



## Computer Science | 2014-2015 Assessment Report

In the past, Computer Science has used a variety of assessment methods including many indirect methods. This year the program decided to concentrate on direct methods, including grades on projects, exam questions, homework assignments, and final grades. The results generally show a satisfactory level of learning by students, but there are occasional problems with writing skills and there are several instances of bimodal grade distributions which are interpreted to mean that some students give up (high absence rates), do not expect the level of rigor required, or are not adequately prepared by their previous courses. The curriculum has been redesigned this year to correct some of these problems and to clarify expectations of individual courses. Our assessment technique involved examining project grades. We targeted the first learning outcome for continuous improvement. The results are generally encouraging but we plan on further discussions to assess the effectiveness of the program tweaks. We will use a faculty retreat to look more closely at the results and determine our next steps.

### Computer Science Learning Outcomes:

1. Students must be able to design the logic and information structures necessary to create software capable of solving problems subject to specified constraints.
2. Students must develop both written and verbal communications skills that support the design and documentation of software products and help utilities.
3. Students must be able to analyze software to determine correctness and, if incorrect, be able to determine the cause of errors and fix them.
4. Students must understand fundamental principles and theory of both computer hardware and software and the mathematical foundations on which Computer Science is built.