Course page: 0510-7407
Advanced Topics in Hardware Design
Spring 2008
Dr. Guy Even
`http://hyde.eng.tau.ac.il/Advanced_Harware`

1 Place & Time

- Class: Tuesdays 16:10-18:00, 206, Kitot.

2 People

- Dr. Guy Even
  Office Hours: Tuesdays 10-11, Room 202, Computer Engineering and Software Engineering Building . Tel: 640-7769

Please coordinate meetings either by email or by phone.

3 Syllabus

Most of these topics will be covered:

- Introduction to digital design
- Parallel prefix computation
- Division: Newton iterations
- Systolic Circuits and Retiming
- Atrubins's Systolic Multiplier
- Batcher's Bitonic Sorting
- Benes/Waksman Permutation Routing

4 Bibliography

Most of the material is based on articles that will be distributed to the students.

5 Course Requirements

Course grade will be determined as follows:

1. Homework: 5 homework assignments will be given. Homework grade will constitute roughly 20% of the final grade.

2. Project or Exam (subject to approval by head of school): Each student is required to complete a project. Projects can be: (1) implementation of circuits in HDL, or (2) summary of an article. Project grade will constitute 20% of the final grade.

Remarks:

- Students absent due to military service should contact me in advance to coordinate submission of homework assignments during their service.
- Homework may NOT be submitted in pairs.
- Students unable to attend the final exam are requested to inform me of this event as soon as possible.