

# Guide for preparing course descriptions and competence profiles

with focus on descriptions of learning outcomes

## **Table of contents**

Reading guide	3
Part 1	4
Coherence between course descriptions of learning outcomes, the competency profile and the qualifications framework	4
Course description	6
Content	6
Description of learning outcomes	6
Should an exam always assess all learning goals?	7
The difference between knowledge, skills and competences	8
How do you make descriptions of learning outcomes?	10
Checklist for descriptions of learning outcomes	11
Examples of descriptions of learning outcomes:	11
Teaching and learning methods	13
Checklist for teaching and learning methods	14
Examination	15
Criteria for exam assessment	15
Checklist for examination form	16
Feedback	16
Part 2	17
Competency profiles for entire degree programmes	17
Progression in education – the difference between bachelor's and master's level	18
Work process for the revision or development of a competency profile for the bachelor's or master's level	20
Relevant resources and references	21

#### Reading guide

Dear course coordinators, heads of studies and others who work with formulating academic objectives (also known as learning goals or learning outcomes) in course descriptions. This guide contains knowledge, recommendations and questions for reflection that can help you in the process of preparing course descriptions, in particular for the University of Copenhagen's course database.

In addition, you will find suggestions for how to make the description of learning outcomes, which determines the academic objectives of the course, divided into knowledge, skills and competences, and how to formulate competency profiles for entire degree programmes. At the University's faculties, there are slightly varying practices for whether the course coordinator formulates the description of learning outcomes in the course description, or whether they must use the descriptions of objectives that are already in the curriculum. This guide can be used to formulate academic objectives in both cases. It also provides guidance on choosing teaching and learning methods, feedback, examination forms, etc., which are included in the course template.

The first part of the guide focuses on the coherence between the elements of individual courses, including learning goals, teaching and learning methods, etc. The last part of the guide deals with entire degree programmes, which is coherence above the level of the course.

Even though we address you, the reader, in the singular, this does not mean that the formulation of course descriptions is an individual matter. Often, it is teams of teaching staff that design a new course or a new competency profile. In addition, we encourage involving students in this work from the outset.

If you need further sparring, you can always contact the pedagogical unit at your faculty and/or one of the three of us who have written this guide. Teaching staff at SUND can contact DSE or, if it concerns IT didactics, COBL.

Peter Wick (SOC SCI), Eva Ulstrup (HUM) and Sebastian Horst (DSE)

#### Part 1

# Coherence between course descriptions of learning outcomes, the competency profile and the qualifications framework

At the universities, it is a key principle that the right to determine the course content rests with the institution itself – and not just with the management, but with the teaching staff, the students and the management together. The study board may reject a course coordinator's course description but may not write the description themselves. The Dean may, on behalf of the Rector, reject a study board's curriculum, but may not write the description.

By virtue of their area of expertise, the course coordinator has a particularly important task that no one else can do: To describe what is going to happen in the classroom and what the students are to learn. And how do you go about that?

First, there is the curriculum and competency profile of the degree programme to refer to. There it says what the students need to learn on the degree programme as a whole, and the course must, of course, contribute to this.

Second, there is an overall framework for higher education, which is called the national qualifications framework (Kvalifikationsrammen, 2007). The national qualifications framework is the Danish interpretation of the European Qualifications Framework (EQF), and it describes general objectives for full degrees (bachelor's, kandidat (danish) and master degrees). The main difference between the bachelor's and master's (kandidat) degree levels is the breadth and depth of knowledge, the depth of the research on which the skills are based, and the degree of independence and contextual complexity in which the acquired knowledge can be applied<sup>1</sup>. In Danmark there is a slight difference between the kandidat degree and the master's degree. Even though the master programme is on the same level (7) as the kandidat degree programme, the master programme is a so-called higher education program for adults, and its degree type descriptor<sup>2</sup> differs slightly from the kandidat degree programme. In this guide, we will concentrate on bachelor's and kandidat degree programmes, even though most of it can also be used to describe master programmes. From now on, we will use the term master for both the master and kandidat degree.

Ensuring coherence between the competency profile for the entire degree programme and the individual course descriptions means that the programme's courses together must ensure that the student achieves the goals described in the competency profile. This does not mean that all elements from the competency profile have to be included in the individual course description. When the qualifications framework mentions responsibility and independence under competences for the

<sup>&</sup>lt;sup>1</sup> https://ufm.dk/uddannelse/anerkendelse-og-dokumentation/dokumentation/kvalifikationsrammer (in Danish) [For information in English, see https://ufm.dk/en/education/recognition-and-transparency/transparency-tools/qualifications-frameworks]

https://ufm.dk/uddannelse/anerkendelse-og-dokumentation/dokumentation/kvalifikationsrammer/andre/dk-videregaaende/kvalifikationsramme dk\_videregaaende\_uddannelse\_20080609.pdf (in Danish) [For English, see https://ufm.dk/en/education/recognition-and-transparency/transparency-tools/qualifications-frameworks/other-qualifications-frameworks/danish-qf-for-higher-education/qf\_dk\_he\_261009.pdf]

master's degree level, this programme must contain subject elements that support these competency goals. However, it does *not* necessarily mean that *all* courses should meet this overall competency goal. Descriptions of learning outcomes should be steps towards achieving the knowledge, skills and competences set out in the degree programme's competency profile, and which reflect the bachelor's and master's degree levels in the qualifications framework, respectively.

