

ASTRONOMY: THE SOLAR SYSTEM
PHYS-1020
Fall SEMESTER 2019
Last updated August 26, 2019

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Hours: by appointment
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Textbooks: *NONE!!*

The goal of this course is to familiarize the student with our solar system, and how that applies to the detection and characterization of exoplanet systems

There will be a few calculations on the homework sets. Please be aware that you should really only carry as many digits as are in the numbers you start with. Example, if you divide 73 by 29, do not give me an answer of 2.51724137931 (and do not laugh, as I have seen this). There is no justification for anything beyond the first 2 digits, although you may want to carry an extra digit temporarily through the middle of an extended calculation. For exams, if you can multiply or divide by 2 or 3, that's all you need.

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27 August 0 Introduction	29 1 – The Sky
3 September 1 – The Sky & Finding Stuff	5 2 – Greek Astronomy
10 3 – The Copernican Revolution	12 “The Harmony of the Spheres” (Cosmos #3)
17 4 – Gravity & 5 - Light	19 5 - Light
24 6 - Telescopes	26 7 – Solar System Exploration 8 – The Solar System
1 October EXAM 1 REVIEW	3 EXAM 1
8 8 – The Solar System	10 9 – Solar System Formation
15 10 – Terrestrial Planets 1	17 11 – Terrestrial Planets 2
22 12 – Terrestrial Planets 3	24 “Blues for a Red Planet” (Cosmos #5)

29 13– Jovian Planets	31 14 – Moons & Rings
5 November EXAM 2 REVIEW	7 EXAM 2
12 15 – Solar System Debris	14
19 16 – Exodisks & 17 – Habitable Zones	21 18 – Pulsar Planets & 19 - RV Planets
26 10 – Transit Planets	28 HOLIDAY
3 December 21 – Imaged Planets & 22 – Exoplanet Properties	5 EXAM 3 REVIEW

Grading:

Your grade will be based on a series of ~6 homework sets, along with 2 midterm exams and a Final Exam. There may be the opportunity to do an in-class activity or two, which will also be graded.