

# MOOC課題作成用ツールについて

MOOCではさまざまな種類の課題が用いられます。目的に合わせて、課題作成を補助するさまざまなツールが利用可能です。次ページより、具体的な課題作成の事例をご紹介します。各課題の右側の数字はご紹介するページ数を表しています。

## 一般的な課題

- Multiple Choice (p.2)
- Checkboxes (p.3)
- Dropdown
- Numerical Input (p.4)
- Text Input
- Problem with Adaptive Hint

## 発展的な課題

- Custom Javascript Display and Grading
- Write-Your-Own-Grader Problem
- Circuit Schematic Builder Problem
- Drag and Drop Problem (p.5)
- Image Mapped Input
- Math Expression Input
- Problem Written in LaTeX
- Molecular Editor (p.6)
- Peer Assessment (p.7)
- Problem with Adaptive Hint












(参考: [http://edx.readthedocs.io/projects/edx-partner-course-staff/en/latest/exercises\\_tools/index.html](http://edx.readthedocs.io/projects/edx-partner-course-staff/en/latest/exercises_tools/index.html))

# 一般的な課題①：Multiple Choice

## Multiple Choice:

複数の選択肢から解答として正しいものを1つ選ぶ課題です。問題文、選択肢に加え、適宜、ヒントや説明文等を付け加えることが可能です。

Week 3 > Ethnomethodology 1 > Problems (1-3)

< Previous            Next >

### Problems (1-3)

[Bookmark this page](#)

#### Problem 1

1.0 point possible (graded)


Who started and developed ethnomethodology at University of California, Los Angeles?

Harold Garfinkel

William Foote Whyte

Max Weber

Yutaka Yamauchi












Submit You have used 0 of 2 attempts  Save

## 一般的な課題②：Checkboxes

### Checkboxes:

複数の選択肢から解答として正しい（当てはまる）ものを1つもしくは複数選ぶ課題です。1つのみを選ぶMultiple Choiceと異なり、当てはまるものをすべてチェックする問題に使用します。選択された選択肢は、左端の四角にチェックマーク (☑) が入ります。

Week 2 > Lecture 2: Writing and Synthesizing DNA - 53 minutes > Exercise 2 - DNA Base Pairing

< Previous            Next >

### Exercise 2 - DNA Base Pairing

[Bookmark this page](#)

#### Exercise 2

0 points possible (ungraded)

### DNA BASE PAIRING

*Check all that apply.*

- A-C are linked together by 3 hydrogen bonds.
- C-G are linked together by 2 hydrogen bonds.
- A-T are linked together by 2 hydrogen bonds.
- C-T are linked together by 1 hydrogen bond.
- A-T are linked together by 3 hydrogen bonds.
- C-G are linked together by 3 hydrogen bonds.

Submit







(イメージは KyotoUx 001x: Chemistry of Life より)

# 一般的な課題③ : Numerical Input

## Numerical Input:

数値や比較的単純な数式を直接入力して回答する課題です。  
下の事例では、素数を入力する必要があります。

Week 1 > Introduction to Prime Numbers > Problem (7-8)

< Previous       Next >

**Problem (7-8)** [VIEW UNIT IN STUDIO](#)

[Bookmark this page](#)

**Problem 7**  
1.0 point possible (graded)

The twin prime pairs between 50 and 100 are (A, B) and (C, D). Write a prime number in each of the blanks in ascending order.

A:

B:

C:



  

(イメージは KyotoUx 004x:  
Fun with Prime Numbers:  
Mysterious World of  
Mathematics より)

# 発展的な課題①：Drag and Drop Problem

Drag and Drop problem:  
テキストや画像をドラッグして正しい位置に配置する課題です。

Week 7 > Problems 7-8 > Problem 8 - Peptide Synthesis Reaction

< Previous   Next >

## Problem 8 - Peptide Synthesis Reaction

[Bookmark this page](#)

### Problem 8

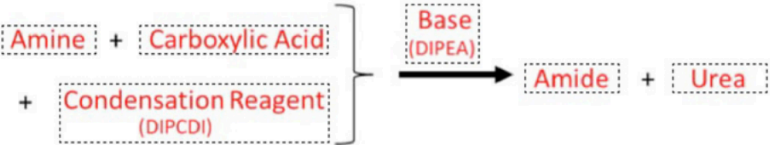
5.0 points possible (graded)

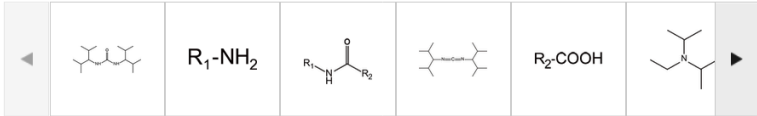
### PEPTIDE SYNTHESIS REACTION

Drag each chemical structure to their corresponding name to complete the formation of an amide bond.