The study board and the head of studies are responsible for ensuring that all the courses taken together cover the goals of the competency profile, but it is makes sense that those who formulate the learning outcomes for the individual courses also consider this coherence.

Figure 1 illustrates the connection between the qualifications framework and the competency profile for the *entire* degree programme as well as the competency profile's coherence with individual course descriptions, including the descriptions of learning outcomes for the individual courses. However, practices vary at UCPH, as not all faculties require descriptions of learning outcomes to be included in the course database (HUM and THEO). These two faculties just refer to the curriculum from the course database. However, the course description itself must always include a description of learning outcomes, which is divided into knowledge, skills and competences.

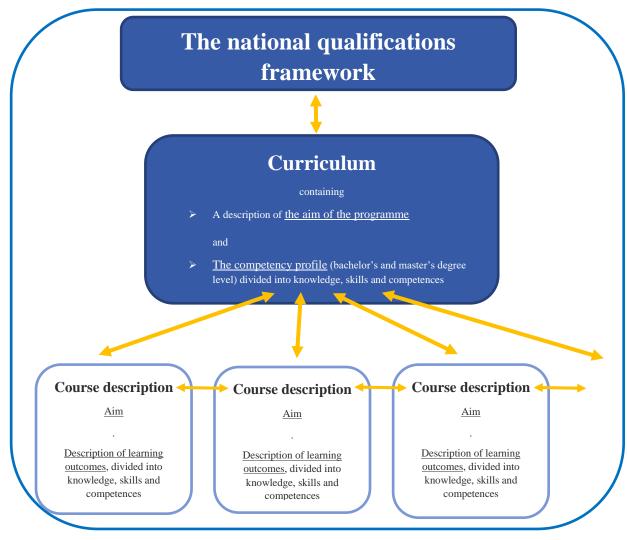


Fig. 1: The connection between the qualifications framework, competency profile and course descriptions (vertical) and the coherence of courses (horizontal). (Inspired by Bering Keiding, 2017)

#### **Course description**

The course description is the overall description of the course and contains a number of fields that must be filled in: Content, learning outcome (at HUM, the learning outcomes can typically be found in the curriculum), teaching material, formal requirements, teaching and learning methods, feedback, exams, workload, etc. The course description as a whole has several target groups and functions, which can make it a little difficult to write. UCPH has two different (one big and one small) course description templates that can be used, and each faculty has its own description of the requirements for completing the template. As a supplement to the faculties' requirements, we will now guide you through filling in a selection of the fields that we experience many course coordinators find challenging.<sup>3</sup>

#### Content

The field 'Content' is about the course content and *aim*. It focuses on the course as a whole and is therefore often written in prose. It may also mention the teaching and learning methods on the course, prerequisites for participation, and what is expected of the student (for example activity level).

#### **Checklist for describing course content:**

- Does the text make the aim of the course clear?
- Is the academic content of the course clearly described, including its subject areas, theory and methodology?
- Does your description of the course content relate to already acquired knowledge or other courses on the degree programme or to the programme as a whole?
- Is the course coherent with the overall competency profile of the programme in terms of skills and progression? Why should students take the course?
- Is the description of the course content attractive to students? The content description must be aimed at and formulated with the students in mind, meaning it must be easy to read and that students without prior understanding must be able to understand it. You can do this by, for example, using active instead of passive language, and maybe also by addressing the students by writing 'you' when you describe the content.

#### **Description of learning outcomes**

The description of objectives (also known as learning outcome in the course database) is the description of the academic objectives of the course and has several functions. First, a clear description of learning outcomes can facilitate communication between teaching staff regarding prioritisation and progression in the course – and thus make the dialogue with the students about

<sup>&</sup>lt;sup>3</sup>We believe that what we explain in the following sections is in alignment with the faculties' descriptions of requirements for course descriptions. However, if not, then the faculties' requirements prevail.

what is expected of them and how they perform along the way (formative feedback) more transparent.

Second, UCPH is legally obliged to make descriptions of learning outcomes that can be used for assessment and to plan and carry out teaching that enable the students to achieve the objectives.

This means that there must be a strong link between the description of objectives and the course exam. The *Ministerial Order on the Grading Scale and Other Forms of Assessment* states:

"The assessment of the student's performance or proficiency shall take place on the basis of the academic requirements specified for the relevant subject or multidisciplinary programme (awarding of absolute grades). The student's performance or proficiency shall be assessed on the basis of the purpose of the subject or the programme and on the content of the teaching described." (Section 13).

The description of objectives / learning outcomes is thus also the legal document against which complaints regarding assessment will be considered. In the event of disagreement between the examiner and the co-examiner, the description of learning goals is also the basis for the discussion.

