How to write Intended Learning Outcomes

This document provides guidance on how to write Intended Learning Outcomes (ILOs) for use at Bath Spa University (BSU). This document is produced with thanks to the University of Queensland’s Institute for Teaching and Learning Innovation for sharing [their guide](https://itali.uq.edu.au/files/24672/Using-verbs-and-taxonomies-in-assessment-design.pdf), on which this document is based.

Summary & Contents

[What is the difference between aims and learning outcomes? 1](#_Toc173336076)

[What about learning ‘objectives’? 2](#_Toc173336077)

[What do I need to consider when designing Programme ILOs? 3](#_Toc173336078)

[What do I need to consider when designing Module ILOs? 4](#_Toc173336079)

[In what form are ILOs written? 4](#_Toc173336080)

[Appendix 1: Overview of ILOs – what, why and how 6](#_Toc173336081)

[Appendix 2: Alignment between ILOs and Assessment 7](#_Toc173336082)

[Appendix 3: Taxonomies of Verbs 8](#_Toc173336083)

[Bloom’s Taxonomy 8](#_Toc173336084)

[Solo Taxonomy 9](#_Toc173336085)

# What is the difference between aims and learning outcomes?

Aims are focused on the programme or module. They set out broad purposes or goals. They are aspirational; statements of intent for the overall programme or module and answer the question: ‘what is this programme/module trying to achieve?’. Aims can help students make decisions about whether to take a programme or module and help set students’ expectations at the beginning of a period of learning. Therefore, they are succinct and in plain language. For example:

This programme aims to:

1. Stimulate students’ critical awareness and independent thinking, to develop an ambitious, enquiring, ethical and sustainable approach to art and craft practice.
2. Equip graduates with a breadth of skills in investigative laboratory techniques which are applicable to a range of scientific situations.
3. Develop graduates as confident and skilled creative practitioners who can produce personal and individual work and collaborate with others.

Intended Learning Outcomes (ILOs) are focused on the student. They state what students should be able to do once they have completed the period of learning. ILOs can be written for programmes, stages, modules and even individual learning sessions.

ILOs focus on the minimum, threshold expectation (for instance, what is the minimum that a student must be able to do in order to pass a module or programme?). The expectation is that most students will (hopefully) exceed the minimum threshold expressed by the ILOs.

Here are some example level 6 programme ILOs:

By the end of the programme, the student will be able to:

1. Apply systematically detailed and coherent understanding of materials, techniques and technologies to the production of an authoritative self-initiated body of art/craft work.
2. Form personalised and complex creative connections from a broad range of contemporary music practices.
3. Critique global issues such as sustainability and evaluate how they relate to fashion management and the evolving positions of stakeholders.

## What about learning ‘objectives’?

At BSU we only use the terms ‘aims’ and ‘outcomes’. If you have previously used the term ‘objectives’ to describe the nature of a period of learning (e.g. programme, stage, module or session) then you will now need to use ‘aims’ or ‘outcomes’, as appropriate. This is to ensure consistency of language.

# What do I need to consider when designing Programme ILOs?

Programme ILOs are statements of what successful students will be able to do by the end of the programme. They are:

* Related to the programme aims;
* Categorised according to Bath Spa’s [template for programme specifications](https://bathspaonline.sharepoint.com/:f:/r/sites/AcademicGovernanceandQuality-com/Shared%20Documents/Programme%20Document%20Templates?csf=1&web=1&e=JAUeNu) (requires BSU login);
* Aligned to relevant internal and external reference points (see below);
* Observable, such that a tutor should be able to observe and assess a student’s learning against this ILO;
* Clearly written, avoiding jargon or technical language so as to be understandable by prospective students, avoiding also ambiguous or general terms.

BSU Programmes normally have up to 12 ILOs across two categories:

1. Subject-Specific Skills and Knowledge
2. Cognitive and Intellectual Skills

In addition, there is also a further category with several “standard” ILOs which are the same for all BSU programmes:

1. Skills for Life and Work

Reference points:

* [Bath Spa University’s Education Design Principles;](https://www.bathspa.ac.uk/projects/teaching-expertise-guide/)
* the level of study as defined by the [OfS Sector Recognised Standards](https://www.officeforstudents.org.uk/media/53821cbf-5779-4380-bf2a-aa8f5c53ecd4/sector-recognised-standards.pdf), which draws upon the [QAA Framework for Higher Educationn Qualifications (FHEQ)](https://www.qaa.ac.uk/the-quality-code/qualifications-frameworks); noting also the [SEEC Credit Level Descriptors for HE](http://www.seec.org.uk/wp-content/uploads/2016/07/SEEC-descriptors-2016.pdf);
* relevant [QAA Subject Benchmark statements](https://www.qaa.ac.uk/quality-code/subject-benchmark-statements);
* relevant professional or accrediting body (PSRB) requirements.

