

This is the expected schedule of the problems of the course. After each lecture, you will have reviewed the theory that is needed to solve the corresponding list of problems. The asterisk (*) means that the problem can be solved after the corresponding lecture, but it will be better to wait and solve them when this has been put in stellar evolution context. In each of the problem solving sessions, we will work on the corresponding problems highlighted in red.

| DATE | LECTURE | CORRESPONDING PROBLEMS |
|----------------|--|--|
| week 3 | | |
| 19/1: | Introduction/Background | 1, 2, 3, 4 |
| 20/1: | Equations of structure, Equations of state | 5a, 6, 8, 12, 13, 14, 15, 17, 18 |
| 22/1: | Exercise/discussion | 1, 2, 3, 4, 5a, 6, 7, 8, 10, 12, 13 |
| week 4 | | |
| 26/1: | Thermodynamics, Polytropic models | 7, 10, 16, 29 |
| 27/1: | Nuclear reaction rates | |
| 29/1: | Exercise/discussion | 7, 10, 16, 29 |
| week 5 | | |
| 2/2: | Nuclear processes | 20, 21, 22*, 23*, 24, 25*, 30* |
| 3/2: | Energy transport | 5b, 19 |
| 5/2: | Energy Transport, Project introduction | |
| week 6 | | |
| 9/2: | Stellar Atmospheres | 11, 26, 27, 28, 31, 32 |
| 10/2: | Star Formation | 9 |
| 12/2: | Problem Solving | 11, 14, 15, 16, 17, 18, 19, 20, 21, 22, 24 |
| week 7 | | |
| 16/2: | Main-sequence evolution | |
| 17/2: | Main-sequence evolution, solar neutrinos | 22*, 23*, 30* (neutrinos) |
| 19/2: | Exercise/discussion, Project Work: questions | |
| week 8 | | |
| 23/2: | Post-main-sequence evolution: low mass | |
| 24/2: | Post-main-sequence evolution: high mass | 25* |
| 26/2: | Final Stages | |
| week 9 | | |
| 2/3: | Stellar Nucleosynthesis | |
| 3/3: | Extra time for project work | |
| 5/3: | Exercise/discussion | 9, 23, 25, 26, 27, 28, 29, 30, 31, 32 |
| 7/3: | Deadline project report | |
| week 10 | | |
| 9/3: | Seminar | Project presentations, discussion |
| 10/3: | Seminar | Project presentations, discussion |
| 12/3: | Summary & questions (all) | |
| 14/3: | Deadline project reflection | |
| week 11 | | |
| 18/3: | Exam | |