#### Should an exam always assess all learning goals?

It is unclear whether an exam should always assess *all* academic objectives or whether it should just, in principle, allow for including an assessment of all academic objectives. The Ministry has not sent any instructions on how the performance management that was launched along with the new ministerial order and scale in 2006 should be used in practice. It is our impression that, in some places, exams are intended as a spot test – especially in relation to knowledge. In our view, however, you should formulate the learning outcomes and choose the exam type in such a way that *all* objectives are included in the exam. This will be more in line with the Ministerial Order on the Grading Scale and Other Forms of Assessment of University Education and the principle of a strong link between objectives and examination. This may mean that you have to formulate the learning goals in a slightly more general way and perhaps use more generic terms rather than listing all relevant terminology. This may also mean that you will have to readjust the examination form to include all learning goals set for the course.

The descriptions of learning outcomes for all course elements (courses, projects, etc.) are also required to be formulated based on the three categories: knowledge, skills and competences and listed in bullet points. The formal texts about these three categories may appear unclear in relation to a specific use. In the following, we will present a pragmatic and constructive understanding of them, so that they can be used in a meaningful way in the course description work and the communication between teachers and students.

#### The difference between knowledge, skills and competences

Knowledge, skills and competences should be understood as different elements of a learning outcome. In table 1 below, the left-hand column shows the official definitions of the concepts<sup>4</sup>, while the right-hand column is an attempted translation into what you should write in your description of learning outcomes.

**Table 1.** Differences between knowledge, skills and competences. The left-hand column contains quotations from the official descriptions, while the right-hand column is a suggestion for use at UCPH.

#### Official definitions What do we write in the description of objectives? Knowledge Here you write the disciplines, subject areas or Knowledge means knowledge and understanding of a problem areas that are part of the course and how subject. Knowledge contains the following aspects: the student demonstrates knowledge of these (for example by explaining it). For well-established The type of knowledge involved: knowledge about theory or knowledge about practice; knowledge of a disciplines, you may describe them in just a few subject or a field or within a profession. words, also listing (parts of) textbooks. For newer The complexity of this knowledge: the degree of disciplines or interdisciplinary courses, it may be complexity and how predictable or unpredictable the better to describe the contexts in which the situation is in which this knowledge is mastered. knowledge in question appears or is available. Understanding: the ability to place one's knowledge in a context. For example, understanding is expressed when one explains something to others. **Skills** Here you write the more or less standardised and Skills are what a person can do or accomplish. Skills well-defined techniques, methods, approaches that contain the following aspects: the students must be able to master after the course and how the student can demonstrate their mastery The type of skill involved: practical, cognitive, (for example by classifying, calculating etc.). creative or communicative. The complexity of the tasks in question: the tasks for How the concept of skills is understood may vary which the skills are to be used, and the complexity of across different academic environments. For example, skills in some subject areas can be Communication: the type of communication required, understood as something that can be performed the complexity of the message, to which target groups regardless of who the student is – in other subject and with which means.

areas, skills will be seen as well-defined elements, which together form the basis for the student to

develop a given competence.

 $<sup>^4\,\</sup>underline{\text{https://ufm.dk/en/education/recognition-and-transparency/transparency-tools/qualifications-frameworks/concepts}$ 

#### **Official definitions**

# What do we write in the description of objectives?

#### Competences

Competences are about responsibility and autonomy and indicate the ability to apply knowledge and skills in a work situation or in a study-related context.

Competences contains the following aspects:

- Situation: the type of work and/or study-related contexts in which the knowledge and skills are brought into play, and the degree of unpredictability and changeability in these contexts.
- Cooperation and responsibility: the ability to take responsibility for one's own work and the work of others and the complexity of the cooperative situations in which they can engage.
- Learning: the ability to take responsibility for one's own learning and that of others.

Here you write what the students should be able to do on their own with the knowledge and skills that they have acquired during the course (for example assess, analyse etc.).

You must formulate it in such a way that it is possible to assess whether the individual student is able to do so at the course exam.

Competences will typically have a component of independent decision-making, for example on methodology, analysis, conclusion, etc., but also aspects associated with collaboration and own learning and that of others.

The reference group for the Danish National Qualifications Framework for Higher Education explains how skills should be understood, especially in contrast to competences, as follows (translation):

[The distinction between skills and competences is exactly where the student, more or less on their own initiative, independently transfers concrete skills to new areas, contexts and situations. An example from the linguistic area with a distinction between language skills and communicative competences can illustrate this. Language skills are the building blocks of various kinds that the competent language user brings into play in new communicative contexts. The communicative competence constantly calls for decisions on what is the right thing to say/write in the individual communication situation based on knowledge and skills within many sub-areas (for example phonetics, morphology, syntax, vocabulary, pragmatics, conversation situations and scenarios, stylistic level, culture, etc.).] (Referencegruppen, 2007, p. 7)<sup>5</sup>

This supports an understanding of skills as techniques, methods, approaches, etc. Competences are characterised by the fact that such skills can be used in and adapted to different contexts. Examples of skills include interview techniques, translation, statistical data analysis, laboratory techniques, calculation techniques, measurement, use of specific equipment, IT, etc. Such skills are part of the competences when combined and adapted to new contexts, either independently or in collaboration with others.

