

Designing your own bachelor lab-course using open inquiry

In this last part of the play book a table with design items is presented to help you design your open inquiry course. Answering the questions one by one will aid you to think of all the details of the course design, before starting the course. The first time running the course will lead to changes, but preparation is key. Feel free to bounce your ideas and questions to the group on the SURF forum, or join one of the open inquiry meetings online.

	Detail	Your ideas / document location
What is your motivation to use open inquiry	People will ask; first opportunity students get to think for themselves; it motivates students more for the course; better prepare for bachelor end project; insights into career as researcher / designer; allowing students to explore topic of interest, with eye on their future (master, career).	
Lab space available	Kind of space, materials, limitations of possible experiments or designs	
Lab time available vs. duration of the course	How many hours can students actually use the lab for? Where can they work if lab is not available?	
Prerequisite student knowledge	What do students need to know before they start? Which students can join?	
Number of students expected	Based on previous years or similar courses	
People available (no. of experts, techs, teachers)	How many teachers will you need, or technicians, are content experts available and willing?	
Learning goals	What are the learning goals, how can students reach them?	
No. of students per group and composition	Will you pre-select students per group based on previous knowledge; self-selection based on topic, free choice of students etc.	
Formulate the assignment	Any research question as long as it is physics; any research question in the domain of microbiology using enzyme based experiments; Design and make a machine that includes biomimicry etc.	

Available test-case / example to present to students	Prepare an example research question and hypothesis, or example design and plan.	
Description of intermediate products (marked)	Half-way item, cooperation, feedback, presentations	
Description of end product	Report, presentation, test, product;	
Assessment plan and rubrics	How will you score cooperation, academic attitude, the half-way item; rubrics based on learning goals; final score calculation	
Plan the course dates	including feedback moments, intervision moments, half-way moments, presentations, 'fuck-up' Fridays to share failure and gain new ideas, etc. Process is planned out, content is not.	
Kind of information students need and accessibility of the information	Where can they find what or who, how will they know where to look, scaffolded (peer-) feedback sessions	
Student explanation on how the course is organized and assessed.	Make clear that you expect students to work autonomously, form their own opinions / insights based on information and use that in their work	
Information on how the course is organized for other people involved	Role division: who gives content information, what kind of coaching, scoring protocol (grades), who does what.	

And most of all: Have Fun!