CSC 405, Week 1
Introduction to the Course
Project Planning

I. **Weekly Lecture/Lab Overview**

A. *Monday*: Go over syllabus and milestone 1

B. *Wednesday:*

1. Clarify milestone 1 activities

2. Discuss major requirements issues.

II. **Course Syllabus**

A. **Instructor**

- Office hours M2-3, Tu9-11, WF10-11

B. **Objectives**

- refine requirements from Fall 2011
- design, implement in two phases
- release to clients, gather feedback
- Javadoc design and implementation
- define a formal JML model
- functional tests with JML/JUnit
- acceptance tests, on dept-specific data
- end-user documentation

C. **Refining Requirements**

- Only a 1.5 week effort.

- Details in Milestone 1 writeup.

- Assignments on 40256 wiki

D. **Design and Implementation Phases**

- Two phases

- Client releases weeks 5 and 9

- Phase 1 is "solid prototype"

- Phase 2 is "beta-version program"

E. **Winter Releases to Clients**

- In-person demos and Q/A sessions

- Ask for response in usability questionnaire

- 309 students do usability testing

F. **Javadoc Documentation**

- Some now, need more

- Audience is Poly staff who may take over

G. JML Formal Model

- Design-by-contract style model

- We'll use to help generate unit tests.

H. JML/JUnit Functional Tests

- Tool provides semi-automated test gen

- Method postconds are test oracles

I. **User-Level Acceptance Tests**

- Each team member will focus on one dept

- We'll develop a standard testing procedure

J. **End-User Documentation**

- Use requirements scenarios and UI screens as basis of documentation.

- Provided as online help.

K. **Course Evaluations**

- I will provide written evaluations, bi-weekly.

- Posted in private course directories

L. **Draft Project Time Line**

Week	Activities
1	organize
2	requirements refinement; testing
3	phase 1 development
4	phase 1 development
5	phase 1 development
6	requirements refinement/enhancement
7	phase 2 development
8	phase 2 development
9	phase 2 development
10	documentation production
11	analysis of client feed back

III. **Milestone 1**

- Requirements refinement

- Department-focused acceptance testing

- Development work assignments

Requirements Refinement Details

- Sign-up table on 405 course wiki.

- Descriptions in Milestone 1 writeup.

Department-Specific Testing

- Sign-up table on 405 course wiki.

- Phase 1 "Must Pass" Testing:

Department-Specific Testing, cont'd

a. all instructors, courses, and locations can be entered into the databases

Department-Specific Testing, cont'd

b. a "master list" schedule template can be
    saved and re-opened using 'File->Save' and
    'File->Open'

Department-Specific Testing, cont'd

c. a schedule can be generated automatically, with a reasonable use of instructor prefer- ences, where "reasonable" means:

Department-Specific Testing, cont'd

i. no instructor is ever assigned a course or time that is "not possible"

ii. the *majority* of instructors are assigned courses that they prefer

Department-Specific Testing, cont'd

d. the actual published Fall 2011 and Winter 2012 schedules can be produced by schedule editing; *any exceptions must be carefully considered*

Department-Specific Testing, cont'd

e. schedules can be viewed using calendar
    view, and at least one other form of view

Department-Specific Testing, cont'd

f. any number of the schedules can be saved and opened, without interfering with any other department

Development Work Assignments

- Sign-up table on 405 course wiki.

- We'll do 1st pass in Week 1 Friday lab.

M1 Deliverables -- on Week 2 of the Quarter

1. *Wed:* Oral report on requirements refinements

2. *Friday:* Oral report on initial testing

3. *Friday:* Committed requirements files

4. *Friday:* Committed testing report

5. *Friday:* Committed development work
     (Javadoc at minimum)

IV. **Other Issues**

A. "Future work" issues from last quarter.

B. Where to put prototype versions.