<sup>&</sup>lt;sup>5</sup> https://ufm.dk/uddannelse/anerkendelse-og-dokumentation/dokumentation/kvalifikationsrammer/andre/dk-videregaaende/forslag\_til\_dansk\_kvalifikationsramme\_for\_videregaende\_uddannelse\_maj\_2007.pdf (in Danish only) [For information in English, see <a href="https://ufm.dk/en/education/recognition-and-transparency/transparency-tools/qualifications-frameworks/other-qualifications-frameworks/danish-qf-for-higher-education">https://ufm.dk/en/education/recognition-and-transparency/transparency-tools/qualifications-frameworks/other-qualifications-frameworks/danish-qf-for-higher-education</a>]

It should be noted, however, that a technique that is considered a skill on one degree programme (or course) – because it has an instrumental, application-oriented purpose – may be considered a competence on another programme, because it is considered essential to this programme that the student becomes a critical and independent user and developer of the technique. Examples could be translation or statistical analysis.

#### How do you make descriptions of learning outcomes?

It will, of course, be an advantage for the collaboration between courses and across degree programmes if all programmes operate with as similar an understanding of the concepts as possible. But this is not the situation today, so we recommend that the formulation of descriptions of learning outcomes is always accompanied by dialogue and discussion with, for example, the head of studies or core teaching staff on the course.

There is a real risk that you focus too much on the knowledge goal in relation to the others (probably a remnant of the thinking behind curricula of the past). We recommend that you start by formulating the competences in order to maintain focus on the competences that students will acquire from their education. However, you should be aware that the categories are listed in reverse order in the UCPH course template.

We recommend the following process for formulating descriptions of learning outcomes:

- 1. Discuss, formulate and decide the competency goals for the course, so that it is clear what the student should have acquired after the course. What can students use their acquired knowledge and skills for?
- 2. Then, describe what skills are needed to acquire these competences.
- 3. Finally, describe what knowledge is necessary and at what level in the light of the desired competences and skills.
  - What does the academic field include?
- 4. Please remember that the descriptions of objectives in the course descriptions must follow the order: knowledge skills competences.

We cannot give general advice on how detailed your descriptions should be - it should be a balance based on the course in question (and the individual degree programme).

We recommend that you use the relevant concepts in the descriptions of objectives in order to make the examination as clear as possible. This means that students often do not understand the description of objectives before the course, but this is not problematic as long as all students who can/must take the course can understand the *Content* field.

Please note that you should use (action) verbs to describe competences and skills, but not necessarily to describe knowledge. Action verb means that the verb reflects an action that can be demonstrated or observed, for example:

- **To formulate knowledge:** Account for, report, list, enumerate, define, describe, mention, explain, reproduce...
- **To formulate skills:** Apply, translate, use, explain, calculate, illustrate, practise, solve, express, appoint, identify, classify, rewrite, reformulate, write down, reproduce, structure, perform, name...
- **To formulate competences:** Assess, review, grade, select, estimate, critique, evaluate, compose, conclude, design, construct, combine, integrate, analyse, diagnose, categorise, compare, relate, determine, explain, put into perspective, discuss, reason...

#### Checklist for descriptions of learning outcomes

- Do you use action verbs to formulate knowledge, skills and competences?
- Is it clear what to look for in order to see if the student has achieved the learning goals?
- Does the formulation of the competences make it possible to imagine how they can be demonstrated at the examination?
- Is there a correlation between the description of learning outcomes and what the student will be tested in?
- Is there a correlation between the description of learning outcomes and the course activities? (You should not test content that the students have not been able to practise)
- Is there a correlation between knowledge, skills and competences, so that the students can bring knowledge and skills into play when they demonstrate competences?
- Are the targets sufficiently ambitious to ensure that also the best students are challenged?
- Is there a correlation between the description of learning outcomes of the course and descriptions of objectives for the courses that the students have already completed as well as the competency profile for the entire degree programme?
- Does the description of learning outcomes sufficiently take into account the level at which
  the students are on the degree programme?
   (For example, more complex requirements must be made at master's level than at bachelor's
  level)

#### Examples of descriptions of learning outcomes:

In order to exemplify the differences between knowledge, skills and competences, in the table below we have made up three learning goals that could be applied at HUM, SOC SCI or SCIENCE. They should not be understood as if they can cover an entire course. They are primarily designed to clarify the differences between knowledge, skills and competences – and differences between subject areas.

*Table 2.* Three made-up examples of learning goals. See the text below for elaboration.

