



## Characteristics of an Optimal Course

In order to understand and support a project, faculty members should be aware of the general characteristics of an “optimal” course. Different courses may differ in their details, but any course that has been designed with the following characteristics in mind can be expected to achieve better and more efficient learning than a course that does not have many of these characteristics. NOTE: Read footnotes for details.

1. *Learning goals*<sup>1</sup> are clearly articulated, both for the whole course and for each section (module) of the course.
2. Learning goals encompass all *learning domains*<sup>2</sup>.
3. Learning goals are driven by needs of students, employers & professions, the University, Faculty, and Department, and relevant subsequent graduate programs.
4. Things students do are specified in terms of the performances or behaviors that will indicate how well students have achieved the goals<sup>3</sup>.
5. Regular and frequent “*formative assessments*<sup>4</sup>” provide timely feedback about progress to both students and instructors.
6. The course is flexible enough to respond to results of these formative assessments.
7. A variety of “*evaluative assessments*<sup>4</sup>” are used which are carefully aligned with course goals.
8. In order to support *scaffolding*<sup>5</sup> and *knowledge construction*<sup>6</sup>, teachers help learners develop and use *frameworks* for the knowledge, which are based upon key concepts and skills.
9. Necessary *prior knowledge* is assessed, and opportunities are provided to help students catch up.
10. Learning activities are designed to promote *long term retention*<sup>7</sup>, effective *transfer*<sup>8</sup> and a range of *skill levels*<sup>9</sup>.
11. Available hardware, software, personnel and space resources are used imaginatively yet cost effectively.
12. *Pedagogy* is based upon peer-reviewed research or local evidence, not intuition.
13. The teaching team (instructor(s) & TA(s)) has suitable pedagogic experience and/or access to appropriate professional development.
14. Teaching practice is “scholarly”; i.e. informed by evidence, improved continuously, discussed & disseminated, etc.
15. Best practices are sustainable; i.e. both transfer to new instructors and reflective practice are supported.

**Note:** Another basis for judging the implementation of an evidence-based education model is given in the Colorado University SEI Advisory Board’s one-page document “*Suggested indicators for full implementation*” at [http://www.cwsei.ubc.ca/resources/files/SEI\\_Suggested\\_Indicators\\_for\\_Full\\_Implementation.pdf](http://www.cwsei.ubc.ca/resources/files/SEI_Suggested_Indicators_for_Full_Implementation.pdf).

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<sup>1</sup> *Learning Goals* (course-level & module or lesson-level) define broad competencies; ie what students will know, understand, and be able to do.

<sup>2</sup> “*Learning domains*” can be defined many ways. Example 1: basic knowledge, cognitive and physical skills, attitudes, and the ability to reflect & think about the thinking (ie metacognitive skills). Example 2: cognitive, psychomotor and affective (eg. “head, hands, heart”).

<sup>3</sup> Task or deliverable descriptions should include detailed criteria (ie *rubrics*) describing different levels of performance. The criteria make clear how students will be evaluated, and ensure regular feedback to students about their progress. Some outcomes may not be directly “examinable”, but provision of feedback is an equally important purpose.

<sup>4</sup> “Assessments” are instruments or activities which measure a student’s ability to demonstrate outcomes. *Formative assessments* provide feedback to students and/or instructors about how learning is progressing, and *evaluative assessments* help determine grades.

<sup>5</sup> “*Scaffolding*” means developing structure for learning the discipline.

<sup>6</sup> “*Knowledge construction*” refers to the fact that students build all new knowledge and skills on top of prior capabilities.

<sup>7</sup> “*Long term*” in this case means beyond the end of the course (eg beyond the exam).

<sup>8</sup> “*Transfer*” means application of knowledge into situations not directly experienced during the course.

<sup>9</sup> For “*skill levels*” consider *Bloom’s Taxonomy* (Bloom, 1956): recall / comprehension / application / analysis / synthesis / evaluation.