FIT 100 Fluency with Information Technology

Winter Quarter 2012

Lecture Time: MWF 2:30pm – 3:20pm

Location: Mary Gates Hall (MGH), Room 389

Instructor: Katherine Deibel, PhD <deibel@uw.edu>

Mailing list: cse100a_wi12@u.washington.edu

Course website: http://courses.washington.edu/fit100/wi12/

Lab Sections and Teaching Assistants

Attendance at all labs is expected.

If you have a laptop, consider bringing it with you to lab; all software we use is available online or for free download.

<table>
<thead>
<tr>
<th>Days &amp; Time</th>
<th>Section</th>
<th>Location</th>
<th>Teaching Assistant</th>
</tr>
</thead>
<tbody>
<tr>
<td>T,Th 930-1020</td>
<td>AA</td>
<td>MGH 058</td>
<td>June Lee <a href="mailto:leej92@uw.edu">leej92@uw.edu</a></td>
</tr>
<tr>
<td>T,Th 1230-120</td>
<td>AB</td>
<td>MGH 058</td>
<td>Rajesh Subramanian <a href="mailto:rajeshsb@uw.edu">rajeshsb@uw.edu</a></td>
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<tr>
<td>W,F 930-1020</td>
<td>AC</td>
<td>MGH 058</td>
<td>Tristan Huber <a href="mailto:hubert4@uw.edu">hubert4@uw.edu</a></td>
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<tr>
<td>T,Th 230-320</td>
<td>AD</td>
<td>MGH 044</td>
<td>Hannah Sherwood <a href="mailto:sherwh@uw.edu">sherwh@uw.edu</a></td>
</tr>
<tr>
<td>W,F 1230-120</td>
<td>AE</td>
<td>MGH 044</td>
<td>Rajesh Subramanian <a href="mailto:rajeshsb@uw.edu">rajeshsb@uw.edu</a></td>
</tr>
<tr>
<td>W,F 130-220</td>
<td>AF</td>
<td>MGH 044</td>
<td>Hannah Sherwood <a href="mailto:sherwh@uw.edu">sherwh@uw.edu</a></td>
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Course Description

Official Course Description

Fluency in Information Technology (5 credits)

Introduces skills, concepts, and capabilities necessary to effectively use information technology. Includes logical reasoning, managing complexity, operation of computers and networks, and contemporary applications such as effective Web searching and database manipulation, ethical aspects, and social impacts of information technology.

Brief Instructor Course Description

The first unit covers computer networks, the Internet, the World Wide Web, searching the Web, truth on the Web, and creating a Web site. The second unit covers programming using JavaScript and adds interaction with users to Web pages. The third unit covers data storage, transfer, and the associated topics of privacy and security.

This course follows two distinct tracks. Concepts are covered in lecture and skills are practiced in labs. Each project brings together all that you have learned. The three projects are creative and fun. The following are examples of projects from previous course offerings:
Course Overview

Fluency with Information Technology involves three types of knowledge, each equally important for reinforcing a deeper understanding of IT and its uses. Upon completion of this course, you will have acquired and honed these three types: skills, concepts, and capabilities.

Skills

Gain contemporary and immediately applicable skills. Become technically literate. Learn how to:

- Browse the Web with Internet Explorer, Safari, or Firefox
- Create and publish Web pages
- Transfer files with FTP
- Effectively use search engines
- Determine authenticity of Web sites
- Program with JavaScript
- Build a spreadsheet
- Build a database
- Understand database and online privacy issues
- Protect your computer from security threats

Concepts

Reach an essential understanding of the foundations on which IT is built that goes beyond technical literacy. Learn about critical areas of IT, such as:

- Computers
- Information systems
- Networks
- Modeling and abstraction
- Algorithmic thinking
- Digital representations, such as MP3, ASCII, and JPG
- Limitations and societal impacts of technology

Capabilities

Learn to apply information technology in complex situations and understand the consequences. Develop the capabilities to:

- Manage complexity
- Test solutions
- Anticipate changes in technology
- Think about IT abstractly

Technology evolves so rapidly that current skills become obsolete over shorter and shorter time spans. Successful completion of this course will give you an understanding of IT capabilities and concepts that will allow you to keep pace with inevitable advances in IT.
Readings

Required Textbooks

One textbook and a clicker are required.

