Utrecht University

UMC Utrecht

Step-by-step guide to **course design**

GRADUATE SCHOOL OF LIFE SCIENCES

Introduction course design guide

What is this guide for?

You have an idea for a new course or want to redevelop an existing course. This guide supports you in the design process. In nine steps you will get started with your course aim, learning outcomes, learning activities and assessment.
You integrate educational principles and determine the way in which you want to offer the course components. The course components and assessment information are included in Osiris as course information for students. The assessment matrix is obligatory for every course and used for quality assurance. Without up-to-date course information and an assessment matrix a course cannot be given.

How should I use the guide?

Following the steps leads you to the Course design form. It is recommended to go back and forth between the steps when designing the course. You can do this by clicking on the steps at the bottom of each page.
For a new course design, follow all steps. If you have an existing course and need to update your course information or assessment matrix, go directly to step 9 (course design form) or to the OSIRIS & Assessment pages. In Step 1 you will find further explanation on how to use the guide.

Why should I use it?

The design is the backbone of your course, where constructive alignment, alignment between learning outcomes, learning activities and assessment, is crucial. Following the step-by-step guide leads to a clear and complete course design. This supports you in developing your course content.

Where can I get support?

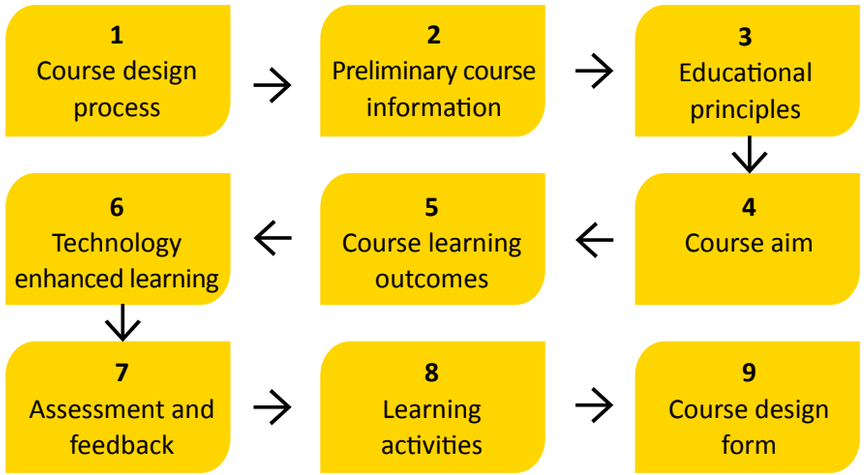
If you have any questions or require any support using this step-by-step guide, please contact the Policy Team.
For advice on assessment, please contact the Assessment Support Panel or visit the GSLS Teacher Guide for information on designing and teaching a course.

STEP 1 Course design process

The nine steps of the course design process help you to think about your course aim, learning objectives, learning activities and assessment methods. During the process, the design is filled in further and further. You can see the result in step 9 in the course design form. This way you can look back and forward (iterative process) and bring all elements in line with each other.

Before you design a new course, please check the procedure of requesting a new course on the GSLS Teachers' Guide. It also includes details on how to review the assessment matrix and get approval for course development. Furthermore, here you can find information on designing and teaching a course.

Roll over the steps to get more information.



STEP 2 Fill in the basic course information such as title of the course, duration, ECTS and contact information.

There are multiple ways to use this guide. Click on the items below to find out where to start your journey.

To design a new course, follow all 9 steps of the guide and finally fill in the Osiris & Assessment pages.
You get information on good didactic design and gradually fill in the components of your own course.
Go to step 2.

STEP 2 Preliminary course information

To start, enter in the basic information about your course if known. This information can be adjusted or clarified as you move through the tool.

