## <u>CS 101 – Fluency with Information Technology</u>

## Fall 2007

Lecture: MWF 9:30-10:30

Hilles 109

**Course description**: going beyond mere literacy skills, the goal is to introduce students to the concepts and capabilities of computers so they can become proficient (i.e. fluent) users, with the intellectual ability to reason about and solve complex problems, both now and in the future.

**Prerequisites**: none but the most basic experience, such as using electronic mail and browsing the web. Students with a strong high school background in mathematics or interest in programming should consider taking CS 105 instead.

Instructor:Steven Lindellslindell@haverford.edu(610) 896-1203Office hours:WF 12:00-1:00and by appointmentKINSC L308Textbook:Fluency with Information Technology: Skills, Concepts, and Capabilities03213578252/E, Lawrence Snyder, University of Washington, Addison-Wesley, 2006.LocationEiden Mathematical Concepts, and Capabilities

**Laboratory**: Either M 1:00-2:00; M 2:00-3:00; Tu 10:30-11:30; or Tu 11:30-12:30 in Hilles 110

**Honor code**: You are encouraged to discuss the lecture material and collaborate on the lab problems with other students, provided the only thing you take away from those discussions is your memory or understanding of the material, *not* written solutions or computer files. No collaboration is allowed on quizzes or examinations.

Accommodations: Students who think they may need accommodations in this course because of the impact of a disability are encouraged to meet with me early in the semester to avoid unnecessary inconvenience and delays, and should also contact Rick Webb, Coordinator, Office of Disabilities Services (rwebb@haverford.edu, 610-896-1290) to verify their eligibility for reasonable accommodations as soon as possible.

**Evaluation**: approximate weighting of requirements that contribute to the final grade

| • | Participation | 10% |
|---|---------------|-----|
| • | Labs          | 20% |

- Homework 20%
- Projects (3) 20%
- Examinations (3) 30%

## <u>Schedule</u>

| Date    |                         | Rea        | ading   | Lab                                      |
|---------|-------------------------|------------|---|--|
| Week 1  | 9/3<br>9/5              | Chapter 1  |   | Sign up for lab periods                  |
|         | 9/7<br>9/10             | Chapter 2  | Part 1:<br>Basic<br>principles<br>and skills              | Lab 1.1:                                 |
| Week 2  | 9/12<br>9/14            | Chapter 3  |   | Software and Data Storage                |
| Week 3  | 9/17<br>9/19            | Chapter 4  |   | Lab 1.2:<br>Internet Basics              |
| Week 4  | 9/21<br>9/24<br>9/26    | Chapter 5  |   | Lab 1.3:                                 |
|         | 9/20<br>9/28<br>10/1    | Chapter 6  |   | Basic HTML                               |
| Week 5  | 10/1                    |            |   | Lab 1.4:<br>Smarter Searching on the Web |
| Week 6  | 10/8<br>10/10           | Chapter 7  | Part 2:   | HTML Project                             |
|         | 10/12<br>10/22          | Chapter 8  | How<br>computers<br>work<br>Part 3:<br>Organizing<br>Data | Lab 2.1:                                 |
| Week 7  | 10/24<br>10/26          | Chapter 9  |   | Tracking Down the Bugs                   |
| Week 8  | 10/29<br>10/31          | Chapter 10 |   | Lab 2.2:<br>Algorithms                   |
|         | 11/2<br>11/5            | Chapter 11 |   | Lab 3.1:                                 |
| Week 9  | 11/7<br>11/9            | Chapter 13 |   | Spreadsheet Basics                       |
| Week 10 | 11/12<br>11/14          | Chapter 14 |   | Spreadsheet Project                      |
|         | 11/16<br>11/19          | Chapter 15 |   | Lab 3.2:                                 |
| Week 11 | 11/21<br>11/23          | Chapter 16 |   | Database: Tables & Queries               |
| Week 12 | 11/26<br>11/28          | Chapter 12 | Part 4:   | Lab 3.3:<br>Modifying a Database         |
| Week 13 | 11/30<br>12/3           | Chapter 17 | Information<br>Handling                                   | Lab 3.4:                                 |
|         | 12/5<br>12/7            | Chapter 23 | Part 5:   | Modifying a Database Schema              |
| Week 14 | 12/10<br>12/12<br>12/14 | ТВА        | Computer<br>Capabilities                                  | Database Project                         |