

A mapping between learning outcomes and objectives for each course grounds the Assessment Process within the Computer Science Department. The Computer Science undergraduate program learning objectives can be found at:

[https://www.pdx.edu/degmap/sites/www.pdx.edu.degmap/files/useful\\_links/PLLO%20%20CS.pdf](https://www.pdx.edu/degmap/sites/www.pdx.edu.degmap/files/useful_links/PLLO%20%20CS.pdf)

and are repeated here for convenience:

1. Adapt algorithms and data structures drawn from a large standard repertoire to new problems.
2. Assess new developments in computer science.
3. Communicate with other members of development teams and with customers.
4. Computing at all levels of abstraction, including: (a) circuits and computer architecture; (b) operating systems; (c) programming languages, and (d) algorithms.
5. Debug and test programs.
6. Develop program designs from specifications under a variety of software paradigms/architecture.
7. Develop program specifications from a variety of informal descriptions.
8. Engineering principles used to meet the challenge of large-scale software production.
9. Implement selected designs as programs in a variety of programming languages.
10. Mathematical foundations of computer science.
13. Present the results of their work orally.
14. The ethical and legal responsibilities of computing professionals.
15. The impact of computing on society.
16. The interdependence of hardware and software.
17. The management and sharing of persistent data.
18. Use analytical techniques to evaluate and compare different designs that meet specifications.

The faculty will typically review the program outcomes once each year, as part of the annual faculty retreat. A new program mapping will be required whenever a new set of program outcomes is adopted.

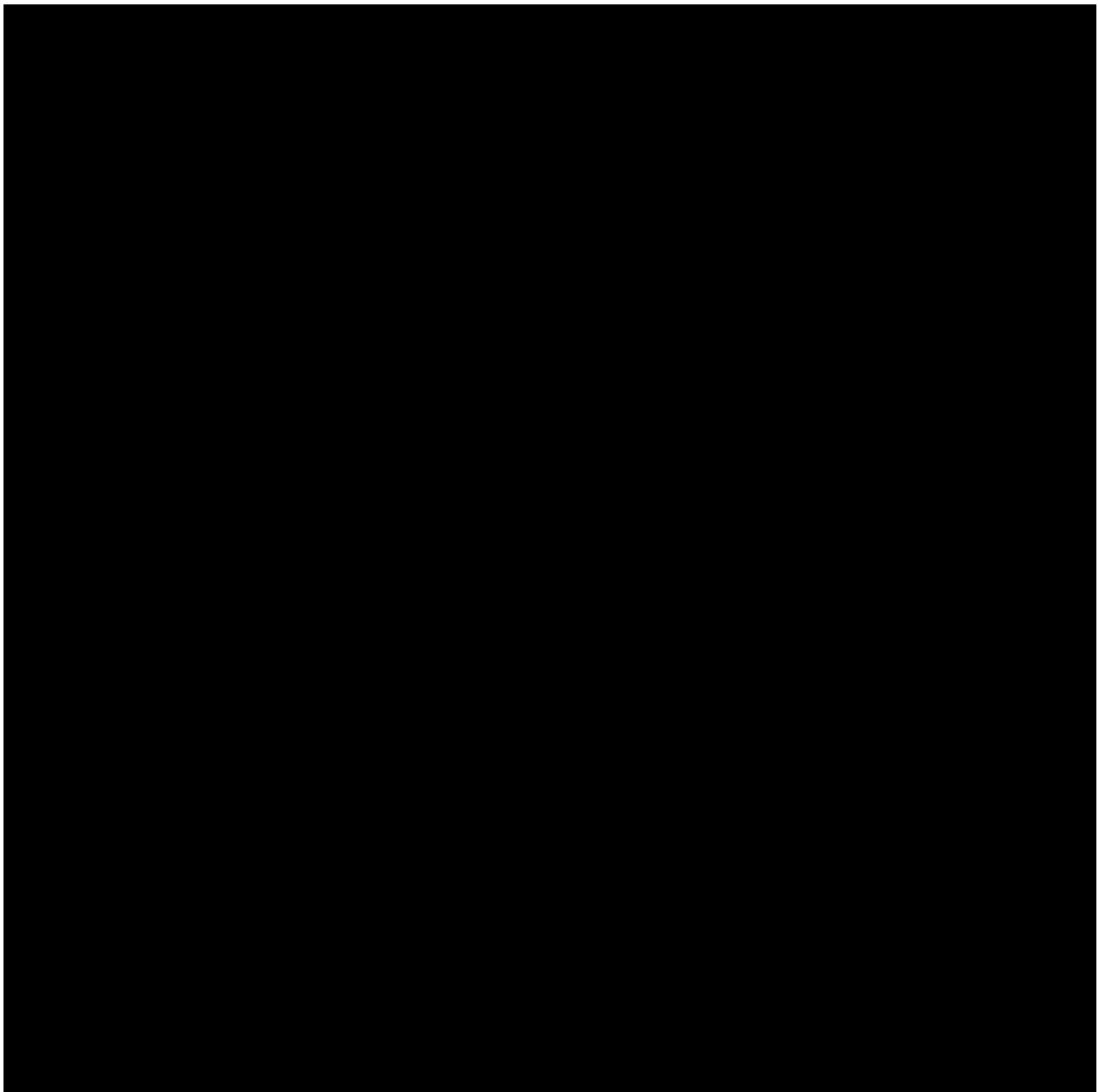
The department maintains a catalog of the courses that it offers. <https://www.pdx.edu/computer-science/undergraduate-courses> The catalog may be updated periodically as new courses are introduced, as old courses are retired, or as new versions of courses are introduced as replacements for old. For each course in the catalog, there is a set of course objectives that itemizes specific skills or knowledge that students are expected to have "upon successful completion" of that course. Every instructor who teaches the course should be familiar with the list of course objectives, and should share it with the students early in the course to ensure that appropriate expectations are set.

Associated with each set of course objectives is a mapping that describes how individual course is



Regardless of other differences, the instructor in each section is expected to cover all of the objectives that have been defined for that course. Conversely, if a topic is not mentioned in the list of objectives then it is possible that an instructor for that course may not include coverage of that topic. This mechanism is intended to provide some significant degree of consistency, at least with respect to technical content, between different offerings of the same course.

Prior to the start of a course, instructors are expected to review the course objectives, and at the end of each term, instructors are expected to complete an online assessment report to document coverage of course objectives and to reflect on possible future revisions



Each course has a course coordinator. A course coordinator's role is to ensure that the course