Semester	AUG 2022
Open to semester	7,13,21
Course code	**PH4163/PH6393**
Course title	**Astronomy and Astrophysics**
Credits	3 /3
Course Coordinator & participating faculty (if any)	Ramana Athreya
Nature of Course	Lectures and Tutorials
Pre-requisites	None
Objectives (goals, type of students for whom useful, outcome etc)	To introduce students (whether with a casual interest or potentially career astronomers) to astrophysics
Course contents (details of topics /sections with no. of lectures for each)	0. Introduction - 1. EM radiation ... 3 hours 1. Stellar Physics (structure, composition, evolution) ... 6 hours 2. Galaxies and Galaxy clusters (structure, composition, dynamics, dark matter, SZ effect) ... 6 hours 3. Active Galaxies (radio galaxies, quasars) ... 6 hours 4. Special topics (pulsars, extra solar planets, binary stars) ... 6 hours
Evaluation /assessment	End-Sem Examination-50% Mid-Sem Examination-30% Others-20%
Suggested readings (with full list of authors, publisher, year, edn etc.)	1. Rybicki & LIghtman: Radiative Processes in Astrophysics 2. Phillips, A.C. (1999) The Physics of Stars (Manchester Physics Series). John Wiley & Sons 3. Sparke, L. S.; Gallagher III, J. S. (2000). Galaxies in the Universe: An Introduction. Cambridge Univ. Press.