

# MET CS405 and 605

## Course Overview

Provides an introduction to human-computer interface design and evaluation, with an emphasis on graphical user interfaces for software products. Covers design principles and theory, usability engineering methods, and selected basic research in the areas of human factors and human cognition, hands-on application of learned principles using Visual Basic.NET or other .NET languages. Also describes GUI XML standards and role HCI plays in creating secure systems.

## Prerequisites

MET CS 272 or METCS231 OR METCS331

## Instructor

Larry Robertie, MBA & MS-CIS  
phone - 617-538-7515  
email [robertie@bu.edu](mailto:robertie@bu.edu)  
office hours by appointment

## Evaluation and Grading

There will be a midterm (20%) and a final (30%) which will together account for 50% of the grade.

The mid-term will take the form of a standard test.

The final will involve submission of an evaluation of another teams Class Project ([see below](#)), incorporating the tools, techniques, and concepts learned in the final half of the semester. The evaluation may contain any set of documents, and the instructor will point out likely candidates for inclusion throughout the lectures following the mid-term. The objective is for the student to demonstrate a clear understanding of Human Computer Interface concepts related to the topic of evaluating interfaces.

During the first half of the semester students will each week produce a written analysis of certain concepts covered in the text "*The Design of Everyday Things*" (20%). Graduate Students will be expected to form a more in-depth analysis than that expected of Undergraduates. Graduate students and will also be required to lead at least one classroom discussion based on their written analysis.

There will also be a programming project (either ASP.Net or the LAMP stack) for the remaining 30%. Students will be asked to perform a [peer evaluation](#) of others on their project team.

In general, an "A" will be awarded for work that totals 92-100% of the possible points, "A-" for 90-92%, "B+" for 88-90%, "B" for 82-88% and so on down to F for below 60%. Grades may be scaled upwards or downwards.

Grades are *your* responsibility. If you need a particular grade to get into the M.S. program, receive tuition reimbursement or stay academically eligible, then it is *your* responsibility to perform at that level. "A" work will get you an "A" and "F" work (or cheating) will get you an "F".

We distinguish between exceptional work and effort that falls short of that level. For example for a class with

ten people one can expect: 1 A, 3 A-, 2 B+, 1 B, 1 B-, 1 C+, and 1 D. Grades of D or F are almost always the result of cheating or simply not doing projects.

## **Class Project**

Students will form 2-3 member teams for a semester long project. The project is to design, analyze, and prototype an interactive system for a real world task. **Teams will be assigned a project topic by the instructor.**

There are several reasons why this is done in teams: a) to apply the various information from the class to a pseudo-real-world system, b) to give students the experience of working in teams, and c) to allow students to work with others of varying expertise. We strongly encourage the formation of inter-disciplinary teams. For example, it might be useful to have one technical person, one psychology expert, and one member experienced in graphic design.

During the last two or three weeks of class (depending on class size), groups will give short presentations detailing the design & evaluation processes they used, and defending the design decisions they made. The project will be broken into several parts, with deadlines throughout the quarter.

## **Texts**

### ***Required***

User Interface Design and Evaluation by Debbie Stone (Author), Caroline Jarrett (Author), Mark Woodroffe (Author), Shailey Minocha (Author)  
Publisher: Morgan Kaufmann (March 22, 2005)  
ISBN-10: 0120884364  
ISBN-13: 978-0120884360

The Design of Everyday Things by Donald A. Norman (Author)  
Publisher: Basic Books; Reprint edition (September 17, 2002)  
ISBN-10: 0465067107  
ISBN-13: 978-0465067107

### ***Optional:***

Microsoft Visual Basic 2005 Step by Step by Michael Halvorson (Author)  
Publisher: Microsoft Press; Pap/Cdr edition (October 5, 2005)  
ISBN-10: 0735621314  
ISBN-13: 978-0735621312

## **Academic Honesty**

The course is governed by the Academic Conduct Committee policies regarding plagiarism (any attempt to represent the work of another person as one's own). This includes copying (even with modifications) of a program or segment of code. You can discuss general ideas with other people, but the work you submit must be your own.