CS 105 – Survey of Computer Science
Spring 2007 – Syllabus

Instructor
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Office Hours: See instructor's home page.

Course Home Page
Announcements regarding handouts and assignments will be made in class. Assignments will be available only at the course home page (http://csserver.evansville.edu/~hwang/s07-courses/cs105.html).
It is your responsibility to consult the course home page on a regular basis. Grades will be posted to Blackboard (http://acebb.evansville.edu).

Catalog Data
This course is intended for students who are not Computer Science or Engineering majors. It provides a breadth-first introduction to various concepts and tools used in computing. Topics include number systems, Boolean algebra, computability, databases, networking, Internet/Web, user interfaces, artificial intelligence, robotics, and a short introduction to programming.

Prerequisites: None.

Required Textbook

Daily Requirements
Assigned daily reading assignments. Daily in-class exercises on material up to and including the reading assigned for the day. These exercises may be both written and hands-on exercises, and may be individual or group exercises.

Homework and Projects
There will be weekly written and hands-on homework exercises. Generally these will be assigned on Wednesday and due the following Wednesday. In addition, there will be 3 larger projects of 2--3 weeks in duration.
Current Events Journal

This is an assignment to collect a "journal" of 8 articles related to computers and electronic technology. These articles may be news articles such as those that announce a new product or a new business, describe a novel use or misuse of technology, or profile a person or business involved in technology. Articles may also be opinion, review, or analysis pieces that strive to explain or persuade the reader of the consequences of using computers and electronic technology.

The articles chosen must be substantial. All should have named authors. In particular, one-paragraph "blurb" articles are not acceptable. The articles chosen should be also be on diverse topics. For example, applications, business, e-commerce, legal and social issues such as viruses and anti-trust, and hardware. Some recent major topics include the increased use of wireless technology, electronic voting, and the new Apple TV and phone.

Since the goal is to consider current events, articles must have been published after January 1, 2007. To save trees, students do not have to produce a copy of the article (unless you want to). For each article, a 1-page write-up should be submitted containing the following:

- a citation that includes the source of the article (author, and name of publisher and/or URL of website) and the date of publication that the instructor could use to find the article
- a short paragraph summary of the article
- a short paragraph discussion of how the topic of the article might affect you personally (for mostly news items) or the identification of bias in the article related to the agenda of the author (for opinion, review, or analysis articles)

The first 4 articles are due at the beginning of class on February 28. The last 4 articles are due at the beginning of class on April 30. On both days, there will be an in-class discussion of the topics of the articles submitted. No late work will be accepted for this assignment.

To get you started, here are some URLs for on-line versions of some newspapers and magazines. You are encouraged to find other (reputable) on-line sources and use print sources as well.

- USA Today, www.usatoday.com
- Time Magazine, www.time.com
Exams and Evaluation
There will be two written in-class exams during the term and a comprehensive written final exam.

Final grades will be based on the following weighted distribution:

- 20% Two in-class written exams (10% each)
- 10% Comprehensive final exam
- 10% Written homework exercises
- 20% In-class exercises
- 10% Current events journal
- 30% Three projects (10% each)

Final grades are based on the final weighted percentage with adjustments depending on class distribution.

Missed Classes and In-class Exercises
Due to the integrated lecture and lab format of the course, attendance is mandatory. In-class exercises may or may not be made up depending on the nature of the exercise. However, excused absences will be noted and taken into consideration when assigning final grades.

Late Homework, Late Projects
All other assignments (homework and projects) are due at the instructor's office and/or electronically as appropriate by 4:30pm on the date specified unless otherwise noted. Any assignments arriving after 4:30pm are considered late. The following automatic late penalties will be applied:

- 10% if handed in by 4:30pm, one day late
- 20% if handed in by 4:30pm, two days late
- 30% if handed in by 4:30pm, three days late

Unexcused late work will not be accepted for credit after three days after the due date without prior arrangements. For the purpose of counting days, Friday 4:30pm to Monday 4:30pm is considered one day. Please note that the purpose of the automatic late extension is to allow students leeway when needed. It is usually better to hand in something late and completed than on-time and incorrect. However, chronically handing in late submissions will lower your final grade.

Valid excuses for missing exams, missing classes, and handing assignments in late include illness, family emergencies, religious observances, official UE events such as varsity games and concerts, etc. They do not include (most) work conflicts, studying for other classes, leaving a day early or staying home an extra day over a weekend or holiday, etc. In general, an excused absence is one caused by circumstances beyond your control.

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The instructor will rely on your integrity for getting work excused. If you have a valid excuse, put it in writing, sign your name to it, and give it to the instructor. For religious observances and official UE events, you must inform the instructor that you will be absent before the absence occurs, otherwise it will be considered an unexcused absence.

Excused work must be made up within one calendar week from the original due date for full credit. Late excused work will not be accepted. Exceptions will be made for serious or prolonged illness, or other serious problems. Please note: It is your responsibility to take care of missed or late work.

**Attendance Policy**

Attendance is important and expected. Attendance records will be maintained in accordance with Federal Law, but will not be used in the determination of grades, except to the extent it affects the in-class exercise portion of your grade and in borderline cases. Students are responsible for all material covered in class. If you miss a class, find out what was covered from another student. You are responsible for checking the course home page for new assignments even if you miss class.

**Honor Code**

All students are expected to adhere to the University's Honor Code regarding receiving and giving assistance. The following specific guidelines are in force for this course.

- Written homework exercises are for you to gain experience and practice. You may collaborate with your classmates, but each student should submit a solution in his/her own words that reflect his/her understanding of the solution. Ultimately you will be required to demonstrate your proficiency of the material on exams. Therefore, it is highly recommended that you attempt all homework problems on your own before finding a solution from another source.

- Projects, the current events journal, and exams are to be your own work.

If there is any doubt as to whether assistance is acceptable, consult the instructor.
Preliminary Schedule

Here is a preliminary schedule of topics and exams. A more detailed schedule will be provided in the near future.

- Data Storage, Chapter 1.1-1.6
- Data Manipulation, Chapter 2.1-2.4
- Operating Systems, Chapter 3.1-3.3, 3.5
- Networking and the Internet, Chapter 4.1-4.3, 4.5
- Exam 1

- Algorithms, Chapter 5
- Programming Languages, Chapter 6.1-6.4
- Software Engineering, Chapter 7
- Data abstractions, Chapter 8.1-8.4
- Exam 2

- Database Systems, Chapter 9.1-9.2
- Artificial Intelligence and Robotics, Chapter 10.1-10.3, 10.6-10.7
- Theory of Computation, Chapter 11
- Final Exam