Course name/title	
Course code	
Name master programme	
Faculty (Medicine/Science/Veterinary Sciences)	
Course duration/sessions	
Course period (P1-P2-P3-P4)	
Time slot if applicable	
Academic year	
ECTS	
Course capacity (min-max)	
Prerequisite knowledge	
Participation is mandatory for	
Participation is optional for	
Name examiner/course coordinator	
Email address examiner/course coordinator	
Solis-ID examiner/course coordinator	
Examiner/course coordinator BKO/SKO	
Examiner substitution (Name/SolisID)	
Lecturers needing OSIRIS access (name/solisID)	
Enrolment via OSIRIS Student (yes/no)	
Fully online course (yes/no)	
Remarks	

STEP 3 Educational principles

Utrecht Educational Model

When developing your education keep the Utrecht Educational Model in mind. The most important part of the model for course development can be shortly summarized as: *"The programme offers personal, activating and, where possible, a small-group flexible learning experience and good supervision."*

Graduate School of Life Sciences

The Graduate School of Life Sciences has formulated its own learning outcomes. Read these learning outcomes carefully and keep them in mind when designing your course learning outcomes and assessment methods. Indicate on the OSIRIS & Assessment pages how you have integrated these outcomes.

UMC Utrecht Education Strategy

Within the GSLS, the education strategy of UMC Utrecht also plays an important role. Watch the video 'Fit for the Future', which explains the eight themes of the education strategy. More information about the themes can be found here. You can use the themes as a reference during your course development.

STEP 4 Course aim

Each course must have a course aim; this is a short sentence which describes the overall objective of your course. When you determine your course aim, it is important to ask yourself what the student should know and/or be able to do after completing the course.

The following questions can help you to specify the aim of your course.

- What is the 'problem' that your course will try to fix?
- What are the current student needs? With this question you examine the gap between the current level of expertise and the desired level of expertise.
- What are student needs in the future? By answering this question, you identify certain changes that will take place in the future and the skills that your students need to cope with these changes.
- What are the needs of the working field? Your course is teaching students to become professionals in a future work field and by answering this question you may contribute to the improvement of the transfer from university to 'real life'.

Example

The aim for the course 'Introduction to Methods and Statistics' is:

After this course, students will be able to assess research and independently analyse and interpret data.

Write down your course aim in the box below:

Course aim

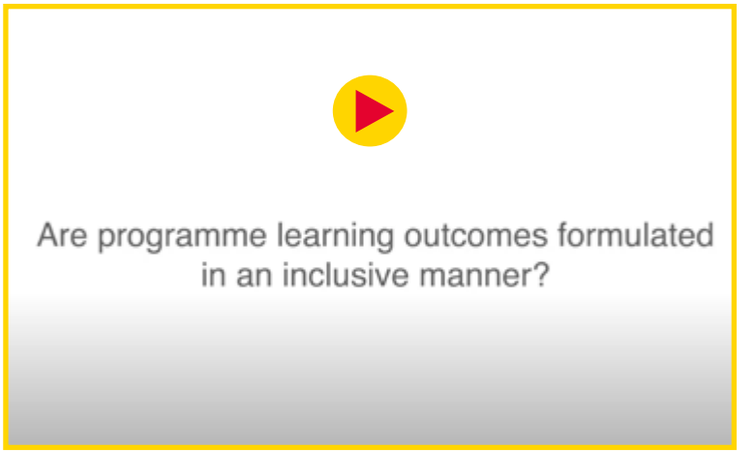
Room for brief explanation

STEP 5 Course learning outcomes

Course learning outcomes are detailed descriptions of knowledge, skills and attitudes that students will learn in your course.
To start: find out more about learning outcomes in the video on the right.

Click on the icons to follow the steps.

Add a measurable (e.g. via assessment) action verb which communicates student performance during the course. Access the Bloom's Taxonomy Verb Chart and this video about Bloom's Taxonomy to help you develop these verbs.



Here you see the course aim you formulated in step 4. If you have not done so yet, you can do it here.

Course aim

Formulate the two most representative course learning outcomes. In step 7 and 8 you will work with the corresponding assessment and feedback methods and learning activities.

