the University Store).

Course Objectives: *Unveiling the Universe* presents the fundamental concepts required for an understanding of planetary and galactic astronomy. Upon completion of this course you should be able to:

- Understand the fundamental concepts regarding the solar system, stars, star clusters, nebulae, and galaxies.
- Use simple math to explain measurements and make predictions.
- Become informed about the basic physical features of the Earth and the night sky.

Unveiling the Universe satisfies the Natural Sciences requirement of the UWSP General Education Program. Upon completion of this course you should be able to:

- Explain major concepts, methods, or theories in the natural sciences to investigate the physical world.
- Interpret information, solve problems, and make decisions by applying natural science concepts, methods, and quantitative techniques.
- Describe the relevance of aspects of the natural sciences to your life and society.

Attendance: Lecture attendance is required only for the midterm examinations, but it is a disadvantage to miss any lectures because the lectures, demonstrations, and in-class activities will greatly enhance your ability to understand the material. Attendance to the labs is not required, but you cannot pass the course if your lab score is below 60%. If you are ill, please contact me **before class** to make arrangements. Otherwise, late assignments are not accepted. Late exams are not allowed, but in special cases, and with my permission, you may take an exam early.

Responsibilities: The grade you earn in this course will be a measure of how well you have learned astronomy. However, you will have learned astronomy in the context of a community, and that means you have a responsibility to make a positive contribution to that community, by both making an honest effort to participate in class activities and by refraining from activities that will interfere with your neighbor's ability to learn. You are expected to attend class regularly, participate respectfully and with integrity, and to remain on task during class periods. Likewise, you are expected to refrain from using any electronic device during class periods. Not only does text messaging and web browsing during class prevent you from listening and learning, it also distracts your neighbor and interferes with *their* learning. If a true emergency has arisen, please quietly excuse yourself from the room before attending to the matter. You are expected to refrain from talking at the same time as the instructor, eating or drinking noisily, using e-cigarettes, or any other behavior that might distract your fellow student and interfere with learning.

Grading policy: The grade you earn in this class will be based upon the five assignment types listed below. A grading scale is also given for your reference. Grades are not curved, encouraging you to work together, but I expect each student to hand in their own work. Your lowest lab, in-class, and homework scores will be dropped at the end of the semester.

Grading Scale		Grade Breakdown			
<u>Letter</u>	<u>Score</u>	<u>Assignment</u>	Weight		
$A- \rightarrow A$	90 - 100	Midterm exams	30%		
$B-\to B\to B+$	75 - 89	Final exam	20%		
$C- \rightarrow C \rightarrow C+$	60 - 74	Homework	20%		
$\mathrm{D} \to \mathrm{D} +$	50 - 59	Labs	20%		
F	0 - 49	In-class activities	10%		

In-class work: During nearly every lecture I will present some **response questions** for which you may earn points by using the TurningPoint system. The TurningPoint clickers are available for an **\$8 rental fee.** This semester lease fee will be automatically added to your UWSP student bill. You will need your UWSP Student ID to lease a clicker. Clickers are available at the <u>IT Service Desk</u> (ALB room 027)

Labs: Please purchase a lab manual from University Store for \$9. The labs are designed to illustrate and expand upon the topics we cover in the lecture portion of the course, and provide valuable hands-on experiences. You must earn at least a 60% in the laboratory portion of the course to pass the entire course. The lab grades will be determined from a combination of the pre-lab assignments and the lab exercise sheets that you hand in.

Homework: The **chapter assignments** can be handed in using the Desire2Learn (D2L) system that allows multiple submissions and gives instant feedback but will not allow late entries. There may also be questions about occasional **news articles** that I will ask you to read. To avoid a zero for late homework assignments you must warn me by phone or email *before they are due* and make special arrangements. If you are too ill to complete the assignment, please see a doctor, and have the doctor write a note. You should not believe that the homework problems are sufficient practice for the exam. Instead I recommend that you answer at least five additional questions for each chapter in the text, and review the in-class questions that are posted on the internet. There will be one **observatory visit** that is due at the end of the semester (see separate sheet).

Exams: Midterm exams are scheduled to occur on **October 11**, **November 8**, and **December 6**. These dates may change but it's not likely. The comprehensive final exam is scheduled for Tuesday, December 19, at 12:30pm. **Cell phones and tablets of any kind are strictly banned from examination periods**. Late exams are not allowed, but in special cases, and with my permission, you may take an exam early.

Tentative Course Schedule: [For a detailed course schedule with links to lecture content, see the <u>online course schedule</u> at http://www4.uwsp.edu/physastr/kmenning/Astr100/100Schedule.htm]

Community Rights & Responsibilities:

Students with special needs should contact the <u>Disability and Assistive Technology Center</u> during the first two weeks of the semester in order to request accommodation. An <u>Exam Accommodation Request Form</u> is available online. Religious beliefs will be accommodated according to UWS 22.03 as long as the student notifies the instructor about the conflict within the first three weeks of class. Students are expected to maintain the highest standards of academic integrity for their work in this course. The University of Wisconsin-Stevens Point dedicated to a safe, supportive and non-discriminatory learning environment. It is the responsibility of all students to familiarize themselves with University policies regarding special accommodations, misconduct, religious beliefs accommodation, discrimination and absence for university sponsored events. (For details please refer to the <u>Community Rights & Responsibilities</u> documents, including the <u>Student Academic Standards and Disciplinary Procedures</u> document.)