For undergraduate programmes, you also need to consider ILOs at each stage/level. You should design the final year (Level 6) ILOs first and then consider Levels 5 and 4 to ensure a coherent development throughout the programme. For example:

|  |  |  |
| --- | --- | --- |
| **Level 6** | **Level 5** | **Level 4** |
| Synthesise and apply relevant contextual, theoretical, and ethical research to the production and development of work. | Apply critical understanding of contextual and ethical research to the development of work. | Recognise how knowledge of contextual and ethical research informs the development of work. |

# What do I need to consider when designing Module ILOs?

Module ILOs are statements of what students should be able to do when they have completed the module. There are normally 3-4 module ILOs. They are:

* Specific to the module;
* Related and contribute to the programme ILOs;
* Appropriate to the level of study;
* Aligned to assessment;
* **Not** a detailed syllabus;
* Observable, such that a tutor should be able to observe and assess a student’s learning against this ILO;
* Clearly written, avoiding jargon or technical language so as to be understandable by prospective students, avoiding also ambiguous or general terms.

# In what form are ILOs written?

ILOs set out what students should be able to do. They are therefore based around a verb and follow on from the stem sentence which reads something like: “On successful completion of this programme/module, you will be able to…”. An ILO is structured as:

For example:

On successful completion of this module you will be able to:

1. Apply established techniques within forensic science research design, methodology and analysis.

This example ILO can be broken down as follows:

For module ILOs in particular, the verb is connected to the assessment. It must be an observable activity which could be observed by an assessor. Therefore, when choosing an appropriate verb you should reflect on ‘how will I know they can do this?’ This applies to both formative and summative assessments. Formative assessments provide an opportunity for students to practise and receive feedback on the ILO activity during the module. Summative assessments provide an opportunity for students to show how well they can meet the ILO and to have this formally evaluated in order to receive a grade. Aligning learning outcomes, assessment and teaching in this way is a key part of [**constructive alignment**](https://www.bathspa.ac.uk/projects/teaching-expertise-guide/curiosity-driven-pedagogies/#d.en.138610).

Intended Learning Outcomes

Assessment

Learning Activities

What sort of learning activities will best prepare and help students to achieve those outcomes?

What type of assessment task will allow students to demonstrate those outcomes?

What do I intend my students to be able to do after my teaching?

Verbs to avoid:

* **Demonstrate**: e.g. “Demonstrate an understanding of key features in the curriculum”. How will this be demonstrated? By applying, explaining, analysing, using, evaluating, etc. These types of verbs contain clearer information about what the student should be able to do and can be better aligned to the assessment task(s).
* **Demonstrate an ability to**: e.g. “Demonstrate an ability to apply standard techniques in curriculum design”. This can be made more succinct and clearer aligned to the assessment by deleting the first four words so that it becomes “apply standard techniques in curriculum design”.
* **Understand**: e.g. “Understand the main components of curriculum design”. How will you know that they understand? Because they can apply, explain, analyse, etc.
* **Multiple verbs in one ILO**: e.g. “Apply standard techniques in curriculum design and evaluate the effectiveness of these for supporting students’ learning”. Although they are related activities, for clarity, they should be separated into two different ILOs.

The appendices of this document provide further details on writing ILOs and aligning them to assessments, including numerous example verbs.

# Appendix 1: Overview of ILOs – what, why and how

This diagram provides a brief overview of ILOs.

Intended Learning Outcomes (ILOs)

What are they?

Statements of what students will be able to do

Why bother to have them?

Make learning expectations clear; guide student focus

Shift the focus of your course planning away from 'covering content' to what the student does

Derive assessment tasks and criteria from them so assessment reflects learning outcomes

How do you write effective ones?

Use verbs to specify things you can observe and measure

SOLO, Bloom’s and other taxonomies provide specific verbs to indicate activity at each level

# Appendix 2: Alignment between ILOs and Assessment

The following table is a visual tool you can use to check whether the assessment tasks you have designed will result in students demonstrating achievement of the learning outcomes (delete or add rows as needed).

|  |  |  |
| --- | --- | --- |
| ABCD1234: Module Name | Assessment Task 1 | Assessment Task 2 |
| [Use this row to describe what the assessment task requires students to do. Use verbs in your description.]  [Tick where what the student needs to do is aligned with an ILO.] |  |  |
| ILO 1: |  |  |
| ILO 2: |  |  |
| ILO 3: |  |  |
| ILO 4: |  |  |
| ILO 5: |  |  |
| ILO 6: |  |  |

# Appendix 3: Taxonomies of Verbs

Choose verbs aligned to each level of a taxonomy to communicate to students what you want them to do.