If you want to elaborate more learning outcomes you can do this in step 9. **You can start here by formulating the two most representative learning outcomes.**

Learning outcomes

Room for brief explanation

STEP 6 Technology enhanced learning

Integrating online elements into your course design can help you teach in a more efficient or effective way. You can think about which parts of your course would be best delivered in a face-to-face session and which parts could best be delivered online.
Think beforehand about the use of technology in your course. After you have selected the assessment and feedback methods in step 7, you will formulate learning activities in step 8, indicating whether these will take place online or face-to-face (F2F).

Click on the icons to get more information.

Blended course design

Fully online course design

Hybrid education

Blended education offers a mix of online and face-to-face learning approaches. In a blended learning design, the acquisition of knowledge can be offered online in e-learning activities (e.g. knowledge clips, e-modules, interactive exercises, formative quizzes), whilst the application of knowledge is suitable for face-to-face education (e.g. seminar learning groups, discussions with experts, challenge-based learning, lab education).
Example of a blended course design: start with a face-to-face introduction meeting, then online preparation with an e-module and formative test followed by face-to-face working on an application assignment in small groups and ending with an online peer feedback assignment.

Learn more about online and blended education by taking these free online courses:

Online education: context and design

Re-design your education with blended learning

Click on the course titles to self-enrol.

STEP 7 Assessment and feedback

Assessment and feedback are important aspects of your course design. While completing the learning activities, it will be necessary to monitor progression towards the learning outcomes. This will inform you and the student about their individual progression and will help to guide and steer the learning process.

Summative and formative assessment
Assessment can have a summative and/or a formative aim.

With summative assessment you decide if the student has sufficiently reached the learning objectives, and you (usually) rate this with a grade which indicates if a student passed or failed. The assessment has a consequence.
Formative assessment and feedback have the aim to form and stimulate the learning process of the student by providing feedback. Formative assessment gives the student insight in their own progress and can prepare them for the (summative) end task. There are various ways of formative assessment, e.g.,

Select the summative assessment methods for learning outcome 1 and 2 from the drop-down menu. If these methods are not sufficient there is room for one other summative assessment method.

In the textbox, indicate formative assessment and feedback methods used to provide feedback to students. For some inspiration you can access this list to review 100+ ways for formative assessment.

Course aim

Learning outcome 1

Assessment/feedback methods

Summative assessment methods

Make your choice

Make your choice

Make your choice

Other summative assessment method, namely …

Formative assessment and feedback methods

Room for brief explanation

Learning outcome 2

Assessment/feedback methods

Summative assessment methods

Make your choice

Make your choice

Make your choice

Other summative assessment method, namely …

Formative assessment and feedback methods

Room for brief explanation

STEP 8 Learning activities

Learning activities or work formats are the link between learning outcomes and assessment. They are the concrete implementation of the course. Examples are lectures, group work, presentations, discussions, assignments, peer feedback etc. For inspiration for different kinds of learning activities, check out the Teaching & Learning Collection.

Within the GSLS, a choice of various work formats can be made. Keep in mind to use work formats that match your learning outcome, that are engaging, activating and inspiring.

Make your selection from the work formats using the drop-down menu. If the work formats in this menu are not sufficient there is room for two other learning activities/work formats. Indicate in the check boxes if the activities will take place online or face-to-face (F2F).

Course aim	

Learning outcome 1	

Learning activities/work formats	Online	F2F
Make your choice		
Make your choice		
Make your choice		
Make your choice		
Make your choice		
Make your choice		
Make your choice		
Other learning activity, namely …	Online	F2F

Room for brief explanation

Learning outcome 2	

Learning activities/work formats	Online	F2F
Make your choice		
Make your choice		
Make your choice		
Make your choice		
Make your choice		
Make your choice		
Make your choice		
Other learning activity, namely …	Online	F2F

Room for brief explanation

STEP 9 Course design form

The design is the backbone of your course. You have chosen the learning activities and assessment methods for each learning outcome so that they are aligned. This course design form is the starting point for the (re)development of the course content.