Subject area	HUM	SOC SCI	SCIENCE
Knowledge	• account for basic concepts and principles related to qualitative interviews.	• account for what it means to produce a reliable, valid, precise and relevant risk assessment.	• account for basic concepts: Conservation of momentum and energy, the concepts of force and momentum, Newton's laws of motion and his work. Rotational mechanics, for example moment of inertia and torque as well as planetary movements and periodical movements.
Skills	Students can  • solve basic tasks related to qualitative interviews, including prepare an interview guide, transcribe and use meaning condensation.	Students can  • design different types of products relevant to risk assessment and strategy development, including memos and policy recommendations.	<ul> <li>use mathematical terminology and language of symbols to solve problems in classical mechanics.</li> <li>use conservation theorems (energy, momentum and angular momentum) in mechanical problems.</li> <li>identify the physical forces – including reactive forces – that work on a body.</li> </ul>
Competences	Students can  • conduct a qualitative interview study, including plan, produce, analyse and assess qualitative interview data.	Students can  manage complex threat environments, including  discover, process and generate knowledge and strategies for use in the management of complex threat environments  function as an evaluator under changing circumstances and decide on, select and recommend possible interventions.	Students can  • analyse a physical phenomenon with tools and concepts from classical mechanics and solve physical problems using laws and mathematical language.

The HUM example is within the area of qualitative interviews (which could be part of several degree programmes), and the competence is the overall goal that the student should be able to carry out such interviews. The skills level deals with (selected) techniques they should master, and the knowledge level is about the student's ability to demonstrate knowledge of relevant concepts and principles.

The SOC SCI example is about risk assessment: The competence level is aimed at performing functions in an authentic reality. The skills level is about mastering the sub-elements that constitute the competence, while the knowledge level describes the basic concepts that they should be able to account for at a given level.

The SCIENCE example is about classical mechanics in physics, and here the competences level is aimed at describing how to think like a physicist in relation to natural phenomena. At the skills level, the techniques typically used are described, and the knowledge level mentions (selected) basic concepts that students should be able to account for.

#### **Teaching and learning methods**

Under teaching and learning methods, you must describe the types of instruction used in the course as well as the types of learning activities that will occur. Teaching and learning methods may include workshops, seminars, lectures or problem-oriented project work. Learning activities may include group work, writing exercises, student presentations, laboratory exercises, production of empirical data, or a mix of online and on-site activities, etc.

For online and blended learning (OBL) activities, you can find lots of tools in the University of Copenhagen's OBL toolbox: https://obl.ku.dk

The University of Copenhagen uses Absalon<sup>6</sup> for all courses, both for distribution of materials and messages to the students and for creating engaging learning activities, which, for example, can contribute to formative tests and feedback and to motivate students to prepare better. You can find information about using the learning platform here:

https://kunet.ku.dk/work-areas/teaching/absalon/Pages/default.aspx

The choice of instruction type should, in principle, be subject to the learning outcomes: The teaching is, after all, supposed to support the students in achieving the objectives. Teaching is for students' sake, so we recommend not deciding on types of instruction and learning activities until *after* you have written the learning goals. Students can also be involved in this process.

When choosing an instruction type, you need to ensure coherence with what the students need to practise: If it is an learning goal that students acquire skills in performing a particular technique, training of this technique must be part of the teaching – or at least there should be activities in the

<sup>&</sup>lt;sup>6</sup> Absalon is the name of the University of Copenhagen's LMS (Learning Management System)

teaching that support the students' practice in the technique outside the teaching, for example in the form of tasks and exercises to do on their own. If it is a competency goal that students can independently analyse, assess, critique, design, construct, etc., the students actually practising this should be part of the teaching. In many courses, the teaching focuses on demonstrating the competences towards the end of the course, for example in the form of a major assignment or exercises that have more degrees of freedom and involve more context that the student must navigate. Typically, it will also make sense to use such elements in the course exam, see the next section on exams. It is also important that the examination form is taken into account when organising the type of instruction so that courses with oral exams contain activities in which the students develop their oral competences, and the same goes for written exams.

As a teacher, you may find it difficult to combine the desired types of instruction with the organisational framework of the course. Typical challenges are, for example, that the class size or time frame stands in the way of the desired interaction and feedback. In some cases, this type of challenge can be solved by means of pedagogic and digital methods, for example supported by Absalon, which the pedagogic unit at your faculty can advise on. In other cases, you will have to realise that the framework available for the teaching does not allow for conducting teaching or testing competences corresponding to the learning outcomes you have formulated. In such cases, it may be necessary to go back to the academic objectives and consider what needs to be adjusted in order to make it possible within the framework made available by the University. Before you do that, we recommend that you first consider various options with your colleagues and your pedagogical unit. If they also do not have any suggestions for reducing the discrepancy between framework, resources and learning goals, the objectives must be adjusted.

It is appropriate for the description of instruction types to be formulated in such a way that students and teaching staff can gain an understanding of the didactic framework and what is going to happen in the classroom before the teaching begins, that is, the description must not be implicit. At the same time, it should not be so detailed that it places considerable limits on the teaching staff's course planning.

#### Checklist for teaching and learning methods

- Are the types of instruction suited to support the students achieving the course objectives?
- Do the learning activities specified enable students to develop the skills and competences mentioned in the description of learning outcomes?
- Are the types of instruction and learning activities appropriate and realisable in relation to the organisational framework for the degree programme, including the number of students, physical environment and teaching resources?
- Does the description give the students a good idea of what they can expect to encounter in the teaching?
- Is the description written so that it leaves course teachers with a reasonable pedagogical scope?