- Lawrence Snyder
  Fluency with Information Technology. 4th ed.
  Prentice-Hall publishers © 2010

Online Resources for Students:

Fluency is available at Odegaard Course Reserves for 24-hour checkout.

We will also be using clickers throughout this course

- **Required:** RFR Card "clicker" (Type RCRF-01)
  Manufacturer: Turning Point
  ISBN: 9780495121336

Clickers are available at the Bookstore. Bring it to lecture every day for answering questions. You will be able to use it for other courses and sell it back at the end of the quarter. Clickers also carry a warranty. If anything goes wrong, take it back to the bookstore.

Newer clickers have LCD screens. They are helpful but unnecessary for this class. If you have a clicker like this one for another class, you don't need to buy another one. You can use the same clicker for more than one class. If you have a friend who has one, you can borrow theirs unless you are both enrolled in this class, then you will both need clickers. If you borrow a clicker from a friend, be sure to use it all quarter. If you lose your clicker, please let us know the new serial number.

Other Assigned Readings

- PDFs are linked from the course Calendar.
- Publicly available web sites are linked from the course Calendar.

Schedule of Readings

Required and optional readings for each week are listed on the course calendar.

Grading

It is important for you to work on the material as we discuss it in class. Keep up with the readings, attend lectures and labs, post to the online discussion board, and do the homework and the projects! If you do these things, your grade will take care of itself, and you will enjoy the class, too.

The breakdown of your grade for this class is shown in the table.
<table>
<thead>
<tr>
<th>Deliverable</th>
<th>Total Points</th>
<th>% of Total</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project 1 (A &amp; B)</td>
<td>150pts</td>
<td>15%</td>
<td>Part A is worth 50pts. Part B is worth 100pts.</td>
</tr>
<tr>
<td>Project 2 (A &amp; B)</td>
<td>150pts</td>
<td>15%</td>
<td>Part A is worth 50pts. Part B is worth 100pts.</td>
</tr>
<tr>
<td>Project 3 (A &amp; B)</td>
<td>150pts</td>
<td>15%</td>
<td>Part A is worth 50pts. Part B is worth 100pts.</td>
</tr>
<tr>
<td>Labs</td>
<td>160pts</td>
<td>16%</td>
<td>Nine labs total each worth 20pts. The lowest lab score is dropped.</td>
</tr>
<tr>
<td>Clicker Quizzes</td>
<td>160pts</td>
<td>16%</td>
<td>Quizzes are worth 8pts each. Your best 20 scores (out of approx. 25) are totaled.</td>
</tr>
<tr>
<td>GoPost Discussions</td>
<td>120pts</td>
<td>12%</td>
<td>See posting grading below.</td>
</tr>
<tr>
<td>Participation</td>
<td>60pts</td>
<td>6%</td>
<td>See participation grading below.</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>50pts</td>
<td>5%</td>
<td>Other assignments not included in the above.</td>
</tr>
</tbody>
</table>

### Grading Scale

You are not in competition with other students in the class for your grade. We do not grade on a curve. Your grade is calculated by taking the number of points you earn, dividing by the total possible points (1000 pts) to get the percent correct, then multiplying the percentage by 4. The resulting decimal grade between 0 and 4.0 is your grade.

### Gradebook

Your scores on the various graded tasks in the class will be available over the web through MyUW. Use your UWNetID and UW password for access. Go to the Catalyst Gradebook. Filter by Participant and Gradebook.

### Evaluation of Student Work

You may expect to receive comments on and evaluations of assignments and submitted work in a timely fashion. All work from the course will be returned, with comments, within two weeks of the last class of the quarter.