In this course design form, you will find what you have previously entered in steps 4, 5, 7 and 8 for the two most representative learning outcomes of your course.

After designing learning outcomes 1 and 2, you can move on to developing the remaining learning outcomes in this step. There is room for up to 8 learning outcomes. Make sure these learning outcomes are formulated at the course level. More detailed learning goals at the learning activity level will be formulated later when the course is developed.

If you went directly to step 9, the input fields are still empty. You can start (re)designing your course here.

Go to the next page

INTRO | STEP 1 Course design process | STEP 2 Course information | STEP 3 Educational principles | STEP 4 Course aim | STEP 5 Learning outcomes | STEP 6 Technology enhanced learning | STEP 7 Assessment and feedback | STEP 8 Learning activities | STEP 9 Course design form | OSIRIS & Assessment | Reference list

STEP 9 Course design form

Course aim

Learning outcome 1

Assessment/feedback methods

Summative assessment

Make your choice

Make your choice

Make your choice

Other summative assessment method, namely …

Formative assessment and feedback methods

Learning activities/work formats Online F2F

Make your choice

Make your choice

Make your choice

Make your choice

Make your choice

Make your choice

Make your choice

Make your choice

Other learning activity, namely … Online F2F

Learning outcome 2

Assessment/feedback methods

Summative assessment

Make your choice

Make your choice

Make your choice

Other summative assessment method, namely …

Formative assessment and feedback methods

Learning activities/work formats Online F2F

Make your choice

Make your choice

Make your choice

Make your choice

Make your choice

Make your choice

Make your choice

Make your choice

Other learning activity, namely … Online F2F

Go to the next page

Continue to define any remaining learning outcomes, assessment methods and learning activities.

STEP 9 Course design form

Course aim

Learning outcome 3

Assessment/feedback methods

Summative assessment

Make your choice

Make your choice

Make your choice

Other summative assessment method, namely …

Formative assessment and feedback methods

Learning activities/work formats Online F2F

Make your choice

Make your choice

Make your choice

Make your choice

Make your choice

Make your choice

Make your choice

Make your choice

Other learning activity, namely … Online F2F

Learning outcome 4

Assessment/feedback methods

Summative assessment

Make your choice

Make your choice

Make your choice

Other summative assessment method, namely …

Formative assessment and feedback methods

Learning activities/work formats Online F2F

Make your choice

Make your choice

Make your choice

Make your choice

Make your choice

Make your choice

Make your choice

Make your choice

Other learning activity, namely … Online F2F

Go to the next page

Continue to define any remaining learning outcomes, assessment methods and learning activities.

STEP 9 Course design form

Course aim

Learning outcome 5

Assessment/feedback methods

Summative assessment

Make your choice

Make your choice

Make your choice

Other summative assessment method, namely …

Formative assessment and feedback methods

Learning activities/work formats Online F2F

Make your choice

Make your choice

Make your choice

Make your choice

Make your choice

Make your choice

Make your choice

Make your choice

Other learning activity, namely … Online F2F

Learning outcome 6

Assessment/feedback methods

Summative assessment

Make your choice

Make your choice

Make your choice

Other summative assessment method, namely …

Formative assessment and feedback methods

Learning activities/work formats Online F2F

Make your choice

Make your choice

Make your choice

Make your choice

Make your choice

Make your choice

Make your choice

Make your choice

Other learning activity, namely … Online F2F

Go to the next page

Continue to define any remaining learning outcomes, assessment methods and learning activities.

