High Performance Computing  
Academic Year 2020-2021  
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Exam Rules

The HPC exam (532AA, 9 CFU) consists of a written part and an oral part. There are six official scheduled resits per academic year (in January, February, May, June, July and September). Except in special cases, students with a sufficient rate in the written part have to do the oral part in the same resit session.

Reference Book

The reference book of the course is: High Performance Computing – Parallel Processing Models and Architectures, author Marco Vanneschi, Pisa University Press, edition 2014. The book is integrated with an updated Errata Corrige. The file is downloadable from professor’s web site and from the official Microsoft Teams page of the course (channel “General” section “File”).

Entry Test

At the beginning of the course, students are invited to do a preliminary test to check their background knowledge and skills. The test is not official and does not contribute to the final score of the exam. It consists of 20-30 multiple-choice questions related to concepts that should have been studied in courses about Computer Architectures and Operating Systems during the Bachelor Degree. The test will be anonymous and useful for personal evaluation only. In case of positive evaluation, students are immediately ready to study HPC. Instead, in case of an insufficient evaluation (less than 70% of correct answers), the students should study deeply the Background Part appendix of the text book (about 100 pages) in order to deeply understand the course content and filling any existing gap.

Course Organization

The course consists of 12 weeks each with three lectures of two hours. The timetable of the lectures is the following:

- **Tuesday**, 11:15-13:00
- **Wednesday**, 09:15-11:00
- **Thursday**, 16:15-18:00

**Question time**: every **Thursday** from **09:00** to **12:00** (through the Microsoft Teams platform “HPC Question Time” channel). Send an e-mail to the professor to schedule a meeting

According to the rules of the University of Pisa for the academic year 2020-2021, the first semester will be given entirely in an **online fashion** (due to the Covid-19 pandemic). All the lectures will be recorded and available online through the Microsoft Teams platform (channel “HPC Lecture Recordings”). Below, there are two important links about the course:

- **Official Microsoft Teams** of the course, where students can find the teaching material (slides, homeworks and exam solutions) and the video recordings of the lectures. To access the classroom, students have to login into Microsoft Teams using their academic credentials (given by UNIPI), and using the following code to connect to the course: m66f66n;
- **Teaching section** in the professor's web page, updated with the teaching material only (slides, homeworks and exam solutions). The video recordings will not be uploaded in this page. The page is available here: http://pages.di.unipi.it/mencagli/teaching.html

Periodically, the professor gives to students a set of exercises (homeworks). They are not mandatory but warmly suggested. The homeworks will be discussed during the question time (not always during the lectures, to stimulate students to attend the question time with the professor face-to-face).

The syllabus of the course can be found in the University web site. Furthermore, the content of the lectures will be continuously updated at the following URL (official “Registro delle Lezioni”):

https://unimap.unipi.it/registri/dettregistriNEW.php?re=3299244::;&ri=013479