

# Team



## Foodprint



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# From start to idea

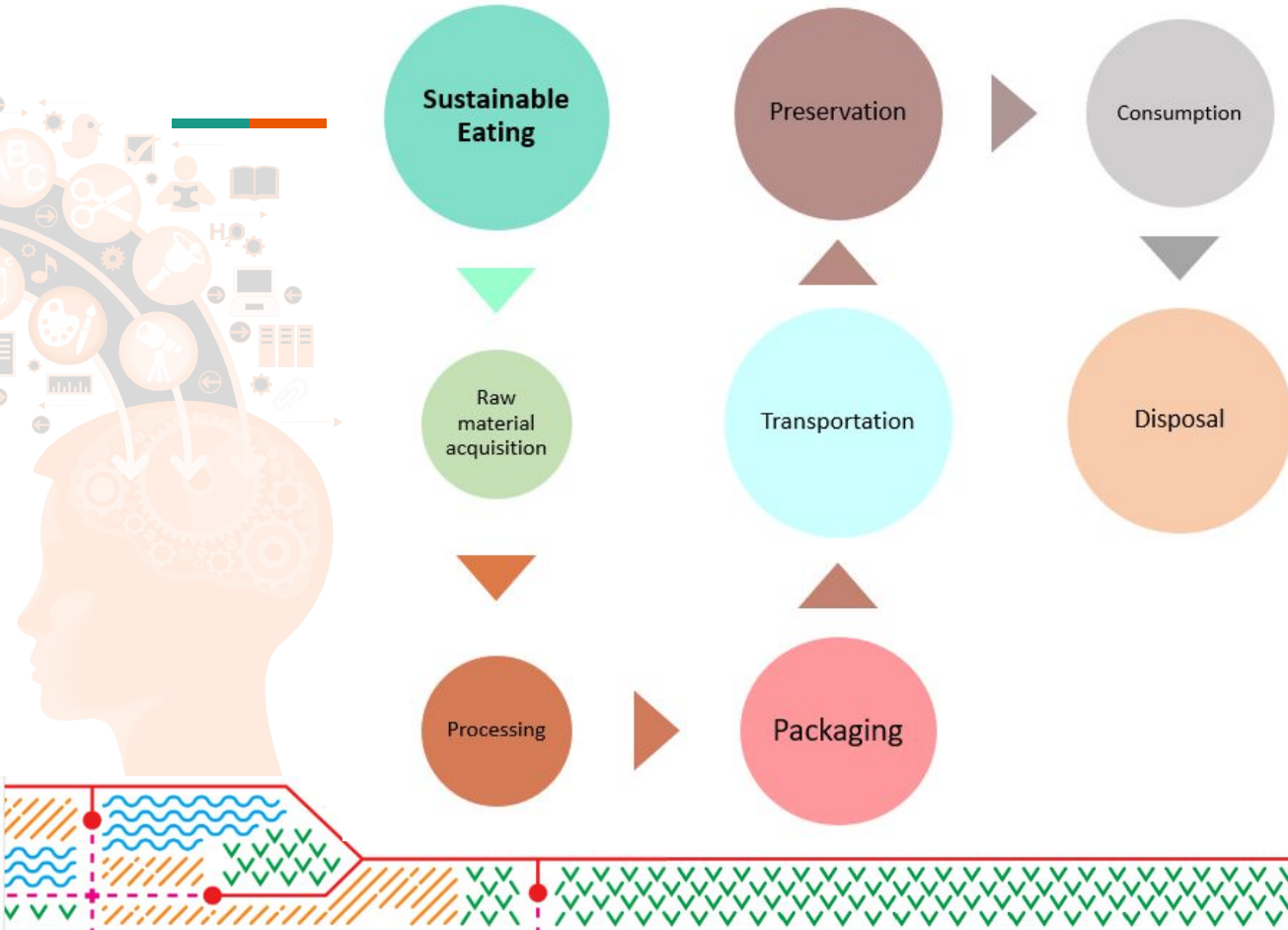
The challenge we got:

Consider, in **different contexts**, how the **food issue** on **campus** can affect **climate change**.  
Is it important **what we eat**, **where** our food comes from, **how it gets** to us, how much of it is **wasted** and how it's **made**?

**Construct your research problem and design a solution.**

Image: [https://www.vhv.rs/viewpic/hbJJhxi\\_knowledge-economy-clipart-png-download-transparent-knowledge-png/](https://www.vhv.rs/viewpic/hbJJhxi_knowledge-economy-clipart-png-download-transparent-knowledge-png/) (used on page 2-9)

# But what is sustainable eating?



We consider it as these steps!

Source: Research Developments in Methods to Reduce the Carbon Footprint of the Food System: A Review  
<https://doi.org/10.1080/10408398.2013.821593>

We then brainstormed ideas regarding the challenge as seen below:

**CLIMATE CHALLENGE FOOD!!!**

Consider, in **different contexts**, how the **food issue on campus** can affect climate change. It is important **what we eat**, **where our food comes from**, **how it gets** to us, how much of it is **wasted** and **how it's made!**

Construct your research problem and design a solution.