Your written work will be graded based on its clarity, organization, balance, amount of pertinent detail included, depth and clarity of evaluative and analytical comments, and preparation. It will also be graded on the extent to which a good understanding of the material presented in the course is shown and on the extent to which directions are followed. If evaluative or analytical comments are required, they should be supported by factual evidence, either from readings or other documents. Other aspects of individual assignments may also be included in the grading.

Written work that shows a lack of understanding of subject matter, is unclear or poorly organized, contains few or irrelevant details, does not follow directions, contains little or unsubstantiated evaluative commentary, or is poorly written, prepared (e.g. typos, grammatical errors), or documented will receive low grades.

Students are encouraged to take drafts of their writing assignments, such as the Weekly GoPost Discussions, to the English Department Writing Center for assistance with using citations ethically and effectively. Information on scheduling an appointment can be found here: [http://depts.washington.edu/wcenter/](http://depts.washington.edu/wcenter/)

### Grading for Labs and Projects with Associated WebQs

Many of the labs and projects have accompanying Catalyst WebQ quizzes. For those assignments, your grade will be the total of the points you earn on the WebQ and on the lab or project. To do well on the assignment, you must do well on both the hands-on work and in answering the questions.
Grading for GoPost Discussions

Each week, there will be several possibility opportunities for students to participate in a discussion on the course's GoPost message board. These opportunities will be tied to required or optional readings that are assigned each week, and there will be approximately 32 such discussions over the quarter. For each discussion opportunity, each student's posts will be graded on a scale of 0–3 as follows:

- **0 points:**
  The student did not participate in the discussion.

- **1 point:**
  The student made only minimal, nonsubstantial posts. Examples of such poor postings include saying "I agree," "This," and "+1." Posters who summarize the reading even after a previous poster had posted a summary will receive this score.

- **2 points:**
  Students contributed actively to the thread by asking questions, answering others' questions, and adding insights into the ongoing discussion. One poster is allowed to post a summary of the related reading and will receive 2 points. Subsequent summaries will be scored lower.

- **3 points:**
  Students who make significant contributions to the thread will earn 3 points. Such contributions can include making multiple posts worthy of 2pts, connecting the discussion to previous readings, and linking to other documents, sites, and materials of relevance.

The final grade for a student's GoPost involvement will consist of the sum of his or her 25 highest scores out of a total possible 60 points. As most posts will earn 2pts, most students will earn 50/60 possible points, but a maximum of 75/60 points is possible. The total value will then be doubled for a score out of 120 points as described in the earlier table.

Grading Participation

Course participation is required because it is only when we engage with the material that we truly begin to understand. While the instructor has important information to impart, each member of the class has knowledge to contribute that can inform everyone's learning experience. Your class participation grades comes from

- participation in lecture and course overall—clicker quizzes, answering questions, raising issues of interest to the class
- participation in lab—asking questions, helping other students
- participation in the GoPost online Help Desk—raising good questions, posting useful answers

Class participation is an important part of any course. The Help Desk on the GoPost online discussion forum is where you can request help from others in the class. Commenting on a post with "me, too" does not constitute active participation.

Late/Missed Work Policy

This class moves fast. It's better to just move on then to be constantly trying to catch up. In life, sometimes things happen. They might take the form of a medical or family emergency or simply staying up all night for a paper due the same day as an assignment for this class.

No late work is accepted for GoPost discussions or clicker quizzes.
All other assignments (labs, projects, and other assignments) may be turned in up to two days late. However, this lateness does come with penalties:

- Assignments (labs, homeworks, and projects) turned in one day late will automatically lose 20% of their possible points.
- Assignments (labs, homeworks, and projects) turned in two days late will automatically lose 50% of their possible points.
- Assignments will not be accepted if more than two days late.

All labs are due by 10pm on Thursdays (for labs given out on Tuesday/Wednesdays) and 10pm on Mondays (for labs given out on Thursday/Friday). If you miss a lab, you can make it up by attending a different lab section and telling the TA that are making up a missed lab. If you do not checkin with the TA but still turn in the lab assignment, you will receive no more than 60% of the possible score (12 points out of 20).

