Announcement: Pretest results

Results statistics

<table>
<thead>
<tr>
<th></th>
<th>Computer Architecture and Organization</th>
<th>Discrete Math</th>
<th>Algorithm Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pass (&gt;=80%)</td>
<td>15 (18%)</td>
<td>42 (51%)</td>
<td>0</td>
</tr>
<tr>
<td>Marginally pass(&lt; 80 &amp; &gt;=66%)</td>
<td>28 (34%)</td>
<td>22 (27%)</td>
<td>15 (18%)</td>
</tr>
</tbody>
</table>

Scores are with CIDSE advising office
Prerequisite modules

- **Algorithm Design Module**: will be covered in the class
  - All of students will have to take the module exam

- **Discrete Mathematic Module and Computer Architecture and Organization Module**
  - Students who have failed the pretest are required to take the respective online modules.
    - A student will not be given a passing grade in this course unless they pass the respective module.
    - Students who have marginally passed are strongly recommended to take these modules.
  - Module information and test dates will be announced later.
Course modules:

- **Module one:** Algorithm Design
- **Module two:** Networking and OS
- **Module three:** Advanced Computer Architecture and Parallel Computing
- **Module four:** Computer System Evaluation and Correctness
COURSE MECHANICS and policies
Course Mechanics

- **Exams for every Module**
  - **Pre-test:** Students who get B or better are allowed to not take the other exams for this module – however the pre-test score will be their final grade on the module.
  - **End of module test**
  - **Final exam test:** as final exam students can select three modules for which they take final test
  - The score of the module is the maximum score of the above tests

- **Final score:** the average of all of the modules

- **Grading:**
  - A+ (97 – 100%)
  - A (94 – 97%)
  - A- (90 – 94%)
  - B+ (87 – 90%)
  - B (84 – 87%)
  - B- (80 – 84%)
  - C+ (76 – 80%)
  - C (70 – 76%)
  - D (60 – 70%)
  - E (0 – 60%)
Homework and Programming Assignments

- Module home works and programming assignments would be assigned
- Some home work problems solutions will discussed in the class
- Home work and programming assignments won’t be graded
  - They are to help you master the material
Project

- For extra credit (up to 40%) a student can choose to do a project
- The individual project should be defined in consultation with the course instructor by end of September.

- Project will consist of
  - Project proposal
  - Project report + presentation

- Nature:
  - A computer system problem involving analysis, simulation, and or implementation

- Resource: based on the project and availability IMPACT lab resources will be made available
Reference books

- Computer Systems: A Programmer's Perspective 2ed, Randal E. Bryant and David R. O'Hallaron
- Computer Architecture: A quantitative approach, John L. Hennessy and David A Patterson.
- Operating Systems Concepts, Silberschatz et al.
- Compilers, Principles, Techniques, and Tools, Aho et al.
- Fundamentals of Mobile and Pervasive Computing, Adelstein et al.
- Algorithm Design, Kleinberg and Tardos
“No Distraction” Policy

- No Laptops/Netbooks/Cell Phone/News Papers etc.

- Laptops/Netbooks may be permitted – only with instructor’s permission
  - Only for note-taking purpose (all other activities disallowed unless instructed).
Cheating/Plagiarism Policy

- Strictly prohibited
- See University policy
- Minimum punishment – zero in the exam
Class Cyberpresence

  - slides

- Blackboard
  - Class assignments
  - Solutions
  - Discussion board
  - Reference material

- Visit regularly for latest information
What can you expect from this course?

- Lots of in-class interaction
- Interesting and challenging assignments and exam questions
- Help/Tutorials by instructor/TA on difficult material
- And lot more!
Contacting Me or TA

- **Instructor**
  - Email: [sandeep.gupta@asu.edu](mailto:sandeep.gupta@asu.edu)
    - Subject line: CEN502Fa13
  - Office: BY 522
  - Phone: 5-3806
  - Office Hours: TTh 9-10:30 am
  - Call me || come to my office hrs || Set up an appointment
  - [http://impact.asu.edu](http://impact.asu.edu)

- **TA: Zahra Abbasi**
  - Email: zahra.abbasi@asu.edu
  - Office: BY517
  - Office Hours: MW 2-3pm or by appointment
What do I do when I am not teaching?
**IMPACT: Research**

**Use-inspired** research in pervasive computing & wireless sensor networking

**ID Assurance**

Goal:
- Protect people’s identity & consumer computing from viral threats

Features:
- PKI based
- Non-tamperable, non-programmable personal authenticator
- Hardware and VM based trust management

Sponsor:

**Mobile Ad-hoc Networks**

Goal:
- Protocols for mobile ad-hoc networks

Features:
- Energy efficiency
- Increased lifetime
- Data aggregation
- Localization
- Caching
- Multicasting

Sponsor:

**Pervasive Health Monitoring**

Goal:
- Pervasive Health monitoring
- Evaluation of medical applications

Features:
- Secure, Dependable and Reliable data collection, storage and communication

Sponsor:

**Criticality Aware-Systems**

Goal:
- Evaluation of crisis response management

Features:
- Theoretical model
- Performance evaluation
- Access control for crisis management

Sponsor:

**Thermal Management for Data Centers**

Goal:
- Increasing computing capacity for datacenters
- Energy efficiency

Features:
- Online thermal evaluation
- Thermal Aware Scheduling

Sponsor:

**Intelligent Container**

Goal:
- Container Monitoring for Homeland Security
- Dynamic Supply Chain Management

Features:
- Integration of RFID and environmental sensors
- Energy management
- Communication security

Sponsor:

**Medical Devices, Mobile Pervasive Embedded Sensor Networks**

**BOOK:** Fundamentals of Mobile and Pervasive Computing, Publisher: McGraw-Hill Dec. 2004

**BOOK:** Body Area Networks: Safety, Security, Sustainability, Cambridge Univ. Press, June 2013
What’s Next?

- Algorithm design
  - Book: Algorithm Design, Kleinberg and Tardos
  - Read chapter one and two
    - Stable matching
    - Algorithm analysis