

# Solar System Physics 1 - Lecture Plan

## **The physics of planetary atmospheres** 1.5 lectures

- o The ideal gas law and velocity of gases
- o Hydrostatic equilibrium and atmospheric scale heights

## **The Jovian planets and their moons** 2 lectures

- o Internal and atmospheric structure and composition
- o Ring systems and Roche stability
- o Physical properties of the main satellites
- o Case studies: Titan and the Galilean moons

## **Lecture 1: A Tour of the Solar System**

Some vital statistics:-

The Solar System consists of:-

- o the Sun,
  - o its **8** planets,
  - o their moons,
  - o dwarf planets, asteroids and comets,
  - o the 'Solar wind'
- 
- Astronomers have studied the motions of the Sun, Moon and planets for thousands of years (see A1X Positional Astronomy).