#### **Examination**

The importance of the examination for the teaching should not be underestimated: We talk about the backwash effect, which means that the exam (regardless of type and content) will determine many students' study strategy: What they prioritise, how they prepare for classes, whether they participate in classes, how they approach assignments and exercises along the way, etc. Therefore, it is essential that there is alignment between the description of learning outcomes, the teaching content and type, and exam content and form. There are many rules for exams, and each faculty may also have its own rules restricting the choice of examination form. However, there are still major variations. As course coordinator, you are obliged to ensure that the exam (or perhaps more accurately: the testing to take place) assesses the students in relation to the academic objectives described for the course. Students are fully entitled to make a complaint, and have it accepted if they are assessed on other things than the academic objectives.

Generally, we recommend using a variety of examination forms throughout a degree programme, which is also a legal requirement, based on the idea that one particular form is not suitable for assessing the achievement of all types of academic objectives. A multiple-choice test is a poor way of assessing competences. A written exam with exam aids is a poor way of assessing immediately available knowledge. And so on.

#### Criteria for exam assessment

In the UCPH course template, the exam description also contains a box called 'Criteria for exam assessment'. This box is for describing the criteria for assessing the degree of achievement of objectives. They differ from descriptions of objectives as they give a more specific indication of what an excellent/fair/just acceptable/etc. performance contains, meaning for what the grades 7, 12, etc. are given. We believe that it is sufficient to describe the grade 12. If the criteria are made explicit for the students, or even prepared together with the students, then you as a teacher make your expectations clear and you can focus your feedback. The assessment criteria also promote a uniform basis for assessment. However, there are different local rules at UCPH for how to fill in this box.

When choosing the examination form for a course, we suggest that you follow the procedure below:

- 1. First, consider what the most important learning outcomes are: What is paramount that the students can do after the course?
- 2. Then consider what would be an ideal, authentic situation where the student can demonstrate the (main) learning outcome. Authentic in this context means that the learning situation reflects practice and working methods where the students need to use their competences. Do not think of framework and limitations.
- 3. What are the key elements of this situation? Is it that the student produces something specific? Is it that the student carries out an activity, alone or together with others, maybe with a particular technology? Prioritise the most important elements from the ideal situation.

- 4. How can these elements be built into or simulated in a more doable examination form: Can you base an oral exam on something that the student has produced beforehand? Can you give a written exam a form that imitates an authentic situation more (use of exam aids, form, context and time for the assignments)? Can you use a portfolio exam where you bring more elements into play?
- 5. Make a detailed description of the examination form and discuss it with both colleagues and students.
- 6. Make the shortest possible description of the exam form for the course description in a way that still meets the formal requirements at UCPH and your faculty.

#### Checklist for examination form

- Is the exam suitable for directing the students' work in the teaching towards the course objectives?
- Have you chosen an examination form that is sufficiently coherent with the description of objectives and thereby evaluates the intended learning outcome?
- Is the examination form and its relation to the teaching activities clear and comprehensible to the students?

#### **Feedback**

According to research evidence, feedback is one of the most effective tools to increase students' learning. It makes sense, therefore, that you have to indicate in the course description how feedback will be given in the course. You do this via a checkbox, where it is possible to indicate different categories of feedback, and a comments field, where it is possible to elaborate on the description of feedback, clarify expectations of the students or add other categories, if necessary. The comments field has a maximum of 500 characters, making the level of detail relatively limited.

Often, a distinction is made between *formative* feedback, which is adapted to the individual student as well as forward-looking and aimed at the learning process, and *summative* feedback (for example a test or an exam where the result is typically indicated by a grade), which is an assessment of the level reached by the student. Formative feedback may strengthen students' learning process and make them more independent as students. Summative feedback, for example through a grade, will not have the same effect because it only indicates the academic level and not how the student can improve. Summative elements of the feedback tend to overshadow the formative elements, so you need to carefully consider when in the process the different forms of feedback should be used.

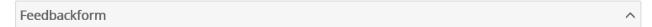
The feedback field in the course description is to be understood as a description of formative feedback, which means it is about when in the course reactions are given to students' products or performance for the purpose of promoting learning. We do not recommend that you describe in the course description in detail what the feedback will concern, but you should consider how to ensure that the students receive feedback on their achievement of the learning goals that students typically have the most difficulty assessing their own achievement of. For example, if a course has the learning goal of being able to carry out a case study at a certain level of complexity, it may be difficult for the students to assess whether their analysis has sufficient depth – even though

assessment criteria have been described. Formative feedback on a smaller case study or parts of a case can exemplify the desired depth and thus clarify the assessment criteria.

The checkboxes about feedback in the course description are broad categories, which are not mutually exclusive, and it is possible to choose multiple categories. Some of the categories are not very informative about what students can expect. It is possible only to tick the different forms of feedback, but we find it insufficient just to tick, for example, oral and written feedback. A much more clarifying description in the comments fields could be if you write: "Oral feedback is given on individual hand-in assignments with the aim of improving subsequent assignments. Written feedback is given on the group report at the end of the course with the aim of ensuring adjustments for the final exam." Then, the students know what to expect and when.

