## Mathematics and Natural Sciences-Department of Chemistry and Physics

PHYSICS 1404 Astronomy-SOLAR SYSTEM

**INSTRUCTOR** Dr. Mike Broyles

> Office: J139 SCC tel (972) 881-5882 email: mbroyles@collin.edu use cougar email

website: see Professor's websites

Office hrs: MWF 10:00-11:00 AM, TR 11:30 AM-

12:30 PM, or by appointment.

TR: 10:00 AM-11:15 AM in H227 (S01) **CLASS MEETS:** T: 4:00 PM-6:50 PM in H130 (S1L) LAB MEETS M: 7:00 PM-9:50 PM in H130 (S7L)

<u>Astronomy Today Volume 1 The Solar System</u> by Chaisson and McMillan, 5<sup>th</sup> edition or 6<sup>th</sup> edition. **TEXT** 

LAB MANUAL

Your lab instructor will provide SUPPLIES

more information regarding supplies for the lab.

## Spring 2010

- F				
Week	Text Chapter for Lecture			
1	Introduction and Chapter 1			
2	1,2			
3	2,3			
4	3,4			
5	4,5			
**************************************	*****			
6	5,6			
7	7			
8	8			
9	9			
**************************************				
10	10			
11	11			
12	12,13			
**************************************	*****			
13	13,14			
14	14,15			
15	16			
**************************************				
_ :				

## Exam dates

Unit 1 Exam Chapters 1-4 Week 5 in class (Scantron form needed) Unit 2 Exam Chapters 5-8 Week 8 in class (Scantron form needed) Unit 3 Exam Chapters 9-12 Week 12 in class (Scantron form needed)

Unit 4 Exam Chapters 13-16 on Tuesday 5/12/10 from 10:00 AM-Noon in class

Also bring a Scantron form for Exam 4-The Final Exam.

## **EVALUATION METHODS**

The following procedure will be used to determine grades. Note that there are two columns, one for the maximum number of points possible and another column for you to enter the actual number of points that you earned on that component.

A.	Exams (4)	Possible Points	<b>Actual Points</b>
	Unit 1 Exam	100	
	Unit 2 Exam	100	
	Unit 3 Exam	100	
	Unit 4 Exam	100	
	Total Exam	400	

Please note again that all exams are given in class. Bring a Scantron Form for all exams. Exams are multiple choice and average between 40-60 questions. Class notes are permitted for all exams (textbooks are not allowed). You must take the exams on time or face a minimum 10% deduction from your score. Testing dates will be announced in class and exams missed are subject to penalty deductions.

B. Laboratory Exercises. Your laboratory grade is part of your overall grade for this course. Your laboratory instructor will assign you laboratory exercises to be completed during that lab period. You will be graded on a point scale for each lab. The total number of points possible for the laboratory is 300. Multiply your laboratory grade average percentage times 300 to obtain your lab score.

Possible Points Actual Points 300

- C. Research Paper or Project: You may do either a research paper or project for this course. If you do a research paper you must include the following:
  - 1. Paper must be typed (handwritten is not acceptable), double spaced, 5-10 pages not including the title page.
  - 2. Paper must have an attached bibliography or list of references, not all of which are from the internet.
  - 3. Paper must be written in your own words or paraphrased, you need to use quotes or footnotes for proper reference.
  - 4. Paper must be over an appropriate topic in astronomy, the topic should not be too broad; -. these titles are not acceptable, "The Planets of the Solar System", "History of the U.S. Space Program".
  - 5. You may give a Power Point presentation to the class in lieu of a conventional paper. Proper credits or works cited need to be included in the presentation. Present by the last week of regular class.

If you would rather do a project instead, use the following guidelines:

- 1. Build something that you can bring to class, for example a working sundial, telescope, model of a planet or solar system.
- 2. If you submit a project, you will still need to document your efforts with a 2-3 page typed report with an attached bibliography of not less than 3 references.

The paper or project will be due on 5/06/10; you will need to plan this work some time in advance so you have enough time to complete it. We have an excellent selection of astronomy books and journals here at the LRC at CCCC for your research efforts. If you need help see a reference librarian.

Possible Points	Actual F	oints
100		

	D. Homework (4) at 10 points per assignment					
		Possible Points	Actual Points			
	Hw 1 10 pts Hw 2 10 Hw 3 10pts Hw 4 10					
]	Attendance points cannot Attendance sheet to receiv lecture has started you wil	be made up for any reason we credit. If you late to cla ll not get credit for attenda	receive credit for these points).  n and you must sign-in on the ass, that is, come in after the ance unless you have a valid elf on this attendance list.  Actual Points			
excuse. Do not sign in for anyone else but yourself on this atternation.  Possible Points Actual Po		ble in a variety of different of extra credit points that you may credit in a notebook.  Tagraph summary of the article of may make a photocopy copy of TICLES FROM MAGAZINES of may bring in a summary of articles. Do not bring them in all is in a notebook. 10 possible of at home or the LRC. Write a 1-2 developed photographs. 5 points is category. Photos must be of mary of your observations. For 10 possible points. Your oder different conditions. In scope or other device that you did tible.  The inimum of 5 minutes and include the present one talk, time permitting of periodically in class. In 15 possible points.  The added up and the following scale crure and lab grades will be redit assignments with no more				

Not passing is below 521 points Grand Total of All Your Points \_\_\_\_\_

D 522-608

NOTE THAT ALL WORK THAT YOU TURN IN FOR CREDIT MUST BE RECEIVED BY 5/6/10. NO WORK WILL BE ACCEPTED DURING FINALS WEEK EXCEPT THE FINAL EXAM AND HOMEWORK 4. ALL WORK THAT YOU WANT GRADED SHOULD BE TURNED IN TO ME PERSONALLY; DO NOT ATTEMPT TO PLACE OR SLIDE ASSIGNMENTS UNDER MY OFFICE DOOR. ALSO NOTE THAT THE LAST DAY TO WITHDRAW FROM A COURSE FOR THE SPRING IS 3/12/10. THE INSTRUCTOR CANNOT DROP A STUDENT, STUDENTS MUST WITHDRAW THEMSELVES.

PLEASE TURN OFF YOUR CELL PHONE IN THE LECTURE AND LAB THESE CAN BE VERY DISRUPTIVE TO THE ENTIRE CLASS.

PLEASE OBTAIN THE CONSENT OF THE INSTRUCTOR IF YOU INTEND TO RECORD ANY LECTURE OR LABORATORY FOR USE OUTSIDE OF THE CLASSROOM OR LABORATORY.