1b - Students will understand the fundamentals of the major field of study

Students will be able to use BNF grammars to determine legal syntax.

Students will understand how subprograms are implemented including differences between parameter passing mechanisms, such as pass-by-value and pass-by-reference, and static vs. dynamic scoping.

Students will understand issues related to storage management.

Students will understand issues related to type checking.

Students will be able to compare programming languages on the basis of syntax, semantics, and implementation.

Assessment: Per last year’s course review, the objectives for this objective were made more specific. Most students appear to understand these topics.

Follow-up: This objective appears to be met.

1d - Graduates will understand the concepts and will have mastered the skills and tools of their profession to a level that will enable them to continue their studies at an advanced level

Students will become familiar with at least one computer language different from the languages used in primary instruction to the point of being able to read and write simple programs in that language. (Currently, primary instruction is in C++.)

Assessment: All students successfully completed an assignment to research and report a programming language other than C++.

Follow-up: This objective appears to be met.

3a - Students will be able to communicate effectively both orally and in writing

Students will write a technical report on a programming language and give an oral presentation.

Assessment: All students successfully completed this assignment. Only one team did not meet the outline and first draft deadlines.

Follow-up: This objective appears to be met.

3c - Graduates will be cognizant of contemporary issues.
Students will be introduced to contemporary professional issues.

**Assessment:** Students were given an issue of Dr. Dobb’s Journal and asked to write a response to an article concerning the object-orientedness of JavaScript. Also it was noted to them that as computing professionals they would be expected to be knowledgeable about current trends in programming languages and systems.

**Follow-up:** Adequacy will be determined by the senior exit interviews.

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1b - *Students will understand the fundamentals of the major field of study*

Students will be able to compare programming languages on the basis of syntax, semantics, and implementation.

**Assessment:** Most students appear to be able to this using some of the techniques covered in the course, but very few can use all of them effectively.

**Follow up:** This outcome appears to be met. However, it needs to be more rigorously defined with more specific objectives.

1d - *Graduates will understand the concepts and will have mastered the skills and tools of their profession to a level that will enable them to continue their studies at an advanced level*

Students will become familiar with at least one computer language different from the language used in primary instruction to the point of being able to read and write simple programs in that language. (Currently, primary instruction is in C++.)

**Assessment:** All students successfully completed an assignment to research and report on a programming language other than C++.

**Follow up:** This assessment indicates that this outcome has been adequately met.

3a - *Students will be able to communicate effectively both orally and in writing*

Students will write a technical report on a programming language and give an oral presentation.

**Assessment:** All students successfully complete this assignment. Only one team did not meet the outline and first draft milestones for this assignment.

**Follow up:** This assessment indicates that this outcome has been adequately met.

3c - *Graduates will be cognizant of contemporary issues.*
Students will be introduced to contemporary professional issues.

**Assessment:** All students were given an issue of Dr. Dobb’s Journal, and asked to read an article on the new language C#. Also, it was noted to them that as computing professionals, they would be expected to be knowledgeable about current trends in programming languages and systems.

**Follow up:** Adequacy will be determined by the senior exit interviews.