Feedback is also a great opportunity to use learning elements such as peer feedback or digital tools such as Peergrade, annotation systems, Screencast-O-Matic<sup>[1]</sup>, etc. For help with this, please contact your pedagogical unit, COBL<sup>7</sup> or ITLC<sup>8</sup>. Avoid naming the specific digital tool in the course description, instead describe in more general terms what feedback is given, whether it is given by the teacher or fellow students and whether it is oral or written.

#### Example (from a sociology course):



Peerfeedback (studerende giver hinanden feedback)

De seks trin i kurset skal i løbet af kurset munde ud i seks mindre skriftlige opgaver. Her skal arbejdsgrupperne give feedback på hinandens opgaver. Hver opgave skal indgå som en del af den samlede porteføljeopgave.

The Department of Science Education has prepared a guide that has more details about how to decide on which forms of feedback to use in your course. The guide is based on development work on feedback to students across UCPH – see the guide here: <a href="https://www.ind.ku.dk/english/resources/feedback/">https://www.ind.ku.dk/english/resources/feedback/</a>.

#### Part 2

#### Competency profiles for entire degree programmes

This part is aimed at heads of studies, study boards, central course managers and other interested parties who are in the process of revising or preparing a new curriculum and the competency profile of the degree programme at bachelor's and master's level. It may also be useful when developing completely new degree programmes.

<sup>&</sup>lt;sup>7</sup> COBL = Centre for Online and Blended Learning (SUND)

<sup>&</sup>lt;sup>8</sup> ITLC = IT Learning Center (SCIENCE)

A well-defined competency profile is aimed at several target groups – students, teaching staff and employers – and must therefore provide an accurate picture of the topics covered in the degree programme and the subject-specific and generic competences it aims towards. You may choose to unfold aim, content and, if relevant, an employment profile in a prose text, but the competency profile must contain a description of objectives divided into knowledge, skills and competences, closely aligned with the qualifications framework. The qualifications framework ensures that the programme's competency profile matches the competency dimensions and complexity at bachelor's or master's level.

A well-described competency profile creates transparency in the European higher education area, so that students and graduates can move freely between European educational institutions and national labour markets (the Bologna declaration). See also the figure below.

You can find inspiration from the following sources:

- At the international level, the competency descriptions will serve as a frame of reference that can contribute to increased transparency in relation to mobility between Danish and foreign universities and to the transfer of educational qualifications for the labour market. It is a good idea to familiarise yourself with reference models or European curricula if they exist for your degree programme.
- Other sources of inspiration are documents and analyses prepared by the Ministry. The most recent report, which has had a major impact on the development of the universities, is 'Universitetsuddannelser til fremtiden' [University education for the future] from 2018.
- You can do focus group interviews with potential employers or if available read the employer reports or the minutes of employer panel meetings. This inspirational dialogue with external stakeholders can contribute to the continued development of the activities of the institution and the graduates in the short and long term.

#### Progression in education – the difference between bachelor's and master's level

The qualifications framework defines progression in education. This can, among other things, be seen in the way that the different levels for the bachelor's degree (level 6) and the master's degree (level 7) are described. The figure below shows the different terms that the qualifications framework uses to describe the difference between the bachelor's and master's level. The degree type descriptors for the master's degree programmes and the master programmes are not completely alike<sup>10</sup>.

When formulating a competency profile, either at bachelor's or master's level, it is important that you stick to the wording of the qualifications framework and how it is divided into knowledge, skills and competences. For example, you should not formulate a competence with the word

qualifications-frameworks/danish-qf-for-higher-education/qf dk he 261009.pdf]

<sup>&</sup>lt;sup>9</sup> https://www.regeringen.dk/media/4985/hele-rapporten.pdf (in Danish only)

<sup>10</sup> https://ufm.dk/uddannelse/anerkendelse-og-dokumentation/dokumentation/kvalifikationsrammer/andre/dk-videregaaende/kvalifikationsramme\_dk\_videregaaende\_uddannelse\_20080609.pdf (in Danish) [For English, see https://ufm.dk/en/education/recognition-and-transparency/transparency-tools/qualifications-frameworks/other-

'communicate' because this verb is used under skills. It is our impression that you have more freedom in the course descriptions to use the words that match the aim of the course than you have when you prepare a competency profile.

