CISP 457 Computer Systems Analysis and Design

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1 About the Instructor

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2 About the class

Course Number	CISP 457
Course Title	Computer Systems Analysis and Design
Prerequisites	A grade of "C" or better in one of the following: CISP 317, CISP 319, CISP 320, CISP 340, CISP 360, CISP 365, CISP 370
Advisory	CISA 305, CISA 340
Number of Units	3.0
Hours	54 lecture
Lecture	MW 1730-1845 121
Class Section Number	18030
Final Exam	May 18, 2005 (Tuesday) 1745-1945
Textbook	Downloadable
Course Description	This course covers the methods used to analyze, design, and implement a computer system that meets client business needs. The methodology emphasizes the skills needed by a system analyst throughout the steps of a system development life cycle. These steps include system feasibility, analysis, design, implementation, documentation, and evaluation.

3 Generic Information (All Classes)

This section contains information that is common for all classes, unless otherwise noted.

3.1 Cheating

- Definitions:
  - "cheat" (general definition): engage in deceitful behavior; practice trickery or fraud (according to WordNet 2.0)
  - "cheat" (specific definition): to submit any work (quiz, examination, homework) that is not completed according to rules.

  - Unless otherwise noted, all submitted work should be completed independently and originally.
  - "Independent" means "by oneself", by whomever submits the work.
  - "Original" means "not derived or copied or translated from something else" (WordNet 2.0)
- But what about helping/getting help (for homework assignments, not quizzes or examinations)?
  - Discuss concepts and ideas, not answers.
  - Do not share specific applications of concepts and ideas for homework assignments.
  - Help others by asking questions, not by spelling out answers.
  - It's okay to clarify material already included in classnotes and textbooks.
  - Use examples that cannot be directly applied to homework assignments.
  - *Never* share files or print-outs of complete homework assignments with other students when work can still be submitted for points.
- How does Tak know?
  - I read all source code and look for similarities.
  - I check to see if homework performance is consistent with examination performance.
  - I proctor examinations and look for unusual behavior.
  - I compare examination answers and look for unusual similarities.
  - I reserve the right to ask a student explain submitted work.
  - I keep my ears open to reports and complaints from fellow students and other professors.
- So what happens to cheating students?
  - Any submitted work that is the result of cheating does not count to the final grade. No make-up will be offered.
  - Incidents are reported to the area dean.
  - Students who repeatedly cheat can be expelled.
- What if a student is "wrongfully accused"?
  - All complaints and appeals should be forwarded to the area dean.
  - The dean's decision will be implemented.

3.2 Resources

- Classnotes are available from my website
- Lecture recordings are also available (whenever I remember to record and upload)
- In-class notes are also available (not guaranteed to be complete)
- Email is an effective method to get in touch with me, better than phone messages.

3.3 Grading

- Examinations
  - No make-up exams unless I approve of reasons prior to the exam
  - For exam-based classes:
    * All exams account for 80% of your final grade
    * First exam accounts for 20% of your final grade
    * Second exam accounts for another 20% of your final grade

    - The final exam accounts for 40% of your final grade
  - All exams are open book and open notes, but no cheating is tolerated
  - All exams are, by default, multiple choice. However, I reserve the right to change the form of questions.
  - All exams have some "extra credit", see below
  - Each wrong answer in a multiple choice test means a deduction of 25% of points!
  - Letter grade equivalence: given t_i is the total number of questions of exam i, b_i is the baseline number of questionsof the same exam, and r_i is the number of questions answered correctly:
    - define $s_i = r_i - \frac{b_i - r_i}{4}$
    - F: $s_i < \frac{b_i}{8}$
    - D: not F and $s_i < \frac{3 \times b_i}{8}$
    - C: not D and $s_i < \frac{5 \times b_i}{8}$
    - B: not C and $s_i < \frac{7 \times b_i}{8}$
    - A: $s_i \geq \frac{7 \times b_i}{8}$
- Homework Assignments/Projects
  - All homework assignments/projects account for 20% of your final grade
  - No late submission is accepted
  - I will use the last submission for grading
  - I reserve the right *not* to grade any submission that is not submitted according to specifications
  - Letter grade equivalence (s_i is the score of a submission, p_i is the number of points for the work):
    - F: $s_i < \frac{p_i}{8}$
    - D: not F and $s_i < \frac{3 \times p_i}{8}$
    - C: not D and $s_i < \frac{5 \times p_i}{8}$
    - B: not C and $s_i < \frac{7 \times p_i}{8}$
    - A: $s_i \geq \frac{7 \times p_i}{8}$
- Final grade
  - Based on weighted average of all exams and homework assignments/projects.
  - Letter grade is based on boundaries determined by weighted average of all exams and homework assignments
  - The following are the boundary lines:
    - F: less than 12.5%
    - D: at least 12.5% but below 37.5%
    - C: at least 37.5% but below 62.5%
    - B: at least 62.5% but below 87.5%
    - A: at least 87.5%

