# AS 725: Gravitational Astrophysics (Spring 2016)

Professor:
Catherine Espaillat
CAS 404A
617-358-3441
cce@bu.edu

Meeting time and location:
Tuesdays and Thursdays 9:30-11am, CAS 502

Office hours:
Mondays 1-2pm, Fridays 1-2pm, 3-4pm, and by appointment.

Course description and objectives:
This course examines astrophysical topics in which gravity plays a dominant role, particularly from the angle of stellar structure. We will cover as many additional viewpoints as time allows. Unfortunately, there is no comprehensive textbook for this course. I will try to point students in the direction of additional reading in the literature and classic textbooks throughout the semester. Note that the syllabus may change based on class progress. Lastly, this course is intended for astronomy graduate students so I will assume all students have a significant background in astronomy.

Grading:
50% Homework
20% Exam #1
20% Exam #2
10% Presentation

Homework:
Problem sets will be assigned roughly every other week in lecture. They will be due at the beginning of class on the date on which it is due. No late homeworks will be accepted. I encourage you to work in groups. If you work together, acknowledge this on the first page by noting the names of the people you worked. Homeworks will receive a zero if they are illegible, only show final answers and no work, and if it is apparent students worked on the homework together, but failed to acknowledge this.

Exams:
The exams will be closed book and held during class at the regular meeting time. Tentatively, the first exam will be on Thursday March 3rd and the second exam date will be announced later in the semester. This is subject to change depending on class progress. All makeups for the exams will be oral exams. I must be notified prior to the beginning of the exam via email that you will miss it and the oral exam must be scheduled within a week of the exam.

Presentations:
Students will give presentations during the last few lectures on astrophysical objects that highlight what they learned during the semester. More details will be given during the semester.

Attendance:
If you miss class, you are responsible for getting all the material you missed from another student. Students who have to miss classes due to research-related travel should email me as soon as they know the classes they expect to miss.

Academic Integrity:
Use of work found in the literature must follow professional procedures to avoid plagiarism (e.g., proper citations of text, figures, data, and conclusions taken from other works). Students should also know and understand the provisions of the Academic Conduct Code. The instructor will refer cases of suspected misconduct to the Dean's Office.