(R<sub>1</sub> corresponds to the first amino acid side chain while R<sub>2</sub> corresponds to the second amino acid side chain)

Amine + Carboxylic Acid  
+ Condensation Reagent (DIPCDI) } Base (DIPEA) → Amide + Urea





Submit You have used 0 of 2 attempts

*\*After answering the problem, click "Save" first then click "Final Check" to have your score computerized.*

(イメージは KyotoUx 001x:  
Chemistry of Life より)

## 発展的な課題②：Molecular Editor

### Molecular Editor:

化学式を描くことができるツールです。化学的に存在しない、もしくは不安定な構造を描画することもできますが、化学的に不可能な構造を回答として提出しようとすると、注意（警告）が入ります。

#### HOMEWORK 2: IDEA FOR A RESEARCH PROJECT

0 point possible (ungraded)

Based on the content of the lectures, come up with your own idea about new ways to use amino acids, proteins, small molecules or fluorescence and illustrate your idea with diagrams as follows:

**STEP 1:** Use **Molecular Editor** to draw a chemical structure (optional)

**STEP 2:** Use the provided drawing tool to illustrate your idea (mandatory)

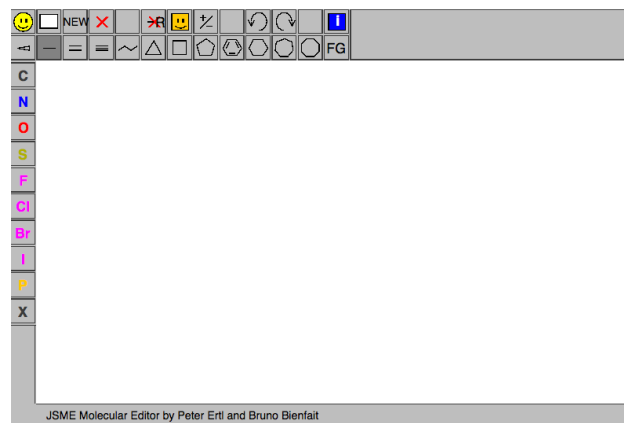
**STEP 3:** Save your homework image as a JPEG or PNG file

**STEP 4:** Submit your image file (next page)

#### STEP 1: DRAWING OF A CHEMICAL STRUCTURE (Optional)

If needed for your idea, draw a chemical structure in the window below using **Molecular Editor** (optional). You can find a tutorial about how to draw and edit molecules [here](#).

#### Molecular Editor



Transfer from editor

(イメージは KyotoUx 001x:  
Chemistry of Life より)

# 発展的な課題③：Peer Assessment

## Peer Assessment:

記述による回答の提出後、匿名化された他の学習者の回答の評価が課せられる課題です。ピアアセスメントのステップ（下図参照）では、与えられたルーブリックによる評価だけでなく、コメント等を残すことも可能です。

2 Assess Peers ✓ COMPLETE (3)

Read and assess the following response from one of your peers.

The question for this section

Question: Take a position on the issue of physical or mental enhancement with use of medicine, and make a case for or against it. You are expected to support your claim with convincing arguments and also consider possible counterarguments to your viewpoint. Your Response should contain approximately 500 words.

NOTE: There will be a great diversity of opinions about enhancement depending on cultural, ethnic, religious, and philosophical points of view. Please respect that diversity and your peers' opinions.

Your peer's response to the question above

My view is that a specific group of people can be used without a strong stimulus of physical or mental enhancement with use of medicine. For example, science and technology workers. As professor Kodama said, "if the scientific research to provide such items, you can accelerate the achievement of excellent results, and for the benefit of the whole society. Some people may be in doubt, why scientists can get such privileges and other people can not. My judgment is based on the size of the contribution to society and the whole human being. The beneficial achievements made by the scientific and technological workers will play a powerful role in promoting the development of the whole human being. The object of its service is the present and future of the whole mankind. Athletes and other individuals or groups that do not have a special meaning and nature, they want to achieve more breakthroughs and achievements is to break the shackles of the existing body, but does not have a more profound meaning. This willingness to make them do not have the right of physical or mental enhancement with use of medicine. The above statement is my idea. Of course, these ideas need to be improved. Welcome everyone and I do a lot of useful discussion."

**SAMPLE**

▼ (A) Does the author make his/her claim clear enough?

Poor 1 POINTS

Good 3 POINTS

excellent 5 POINTS

(イメージは KyotoUx 006x: Ethics in Life Sciences and Healthcare: Exploring Bioethics through Manga (2016, 1st Round) より)