Bachelor's level	Master's degree level
Knowledge	Knowledge
knowledge of a profession or one or more subject areas	in selected fields, knowledge is based on the highest international research
understand and reflect on	understand and, on an academic basis, reflect on and identify academic issues
Skills	Skills
apply methodologies and tools	master methodologies and tools
evaluate theoretical and practical issues as well as explain the reasons for and choose relevant solution models	bachelor's level plus on an academic basis, set up new analysis and solution models
communicate academic issues to peers and non-specialists	bachelor's level plus communicate <b>research-based</b> knowledge and <b>discuss professional and academic issues</b>
Competences	Competences
handle complex and development- oriented situations	manage work situations and developments that are complex, unpredictable and require new solution models
independently participate in discipline-specific and interdisciplinary collaboration	independently <b>initiate and carry out</b> discipline- specific and interdisciplinary collaboration and assume <b>professional responsibility</b> .
identify their own learning needs and structure their own learning	independently take responsibility for their own professional development and specialisation

Figure 2. A selection of some of the knowledge, skills and competences areas described in the qualification's framework for bachelor's and master's degree programmes, respectively. The bold text for the master's level mark the *progression* from bachelor's to master's degree level. (Source: https://ufm.dk/en/education/recognition-and-transparency/transparency-tools/qualifications-frameworks/other-qualifications-frameworks/danish-qf-for-higher-education, 2007)

## Work process for the revision or development of a competency profile for the bachelor's or master's level<sup>11</sup>

Lastly, here is a suggestion on how to work step-by-step with the revision or development of competency profiles:

- 1. Identify the core competences. You can do this by thinking about work situations that graduates may face and which competences they will need to possess. Afterwards, you can discuss and formulate, on your own or together with others, the routine skills and knowledge needed in these situations.
- 2. Identify new priority areas for research and teaching based on the sources of inspiration mentioned above.
- 3. Consider and examine whether the theoretical/methodological elements of the degree programme should be strengthened.
- 4. Consider and examine whether the dialogue with the outside world should be strengthened in the degree programme.
- 5. Consider and investigate whether the internship elements in the degree programme should be strengthened.
- 6. Make a clear progression from bachelor's to master's degree level.
- 7. Consider whether more specialised lines of study should be introduced on the programme.
- 8. Conduct a review of subject areas with the aim to look into how students develop the desired competences and skills and the necessary knowledge. Consider the logical and appropriate order in which competences and skills should be introduced to students.
- 9. Consider and examine whether there is progression in study techniques (which must always be linked to academic content and not made generic) and feedback. Are there variations in the teaching formats (lectures, seminars, etc.)?
- 10. Review examination forms looking for variation, reliability, validity and authenticity / relevance to the outside world.

20

<sup>&</sup>lt;sup>11</sup> Inspiration is taken from 'En hvidbog om de moderne fremmedsprogsuddannelsers aktuelle situation og fremtidige udfordringer' [A whitepaper on the current situation and future challenges of modern foreign language studies], University of Copenhagen (2002)

#### Relevant resources and references

- Hansen, Hans Lauge (ed.) (2002): En hvidbog om de moderne fremmedsprogsuddannelsers aktuelle situation og fremtidige udfordringer [A whitepaper on the current situation and future challenges of modern foreign language studies]. Sprogfagenes identitetsudvalg [The language programmes' identity committee]. Faculty of Humanities, University of Copenhagen.
- Bering Keiding, T. (2017): *Guide til studieordningsrevision* [Guide for the revision of curricula]. Version 2 Centre for Teaching Development and Digital Media. Aarhus University.
- Qualifications Framework for Lifelong Learning. <a href="https://ufm.dk/en/education/recognition-and-transparency/transparency-tools/qualifications-frameworks">https://ufm.dk/en/education/recognition-and-transparency/transparency-tools/qualifications-frameworks</a>.
- Referencegruppen [The reference group] (2007). Ny dansk kvalifikationsramme for videregående uddannelse. [New Danish Qualifications Framework for Higher Education.] https://ufm.dk/uddannelse/anerkendelse-og-dokumentation/dokumentation/kvalifikationsrammer/andre/dk-videregaaende/forslag\_til\_dansk\_kvalifikationsramme\_for\_videregaende\_uddannelse\_maj\_2007.pdf (in Danish only) [For information in English, see https://ufm.dk/en/education/recognition-and-transparency/transparency-tools/qualifications-frameworks/other-qualifications-frameworks/danish-qf-for-higher-education]
- Resource on feedback to students. Examples and materials for use in the development of better feedback to students. www.ind.ku.dk/english/resources/feedback/
- Rienecker, L., Jørgensen, P.S., Dolin, J., and Ingerslev, G.H. (eds.) (2013). *Universitetspædagogik* [University Pedagogy]. Samfundslitteratur.
- Skov, S. (2015): *Læringsorienterede kursusdesign* [Learning-oriented course designs]. Frederiksberg: Samfundslitteratur.
- *Udvikling af egen undervisning: En kort guide for undervisere* [Development of your own teaching: A brief guide for teaching staff.]. Teaching and Learning Unit of Social Sciences. <a href="https://samf.ku.dk/pcs/tekster\_og\_pjecer/undervisingsudvikling-pjece.pdf">https://samf.ku.dk/pcs/tekster\_og\_pjecer/undervisingsudvikling-pjece.pdf</a> (in Danish only)
- *Undervisningsformer*: *Ideer til undervisningsaktiviteter* [Teaching and learning methods: Ideas for course activities]. Teaching and Learning Unit of Social Sciences. https://samf.ku.dk/pcs/tekster\_og\_pjecer/undervisningsformer\_A4\_Pjece.pdf (in Danish only)