ONE-PAGER ON FORMULATING LEARNING OUTCOMES

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| Taxonomy levels	remember	understand	apply	analyze	evaluate	create
			Bachelor's degree level →	Master's degree level →		
Verbs	list, recite, outline, define, name, match, quote, recall, identify, label, recognize, state, cite, tell, describe, reproduce	describe, explain, paraphrase, restate, give examples, classify, summarize, contrast, interpret, infer, convert, illustrate, distinguish, discuss	calculate, predict, apply, solve, illustrate, use, demonstrate, determine, model, perform, complete, implement, perform, plan, examine, configure, present	classify, order, break down, categorize, analyze, diagram, compare, contrast, criticize, simplify, separate, deduce, examine, associate	assess, justify, differentiate, discriminate, distinguish, appraise, conclude, grade, persuade, argue, select, evaluate, weigh, order, organize, critique, defend, measure	design, develop, formulate, build, invent, create, compose, prepare, produce, generate, derive, modify, hypothesize, devise, assemble, structure, simulate
Example Students will be able to:	· list basic concepts and terms used in economics.	· explain the basics of cost accounting.	· apply proper accounting principles and prepare a balance sheet.	· separate microeconomic and macroeconomic problems.	· critically assess economic models with respect to their relevance for society.	· develop new financial products and services on the basis of field research.

CHECKLIST
FORMULATING LEARNING OBJECTIVES

Subject competences · Social competences · Method competences · Personal competences
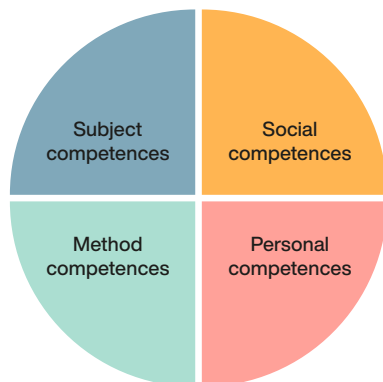
▶ Start with the sentence: "Upon successful completion of the program/module/class, students will be able to .."
  ▸ This makes it easier to formulate measurable outcomes.

▶ Focus on the outcome

▶ Observable, measurable, and outcome-oriented
  ▸ The SMART method, for example: **S**pecific, **M**easurable, **A**chievable, **R**ealistic, and **T**ime-Bound

▶ Achievable in the time available

▶ Generally one active verb per learning outcome
  ▸ Verbs such as know, since it is not measurable, and should, since it does not constitute a goal, should be avoided.

▶ In accordance with the degree level (see taxonomy table)
  ▸ Taxonomy levels can be skipped.

▶ Incorporation of the competence dimensions (see diagram on the left)
  ▸ All four competence dimensions must be addressed at the degree program outcome level, but not at the module or teaching unit level.

▶ Coherence of learning outcome, teaching and learning methods, and form of assessment (constructive alignment)

▶ Generally a maximum of ten learning outcomes per module

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