**Course No. : Phys 550**

**(Fundamentals of Astrophysics)**

1- **Lecturer name**: Prof. Mohamed Saleh El-Nawawy

**References**: 1- Astronomy Today, eds : E. Chaisson and S. Mcmillan, 2002,

 Prentice hall

 2- Introduction to Modern astrophysics

**Course content:**

 1- Physical properties of stars

 2- Binary star

  3- Variable stars

 4- Star clusters

 4- Nuclear reactions

 5- Interstellar matter and star formation

 6- Life story of the stars: on main sequence – Giant stars - Helium flash - PN - White dwarfs – Nova, Supernova – Neutron stars – Black holes

3- **Class activities**: attendance – communication in class ) 2 grades)

4- **Reports on**: (6 grades)

 5- **Quizzes**: 12 grades - to be defined later

6- **schedule of exams:**

**فصلي أول (20 درجات) – فصلي ثاني ( 20 درجات) - نشاط فصلي( 20 درجة) - آخر الفصل ( 40 درجة**)