Bloom’s Taxonomy

For more information on Bloom’s Revised Taxonomy see: Anderson, L.W. & Krathwohl, D.R. (2001) *A taxonomy for teaching, learning, and assessing: A revision of Bloom’s taxonomy of educational objectives*. New York: Longman.

|  |  |
| --- | --- |
| **Levels of Bloom's Revised Taxonomy** | **Verbs aligned to levels of Bloom's Revised Taxonomy** |
| **Remember**  Focusing on recall and description. | recall, identify, recognise, acquire, state, define, name, list, label, reproduce, order, indicate, record, relate, repeat, select, tell, describe, match, locate, report, cite, define, outline, complete, draw, find, give, isolate, pick, put, show |
| **Understand**  Interpreting and constructing meaning from information | translate, extrapolate, convert, interpret, transform, select, indicate, illustrate, represent, formulate,  explain(who/what/when/where/that/how), classify, describe, discuss, express, locate, paraphrase, re-state, review, summarise, find, relate, define, clarify, diagram, compare, contrast, derive, arrange, estimate, extend, generalise, distinguish |
| **Apply**  Using information in new situations | apply, sequence, carryout, solve, prepare, operate, plan, repair, predict, instruct, compute, use, perform, implement, employ, construct, demonstrate, give examples, illustrate, interpret, investigate, practice, measure, operate, adjust, show, paint, draw, collect, dramatize, classify, order, change, write, manipulate, modify, produce, schedule, translate, complete, examine, advocate, persuade, resolve |
| **Analyse**  Identifying and explaining relationships between material  Distilling and /or organising information into its components; solving problems | analyse, estimate, detect, classify, discover, discriminate, explore, distinguish, catalogue, investigate, breakdown, order, determine, differentiate, dissect, examine, interpret, calculate, categorise, debate, diagram, experiment, question, solve, test, deconstruct, focus**,** find coherence, survey, compare, contrast, classify, investigate, separate, structure, categorise, determine evidence/premises and conclusions, appraise, criticise, debate, illustrate**,** infer, inspect, inventory, select,  deduce, induce, argue, balance, moderate, explain(how/why), challenge, question |
| **Create**  Generating new ideas or compile information in a new way | plan, formulate, propose, theorise, design, build, compose, construct, create, perform, prepare, compare, contrast, hypothesise, invent, modify, improve, adapt, devise, generate, revise, extend, project |
| **Evaluate**  Using standards criteria, theories or processes to judge value | evaluate, argue, verify, assess, test, judge, rank, measure, appraise, check, justify, determine, support, defend, critique,  weigh, choose, decide, estimate, grade, rate, revise, score, coordinate, debate, monitor, discriminate |
| Affective domain | Is missing from Bloom’s which is why it is useful to work with more than one taxonomy |

## Solo Taxonomy

For more information about the SOLO Taxonomy, see: Biggs and Tang (2011) *Teaching for Quality Learning at University: What the Student Does* (4th ed.). Maidenhead: McGraw-Hill.

|  |  |
| --- | --- |
| **Levels of Observed Learning Outcomes (SOLO) Taxonomy** | **Verbs aligned to levels of the SOLO Taxonomy** |
| Unistructural Level (one aspect) | define, find, identify, label, name, match, memorise, order, recall, recite, re-organise, tell, follow steps, arrange, reproduce, recognise, calculate, locate |
| Multistructural Level (several aspects at a time) | classify, categorise, describe, discuss, list, narrate, outline, report, select, separate, distinguish, sequence, combine, structure, conduct, illustrate, express |
| Relational Level  (several aspects integrated) | analyse, apply, argue, justify, defend, substantiate, compare, contrast, conclude, research, construct, critique, debate, differentiate, draft, examine, explain, integrate, plan, organise, paraphrase, review and re-write, problem solve, resolve, summarise, relate, translate principles to another circumstance, adapt, synthesise |
| Extended Abstract Level (generalised or abstract implications) | create, generate, extrapolate, generalise, hypothesise, interpret, invent, devise, prove, derive, predict, judge, assess, evaluate, reflect |