STEP 9 Course design form

Course aim

Learning outcome 7

Assessment/feedback methods

Summative assessment

Make your choice

Make your choice

Make your choice

Other summative assessment method, namely …

Formative assessment and feedback methods

Learning activities/work formats Online F2F

Make your choice

Make your choice

Make your choice

Make your choice

Make your choice

Make your choice

Make your choice

Make your choice

Other learning activity, namely … Online F2F

Learning outcome 8

Assessment/feedback methods

Summative assessment

Make your choice

Make your choice

Make your choice

Other summative assessment method, namely …

Formative assessment and feedback methods

Learning activities/work formats Online F2F

Make your choice

Make your choice

Make your choice

Make your choice

Make your choice

Make your choice

Make your choice

Make your choice

Other learning activity, namely … Online F2F

OSIRIS & Assessment

To design your new course, you have completed the steps of the design process. To submit the course information and design for final approval you will complete the OSIRIS & Assessment pages. If you have an existing course, for which updates are required, please update the OSIRIS & Assessment pages for the annual course update request by the policy team. Information on the application process for a new course, approving for course development and registration in OSIRIS can be found on the Teachers' guide.

Fill in the course information in the table below as completely as possible.

Course information	
Course name/title	
Course code	
Name master programme	
Faculty (Medicine/Science/Veterinary Sciences)	
Course duration/sessions	
Course period (P1-P2-P3-P4)	
Time slot if applicable	
Academic year	
ECTS	
Course capacity (min-max)	
Prerequisite knowledge	
Participation is mandatory for	
Participation is optional for	
Name examiner/course coordinator	
Email address examiner/course coordinator	
Solis-ID examiner/course coordinator	
Examiner/course coordinator BKO/SKO	
Examiner substitution (Name/SolisID)	
Lecturers needing OSIRIS access (Name/SolisID)	
Enrolment via OSIRIS Student (yes/no)	
Fully online course (yes/no)	

Go to the next page

OSIRIS & Assessment

Remarks

Provide a brief description of the content of the course. This will be included in the OSIRIS course catalogue used by the students.

Course description

Go to the next page

INTRO | STEP 1 Course design process | STEP 2 Course information | STEP 3 Educational principles | STEP 4 Course aim | STEP 5 Learning outcomes | STEP 6 Technology enhanced learning | STEP 7 Assessment and feedback | STEP 8 Learning activities | STEP 9 Course design form | OSIRIS & Assessment | Reference list

OSIRIS & Assessment - Assessment matrix

Indicate how the GSLS learning outcomes are reflected in the course learning outcomes. If you haven't yet formulated all the course learning outcomes in step 9 you can do so here.

With which GSLS learning outcomes do the learning outcomes of your course align?

Course learning outcomes		GSLS learning outcomes (e.g., 1a, 3b)
1		
2		
3		
4		
5		
6		
7		
8		

Choose the most important learning activities/work formats you are going to use from the drop-down menu. Indicate per learning outcome which learning activity/work format will be used.

Course learning outcomes	1	2	3	4	5	6	7	8
Learning activities/work formats								
Make your choice								
Make your choice								
Make your choice								
Make your choice								
Make your choice								
Make your choice								
Make your choice								
Make your choice								
Make your choice								
Make your choice								

Choose all assessment methods from the drop-down menu and indicate for each method with what percentage they count in the assessment. Indicate per learning outcome which assessment method will be used.

If you want to use a different assessment method, please contact the Assessment Support Panel.

Course learning outcomes		1	2	3	4	5	6	7	8
Assessment methods	**Weight %**								
Make your choice	0%								
Make your choice	0%								
Make your choice	0%								
Make your choice	0%								
Make your choice	0%								
Make your choice	0%								
Make your choice	0%								

References

Step 1

Icons from: zero_wing, Smashicons, Freepik

Step 4

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Step 8

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Colophon:

This GSLS Step-by-step Guide to Course Design is based on the Step-by-step Guide to Course Design from the University Medical Centre Utrecht and Utrecht University (developed by Anne-Petra Rozendal, Annet van der Riet, Danza Onvlee en Kelly Kwant). The GSLS version was developed by Kirsten Koymans, Nivard Koning, Marianne Bol-Schoenmakers and Anne-Petra Rozendal.

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