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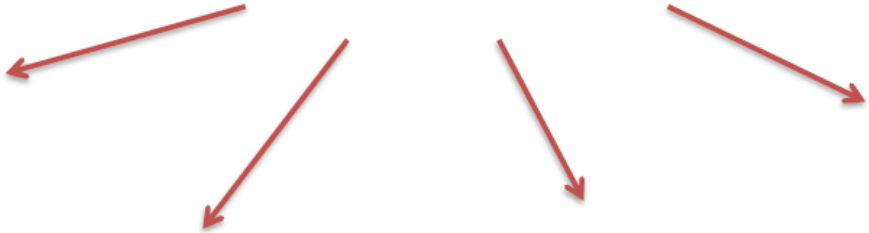
Proteins for healthy and sustainable food
ProFood



Institutions

- Increasing collaboration for digital learning
- Harmonization of practices at the EU level
- More efficient use of pedagogical skills & ressources
- More visibility of our departments/ Attractivity
- Participation to the EU food transition strategy « from Farm to Fork »

Students

- New skills
- Suitability for positions on protein processing
- Patricipation to the food transition

Food compagnies & organizations

- Scientific knowledge availability
- Competent food science graduates
- Plant Protein development (2/5 food industry have now teams dedicated to)

Consumers

- Accurate informations about protein-based food
- Sharing requests & expectations (students projects)

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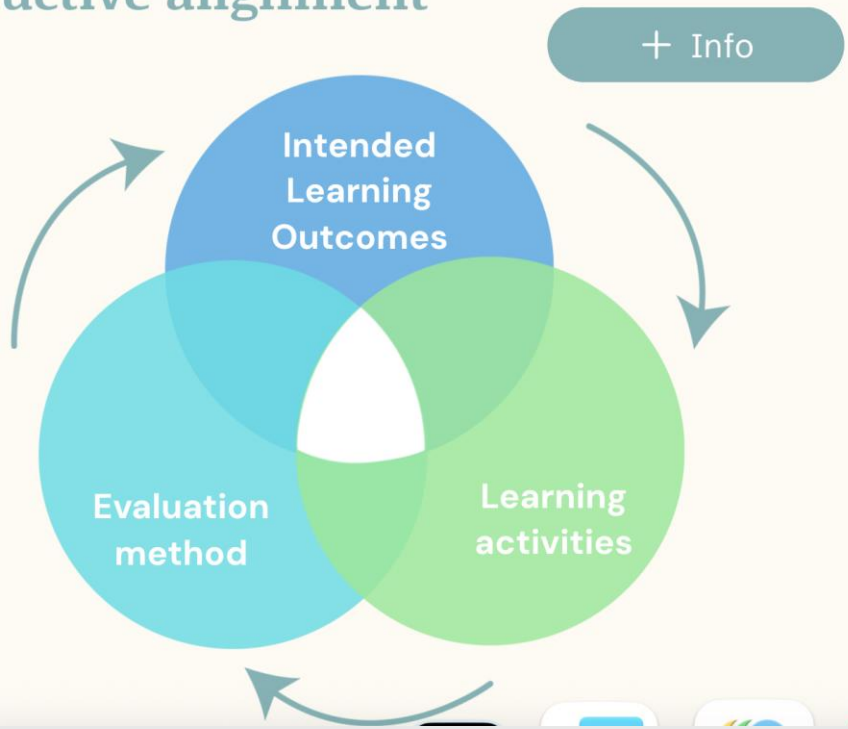
1. COURSE STRUCTURE

Constructive alignment



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PART 1

1. The course

Proteins for healthy and sustainable food

As part of the European project PROFOOD, we designed and developed an online course on the Moodle platform.

The course consists of 3 chapters, each presented in the form of Books to enable linear navigation through resources, consistent with the course structure (18 videos in total).

Course tested by about 20 first-year Master's students in Food Science at Polytech.

Link:

https://moodle-sciences-24.sorbonne-universite.fr/course/view.php?id=3971#section-2

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Part I: course

2. Moodle 4U+ Platform

Quiz, Peer Evaluation

Book, Lesson

Interactive Video

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topic of the course

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Table1. Main topic repartition between participants from the partners institutions.

Name	Main topic
Polytech Sorbonne	
Hayat Bouteau	Seed proteins & quality
Patrice Meimoun	Plant protein biochemistry
Evelyne Téoulé	Breeding for better yield and better quality
Pierre Crozet	Metabolic ingeneering for protein synthesis
Jérôme Lamoine	industrialization processes
Jean Pierre Grill	Relationship between diet and microbiota
Agroparistech	
Loïc Rajjou	Plant production systems & protein quality
Loïc Lepiniec	Seed filling
1 lecturer (recruiting in progress for 09/2022)	Plant metabolism & protein quality
Milano University	
Alessio Scarafoni	Purification and molecular characterization of plant proteins
Patrizia Riso	Nutritional characteristics of plant proteins and their contribution in the definition of plant based dietary patterns
Stefania Iametti	Protein structural modifications induced by various physical and/or biotechnological process
Copenhagen University	
Poul Erik Jensen	Biochemistry, processing and functionality of plant proteins for food
Hanne Frøkiær	Proteins & immunity

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PART II activities of students

1. Peer-review workshop (Moodle Workshop activity)

Students submit a short assignment (e.g. a project idea, case study, or data interpretation).

They then review and evaluate peers' work using a multi-criteria form defined by teachers.

Students receive two grades: one for their submission and one for the quality of their peer review.

2. Thematic discussion forums

Create forums for each chapter for exemple where students post:

- what they learned,
- what surprised them,
- or a question for their peers.

Teachers can summarize key takeaways at the end.

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PART III activities of the students

3. Case study analysis (in small groups)

Groups work on a real-world case.

They submit a short report or presentation and compare their approaches.

4. Article presentation

Each group selects a research article related to plant proteins.

They prepare a short video or slide presentation summarizing the study and its implications.

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3. Feedback Collection Methods

Students

1. Student Questionnaire

Objective: Gather general and detailed feedback on both content and format.

Type: Quantitative with a few open-ended questions.

2. Qualitative Student Interview

Objective: Complement the quantitative feedback with more nuanced insights.

Type: A committed student who completed the full course.

+ info

Teachers

1. Questionnaire for Course Designers (Teachers)

Objective: Gather insights on the course design process, tools used, and any challenges encountered.

2. Questionnaire for Non-Designer Teachers

Objective: Get an external perspective on the pedagogical coherence and usefulness of the course.

+ info

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PART IV

Valutazione con voto…../30

4 CFU altre attività didattiche

Referent:

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