**Questions about Grades**

If you believe that we made a mistake in grading a quiz, lab, or project, please do the following:

1. Write an email to your TA (cc to the professor) describing what you think is the problem.
2. Read the TA's response carefully. If you still think there is a problem, reply to the email and tell the TA you would like to discuss it.
3. Have a discussion with the TA.
4. If you disagree with the outcome of that discussion, tell the TA and then set up a meeting with the professor.
5. Discuss it with the professor. Presumably we can come to a resolution at that time.

**Academic Accommodations**

If at any point you are experiencing difficulties with some aspect of the course, please exercise either of the following options:

- To request personal academic accommodations due to a disability, please contact Disability Resources for Students: 448 Schmitz, 206-543-8924 (or 206-543-8925 for TTY), http://www.washington.edu/students/drs/. If you have a letter from DSS indicating that you have a disability which requires academic accommodations, please present the letter to me so we can discuss the accommodations you might need in the class.
- Contact the instructor to arrange a meeting. I will discuss with and work with you to address your access issues. Together, we will identify ways to address these issues as best as we can.
- Provide anonymous feedback and/or suggestions through the course's anonymous feedback form.

**Academic Conduct**

The work in this course may be discussed with other students. However, the work you turn in for the labs and projects must be your own.

The following paragraphs about academic integrity, copyright and privacy outline matters governing student conduct in the iSchool and the University of Washington. They apply to all assignments and communications in this course.

**Academic Integrity**
The essence of academic life revolves around respect not only for the ideas of others, but also their rights to those ideas and their promulgation. It is therefore essential that all of us engaged in the life of the mind take the utmost care that the ideas and expressions of ideas of other people always be appropriately handled, and, where necessary, cited. For writing assignments, when ideas or materials of others are used, they must be cited. The format is not that important—as long as the source material can be located and the citation verified, it’s OK. What is important is that the material be cited. In any situation, if you have a question, please feel free to ask. Such attention to ideas and acknowledgment of their sources is central not only to academic life, but life in general.

Please acquaint yourself with the University of Washington's resources on academic honesty:
http://depts.washington.edu/grading/issue1/honesty.htm

Students are encouraged to take drafts of their writing assignments to the Odegaard Writing and Research Center: http://depts.washington.edu/owrc/.

Copyright

All of the expressions of ideas in this class that are fixed in any tangible medium such as digital and physical documents are protected by copyright law as embodied in title 17 of the United States Code. These expressions include the work product of both: (1) your student colleagues (e.g., any assignments published here in the course environment or statements committed to text in a discussion forum); and, (2) your instructors (e.g., the syllabus, assignments, reading lists, and lectures). Within the constraints of “fair use”, you may copy these copyrighted expressions for your personal intellectual use in support of your education here at UW. Such fair use by you does not include further distribution by any means of copying, performance or presentation beyond the circle of your close acquaintances, student colleagues in this class and your family. If you have any questions regarding whether a use to which you wish to put one of these expressions violates the creator's copyright interests, please feel free to ask the instructor for guidance.

Privacy

To support an academic environment of rigorous discussion and open expression of personal thoughts and feelings, we, as members of the academic community, must be committed to the inviolate right of privacy of our student and instructor colleagues. As a result, we must forego sharing personally identifiable information about any member of our community including information about the ideas they express, their families, life styles and their political and social affiliations. If you have any questions regarding whether a disclosure you wish to make regarding anyone in this course or in the UW community violates that person's privacy interests, please feel free to ask the instructor for guidance.

Knowing violations of these principles of academic conduct, privacy or copyright may result in University disciplinary action under the Student Code of Conduct.

Student Code of Conduct

Good student conduct is important for maintaining a healthy course environment. Please familiarize yourself with the UW Student Code of Conduct: http://www.washington.edu/students/handbook/conduct.html