CSE502 - Syllabus
Computer Architecture
Fall 2016

| Lecture Meeting Time:       | Tuesday/Thursday 10:30AM ~ 11:50AM |
| Location (Lecture):         | TBD                                  |
| Course Web Site:            | Check blackboard                     |
| Instructor:                 | Dr. Ilchul Yoon                      |
| Office:                     | Academic Zone B #421                 |
| Phone:                      | +82 (32) 626-1213                    |
| Fax:                        | +82 (32) 626-1559                    |
| E-mail:                     | icyoon@sunykorea.ac.kr               |
| Office Hours:               | Tuesday 1:00PM~2:30PM / Wednesday 1:00PM~2:30PM |

MATERIALS

Required:
Authors: Hennessy and Patterson
Publisher: Morgan Kaufmann

Supplement materials:

COURSE DESCRIPTION:
In this course, we will study advanced topics in computer architecture. This course is designed for graduate students in the department of Computer Science, and is offered as one of the core courses in the “Systems” Core Area. To take this course, students are expected to have enough understanding of the topics covered in CSE 320. We will first review the contents explained in the appendix A through C of the text (pipelining, instruction set principles, and memory hierarchy). Then, we will advance to other topics such as superscalar execution, branch prediction, dynamic scheduling, multi-threading support, shared memory architecture, GPU, and storage systems.

We will use Piazza for this course. Lecture notes and assignments will be available for download in Piazza, and class announcements will also be posted to Piazza. However, you must use Blackboard for submitting project assignments and for checking your grades. This course will be very demanding.
Expect to spend many hours to study the contents we will cover in classes and also to complete assignments. Our Piazza class page is: https://piazza.com/sunykorea.ac.kr/fall2016/cse502/home

COURSE COMPONENTS

Lectures
The lectures will focus on discussing concepts with simple examples. Both lecture meetings will be in the classroom. The student will be responsible for all the material and updates presented and discussed in the lectures. The text, lecture notes and lectures will provide a base of knowledge that participants can use in assignments and the course project.

Homework Assignments
To reinforce concepts related to the relevant chapters/lectures, there will be 3 to 5 homework assignments to be completed individually. It is allowed to discuss with other class participants to have clear understanding of the questions or to find rough strategies to solve the questions. However, the discussion should be only for the idea, and each student should write his or her solutions individually.

You must submit your work in an electronic format (e.g., .doc, .txt, .png, or .jpg) via Blackboard before the due date/time. Late submission is allowed, only if you submit your work within 24 hours after the due time. However, expect a grade reduction of 25% for the late submission. Submissions after 24 hours will not be accepted.

Course Project
There can be 1 or 2 projects. Each project must be accompanied by a design document. Project details will be posted in BlackBoard, and all deliverables must be submitted) via Blackboard before the due date/time. For late submissions, the same rule described in the homework assignment will be applied.

Exams
Both Mid-Term and Final Exam will primarily test whether you understood concepts covered in the lecture and reading. Both examinations are in class, open-textbook, and open-slide. No electronic device is allowed, except for a simple calculator (not an app in a cell-phone or tablet). The final exam will be cumulative. No extra time will be provided for late arrivals.

Make-up exams can only be offered in the event of documented cases. Written permission must be obtained 48 hours before the exam if you cannot attend. In any event, make-up exams are only given at instructor discretion.

GRADING

Grading method
<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework (3~5)</td>
<td>150</td>
</tr>
<tr>
<td>Class Projects</td>
<td>250</td>
</tr>
<tr>
<td>Mid-Term Exam</td>
<td>300</td>
</tr>
<tr>
<td>Final Exam</td>
<td>300</td>
</tr>
<tr>
<td>Maximum Points Possible</td>
<td>1000</td>
</tr>
</tbody>
</table>

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**Final grades**

The following are indicative of how the points on the course would be mapped to a grade. This is only indicative and may be adjusted at my discretion.

A = 80%+, B = 65-80%, C = 55-65%, D = 10-55%, F = 0-10%

**SCORE/GRADE APPEALS**

You must make the appeal in writing. However, score changes are at the discretion of the instructor and may be up or down based upon a complete review of the work in question. It is important to recognize that a grade reflects another person’s judgment of your work. In this sense, all grading is subjective. Appealing scores is discouraged. Changing a few points on assignments rarely makes a difference in the final grade. Time is much better spent discussing and clarifying the information content presented in the course. In the event of disputes at the end of the semester, you will be required to produce the testing material in question.

In the case of a grading mistake (i.e., grade is posted incorrectly, grader did not give credit for an item that exists) you can always send me e-mail, or we can meet in office hour.

**ACADEMIC INTEGRITY**

Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. Faculty members are required to report any suspected instances of academic dishonesty to the Academic Integrity Committee.

**DISABILITIES ACT**

If you have a physical, psychological, medical or learning disability that may impact your course work, please contact the Department of Student Affairs, Campus Building A, Room 217, (032) 626-1132. They will determine with you what accommodations, if any, are necessary and appropriate. All information and documentation is confidential.

**CRITICAL INCIDENT MANAGEMENT**

SUNY Korea expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Department of Academic Affairs any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, or inhibits students' ability to learn.

**COURSE EVALUATION**

Your participation in the evaluation of courses through Course Evaluation System is a responsibility you hold as a student member of our academic community. The system will be open for you to
complete your evaluations later in this semester. You can participate after logging in to the system with your NetID.

**RIGHT TO CHANGE INFORMATION**
Although every effort has been made to be complete and accurate, unforeseen circumstances arising during the semester could require the adjustment of any material given here. Consequently, given due notice to students, the instructor reserves the right to change any information on this syllabus or in other course materials.