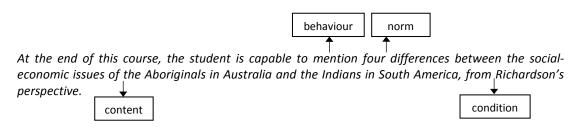
## **Course description**

- 1. **Inspirational introduction** (compare the main objective): in one compelling phrase, clearly state the most inspiring aspect students can learn in the course.
- General course layout: explain how the learning objectives will be met. State the main components of the course and describe important and inspiring aspects. Mention special learning methods used to stimulate the most important soft skills necessary for successful completion of the course.
- 3. **Content:** structured list of topics covered by the course.

## **Course objectives**

- 1. **Construct the main course objective:** select the highest category from Bloom's taxonomy that is applicable to the course. Use no more than 1 action verb from the list corresponding to the category to formulate the main course objective (see table on next page). Formulate SMARTI<sup>\*</sup> with special attention to the aspect <u>Inspiring</u>.
- 2. Describe 3 to 5 sub-objectives for your course: formulate at least 1 sub-objective from the same category as the main course objective; the other sub-objectives may also cover any of the lower categories (but no higher categories). Per sub-objective, use no more than 1 action verb from the list corresponding to the category applicable (see table on next page). The sub-objectives should match the main course objective and the exam questions. Vice versa, arranged exam questions may help in formulating the sub-objectives for the course. Formulate SMARTI<sup>\*</sup> with special attention to the aspect <u>M</u>easurable.
  - A proper course objective contains three to four elements: the expected behavior, the content, the norm and any conditions, if applicable. For example:



For inspiration, use the domain specific reference frame (DSRF), or consult other courses from Leiden University or other institutes, for example: <u>https://cursusplanner.uu.nl/</u>

*SMARTI COURSE OBJECTIVES		
<u>S</u> pecific:	The course objective is described in terms of observable behaviour.	
Measurable:	The behaviour can be assessed based on criteria defined in advance.	
<u>A</u> chievable:	The behaviour is appropriate and worthwhile for students and teachers.	
<u>R</u> ealistic:	The course objective is feasible, not too easy and not too hard, in accordance with the zone of proximal development of targeted students.	
<u>T</u> ime-based:	The course objective can be met within a specified amount of time and has a deadline.	
Inspiring:	The course objective has an inspiring and motivating effect on students.	

## <u>Soft skills</u>

- Describe the most important general skills that are trained in the course. The skills don't need to be tested specifically, but have to be necessary for a successful learning process.
- > For inspiration, use the domain specific reference frame (DSRF).

## Action verbs used in Bloom's taxonomy

In formulating course objectives, action verbs often help to describe observable behaviour. The table below contains examples of action verbs for each category according to Bloom's taxonomy of thinking skills. This framework is commonly used to organize and establish student's activities and question types for exams.

Bloom's thinking skills are organized in six major categories lying along a continuum from simple to complex and from concrete to abstract. The categories may be presented as stairs, in which the category *Remember/Knowledge* is the first step. Complexity increases with every subsequent category. As such, the category *Evaluate/Create* represents the highest step. A course objective usually only contains the highest category applicable. For example:

- 1. Knowledge: The student is able to mention the six thinking skills of Bloom's taxonomy.
- 2. Comprehension: The student is able to indicate the level of thinking skills of Bloom's taxonomy needed to answer particular questions.
- 3. Application: The student is able to explain how knowledge of Bloom's taxonomy can improve teaching.
- 4. Analysis: The student is able to discuss Bloom's taxonomy using given alternatives.
- 5. Synthesis: The student is able to design an original alternative framework of thinking skill categories.
- 6. Evaluation: The student is able to critically assess if Bloom's taxonomy should be a mandatory part of education programmes for teachers.
- > You are encouraged to avoid verbs that do not describe observable behaviour, such as knowing, understanding, realizing, having insight in, etc. Such verbs are therefore not included in the table below.

Thinking skill	Behaviour	Operational verbs
Remember	reproduce facts, recognition, recalling	name, recognize, identify, rank, localize, memorize, recall, mention, list, reproduce, select, display, define
Understand	comprehension, interpretation, logical reproduction	indicate, point out, formulate, paraphrase, illustrate, characterize, instruct, describe, draft, distinguish, define, put into own words, translate, explain, show
Apply	using elements of the 'Remember' category in new situations; selecting the correct rules, schemes, definitions, etc.	contribute, apply, demarcate, indicate gaps, cover, calculate, compute, describe, monitor, define, demonstrate, use, solve, compose, give an overview, list, select a procedure, report, estimate, explain, clarify, predict, propose, shape, question, formulate
Analyze	arrange by content, form, function, etc.	reject, deduce, consider, pose alternatives, juxtapose, reason, comment, conclude, construct, verify, check, discuss, rephrase, direct, model, motivate, negotiate
Synthesize	assemble elements into a unique and original compilation	design, debug, compile, develop, combine, solve, organize, categorize, discuss, prioritize, relate, summarize, execute, accomplish
Evaluate / Create	evaluate, assess, apply beyond own discipline	advise, assess, comment, criticize, argue, evaluate, interpret, relate, support, judge, rate, value, defend, justify, test, act independently, generate, produce