How to Formulate Intended Learning Outcomes Step-by-Step

1	**Choose 4 – 8 topics you want the students to learn in your course.** Topics (or content) can be abstract concepts, theories or definitions as well as activities such as writing a report or conducting a project. The basis is usually some sort of curriculum which guarantees that you contribute to the overall study aims of the department your course is situated in. The curriculum allows you to define requirements for your course, prior knowledge and competences you can expect from your students at the beginning of the semester and which follow-up courses you need to provide a basis for.
2	**Link your topics with active verbs from the table below and define the level of difficulty as well as the workload.** *Describe*, for example, is less difficult and requires less workload in order to achieve than *compare* or *criticise*.
3	**Choose, if possible, one competence on a meta level.** **Methodological competence, practical skills**: e.g. Name and classify a problem, analyse a problem systematically, choose an appropriate method. **Social competence, social skills**: e.g. work in groups, cooperate, handle conflicts, communication skills. **Self-competence, intrapersonal skills**: e.g. ability to work independently, self-management, meet deadlines, apply learning strategies.
4	**Check: Can you transform your sentences into instructions?** Some verbs such as *perceive,* especially state verbs such as *understand* cannot be transformed into meaningful instructions that allow to design test items.
5	**Write sentences using the following schemes:** Address indirectly: After completing the course students will be able to … VERB … TOPIC. Example: *After completing the course students will be able to* ***identify*** *and* ***analyse*** (= active verbs) *a* ***range of scenarios*** (topic, content). Address directly: After completing the course you will be able to … VERB … TOPIC. Example: *After completing the course you will be able to* ***differentiate*** (= active verb) ***positive and negative effects of XXX*** (= topic, content)
6	**Check: Can you apply the SMART-principle to your learning outcomes?** **S – specific:** It is clear which aim wants to be reached and with which results. **M – measurable:** It is determined how the result is checked and which criteria are applied. **A – Achievable:** Attaining the learning outcome is ambitious and not too easy, thus an invitation for a challenge. **R – realistic**: At the same time, the learning outcome is reasonable, not too difficult or too extensive. **T – time-bound**: It is clear when the learning outcome is met, e.g. at the end of the semester.
7	**Check: Are learning outcomes, assessment and teaching / learning activities aligned (constructive alignment)?** **Learning outcome (LEARN):** After completing the course students will be able to ***solve*** cases. **Teaching/Learning activities (PRACTICE):** ***Solve*** cases in small groups **Assessment tasks (PERFORM):** ***Solve*** a case in a written test.
8	**When planning a course the order is different. Use the three-step technique, determine goals before you path the road towards them:** 1. Formulate learning outcomes with active verbs (see list below). Always start with deciding on your learning outcomes. 2. Design test items, ideally with the same verbs as used in the learning outcomes. 3. Choose activities that allow to achieve the intended learning outcomes and master the assessment, ideally using the same verb as formulated in the learning outcomes.

Active Verbs to Formulate Learning Outcomes

remember	understand	apply	analyse	evaluate	create
quote	connect	apply	analyse	argue	perform
state	describe	use	select	defend	design
list	define	fill in	decree	mark	develop
recite	demonstrate	edit	determine	assess	construct
explicate	discuss	calculate	compare	decide	draft
name	explain	print	contrast	evaluate	conceive
sketch	formulate	impement	isolate	review	publish
identify	express	operate	segregate	reason	write
define	locate	conduct	categorize	estimate	assemble
reproduce	present	solve	arrange	forecast	combine
describe	transfer	arrange	test	predict	attach
write	summarize	plan	relate	choose	compose
outline	illustrate	execute	differentiate	criticise	assemble
draw	allocate	format	classify	derive	arrange

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