4 On-site classes

This section applies only to on-site classes.

4.1 During Lectures

- Absolute no-nos
  - Eating *any* kind of food, including chewing gum and candies. If you have a medical condition that requires you to eat during lectures, please let me know ahead of time.
  - Drinking any kind of liquid. If you have a medical condition that requires you to drink during lectures, please let me know ahead of time.

  - Talking that distracts me or other students. This includes talking to another student, on a cell phone, and etc.
  - Behaviors that are disruptive, insulting, intimidating or otherwise unacceptable in a classroom. I may optionally warn, or ask people to leave a classroom without warning. In case of non-compliance, campus security will be called in.
  - Missing classes. If a class meets n times in a week, you can miss n classes before I drop you without warning. Exceptions can be made with my consent.

- Not my problem
  - Falling asleep or otherwise not paying attention.
  - Forgetting to bring classnotes or books in an open-book exam.

- Encouraged
  - Participate in discussions. Answer questions, ask questions, correct my mistakes, etc.
  - Letting me address you before speaking.

4.2 During labs (only for classes with labs)

- No-nos
  - Doing anything that is prohibited, implicitly or explicitly, in the lab usage agreement.
  - Same policy about food and drink.
  - Using any lab resource for *anything* other than school work related to CIS, office technologies or business courses. If a student is spotted using a lab computer for anything that is not related to coursework, lab technicians and I may reboot/disable a computer remotely with or without prior warning.
  - Same policy about unacceptable behaviors.
  - Hogging my attention while other students are waiting. While there is at least one other student waiting, I can only give a student up to 10 minutes at a time. You can always line up again for another 10 minutes.

- Not my problem
  - Missing labs. Labs are optional (unlike lectures), but you may be able to do your homework assignments quicker and more effectively during scheduled labs.
  - Falling asleep, dozing off.
  - Leaving behind diskettes, USB flash drives, etc. Be sure to take all personal belonging with you. No one but yourself is responsible for your belonging.
  - Forgetting to save files before exiting applications or shutting down a computer.

- Encouraged
  - Asking questions related to homework assignments.
  - Helping other students without considered cheating.
  - Doing your CIS, business or office technology homework assignments.

5 Schedule

The following schedule is subject to change.

1/17 to 1/23	Introduction, the players
1/24 to 1/30	Initial contact, meetings
1/31 to 2/6	Requirements (non-functional), requirements project
2/7 to 2/13	Actors and use cases
2/14 to 2/20	Use case diagrams, relationships in UCDs, use case diagram project
2/21 to 2/27	Introduction to scenario, first practice exam
2/28 to 3/6	More on scenarios, scenario diagrams, first exam, scenario diagram project
3/7 to 3/13	Interviewing clients, general techniques
3/14 to 3/20	Interviewing clients, requirements capture
3/21 to 3/27	break
3/28 to 4/3	Cost benefit analysis, life cycle, second practic exam, cost benefit analysis project
4/4 to 4/10	Behavioral analysis, logic representation, second exam, pseudocode and flowchart project
4/11 to 4/17	More on logic representation (state diagrams, activity diagrms), state diagram project
4/18 to 4/24	Data, objects and classes
4/25 to 5/1	Objects and states, class diagrams, class hierarchy project
5/2 to 5/9	Boundary, control and data classes
5/10 to 5/16	How pieces fit together, practice final exam, final project presentation
5/17 to 5/25	Final exam