

# Computer Science (CS)

Leslie Fife, PhD / 293-3295



## BYUH Assessment Plan 2004-2005

31 December 2004

Completed 8 November 2005

### University Mission Statement/Goals

1. Educating the minds and spirits of students within an intercultural, gospel-centered environment and curriculum that increases faith in God and the Restored Gospel, is intellectually enlarging, is character building, and leads to a life of learning and service.
2. Contributing to a resolution of world problems by educating men and women with communications and intercultural skills and by preparing them for leadership roles in the family, in their professions, in civic responsibilities, in social affiliations, and in the Church.

### Unit Mission Statement

Teach students basic computer science concepts, help them develop computer-programming skills, and prepare them for graduate school and/or full-time employment in computer science or a related field.

Outcomes	Means of Assessment	Findings	Actions
1. Students are competent in basic principles and knowledge of computer science.	90% of graduating students will score 500 or higher on the GRE subject test in Computer Science, and 25% will score at the 50 <sup>th</sup> percentile or higher (competitive for graduate school admission in CS).	11 Of 12 took exam. 8 scored 500 to 599 2 scored 600 to 699 1 scored > 699	GRE Subject Test provides minimal assessment data and is quite expensive.  Use the ETS Major Field Assessment Test exclusively. Less expensive and provides more assessment data.
	75% of 2004 -2005 graduating students who take the Major Field Assessment Test in Computer Science (MFAT) will score above the 50 <sup>th</sup> percentile.	Awaiting results of scoring.	
	CS Department will score above the 50% percentile in the three MFAT departmental indicators for Seniors taking the MFAT. a. Programming Fundamentals b. Comp Org/Comp Arch/OS c. Algorithms/Theory/Math	Awaiting results of scoring.	
	CS Students will take the MFAT in Computer Science during CS 301. They will retake the MFAT the semester they graduate in order to measure improvement. The first group of CS 301 to take the MFAT was Fall 2004.	Begun in Fall 2004.	Continue administering to CS 301 students. Compare to their Sr. MFAT when they graduate.

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Outcomes	Means of Assessment	Findings	Actions
2. Graduating students are highly proficient in an object-oriented programming language.	Students will take the ICCP Test for the C++ Programming Language the semester after completing CS 202. No target score is available. The initial test will be used to assess the use of this evaluation instrument and target scores if used in the future.	Not done. Test prohibitively expensive and no national norming is available. Decided that the assessment value did not justify the cost.	Investigate other ways to assess programming ability.
	Students will complete a team project in CS 333/433. This project will include an individual written evaluation, kept on file. A rubric will be developed for this assessment. 90% of students will pass the assessment.	The CS 333/433 project was not completed in this cycle. While failure provided its own lessons, no final project was available for assessment.	Consider addition and earlier measures for project milestones.
3. Graduates are prepared professionally for graduate school or employment in the field of computer science.	In the exit survey, 75% of the graduating students will indicate placement either in a full-time CS-related job or by acceptance to graduate school. This will be done beginning in Fall 2004.	Exit Survey Informal. 11 graduates 8 employed (73%) 3 unknown	Continue to track students. Make tracking more formal.
	80% of 2003-2004 Alumni will indicate placement either in a full-time CS-related job or by acceptance to graduate school one year after graduation.	9 Students 2 in graduate school (22%) 6 employed (68%) 1 unknown  1 of the employed completed M.S.	Continue tracking students.