Some basic facts:

- In the EU, around **98 million tons of food waste** are generated **annually** (with associated costs estimated at 143 billion euros (173 kg food waste per capita per year);
- About **6%-8%** of all human-caused **greenhouse gas emissions** could be reduced if we stop **wasting food**;
- Each year, we waste 1.3 gigatons of edible food and this releases 3.3 gigatons of CO<sub>2</sub>e;
- 1kg of food waste equals to 2.5 kg of CO<sub>2</sub>e;
- Farm animals (bred for meat) account for between 20% and 30% of global greenhouse gas (GHG) emissions;
- Cars, vans, trucks and buses** account for more than **70%** of total greenhouse gas emissions from transport, a significant part of road transport is related to the transport of food; **the longer your food travels, the greater your food miles will be**; in example, a tomato coming to Poland from Spain travels on average 2,289 km.

ENHANCE

UNIVERSITY OF WÜRZBURG

#### CLIMATE CHANGE

- Direct pollution by plastics
- Emissions of GHGs by transports and manufacturing
- The production of different foods
- How one campus is run affects how others are run
- How we use green areas affect the biosphere

#### HOW IT GETS

- Different means of transportation, airplanes, cargo ships... (long distance)

- Multicultural kitchens makes up a good kitchen, since everyone has different experience
  - Do we have this?
- Education and targets for the kitchens are important!!!!

- No money to buy food
- Supply issues by season
- Packaging by eating out

#### CAMPUS

- Around 35,000 people on campus
- It is in the middle of the city

- The meals might not be balanced by the "plate model"
- To much of some parts?
- Calorie info

#### WHERE

- From different regions in Poland
- From outskirts of the cities
- Imported from other countries
- -> Maybe add a number for how much of the ingredients are from Poland so the user knows this.

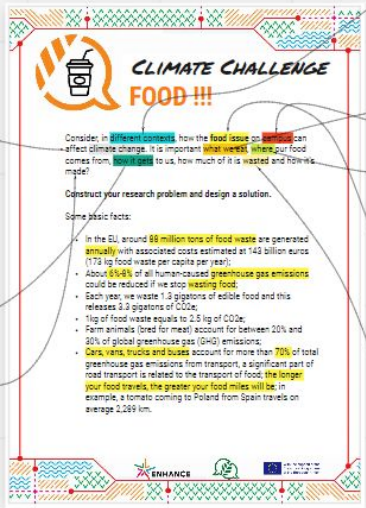
- **Water is not considered food here, since it's a different topic**
- Is it not enough food?
- Is the food too far away for transportation?
- Is the food dangerous to eat?
- Does the demand affect the supply of different foods?
- How do the stakeholders affect the process of food?
- How do they preserve and store food?
- Is the food supply calculated by demand? (Supply demand chain)
- How does consuming processed and non-organic food contribute to climate change?
- How does diet and habit affect the change?
- How are allergies and intolerance catered to?

#### We need to consider:

- Meat is in the culture, so it's a hard thing to change
- We have limited control for the university
- Multicultural diversity makes it hard for all to agree on what to eat

#### WASTE

- Have no time to finish the food
- Too big plates (from the server)
- Doesn't taste good
- Takes to much food (by the taker)
- In the process in making the food, much may go to waste (not using everything)



**CLIMATE CHANGE**

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**DIFFERENT CONTEXTS**

- No money to buy food
- Supply issues by season
- Packaging by eating out

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Our three main topics

- Problems of food transportation
- Unsustainable choices of food
- Food wastage

Conclusions →

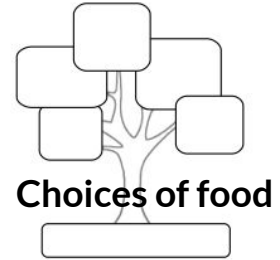
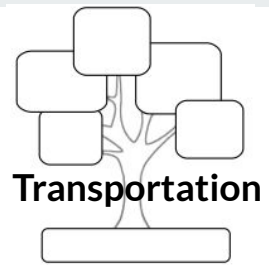
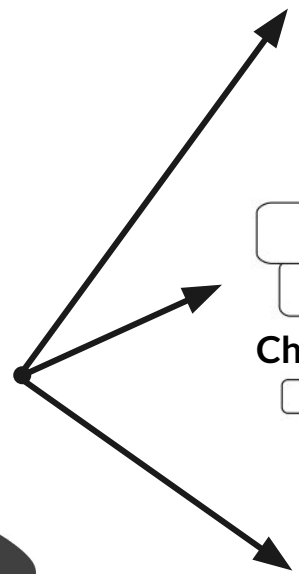
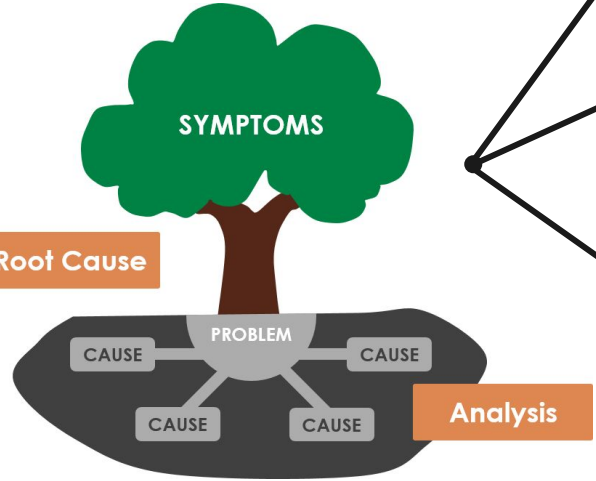




# From start to idea

For each problem, we did this kind of analysis ...

Our three main problems



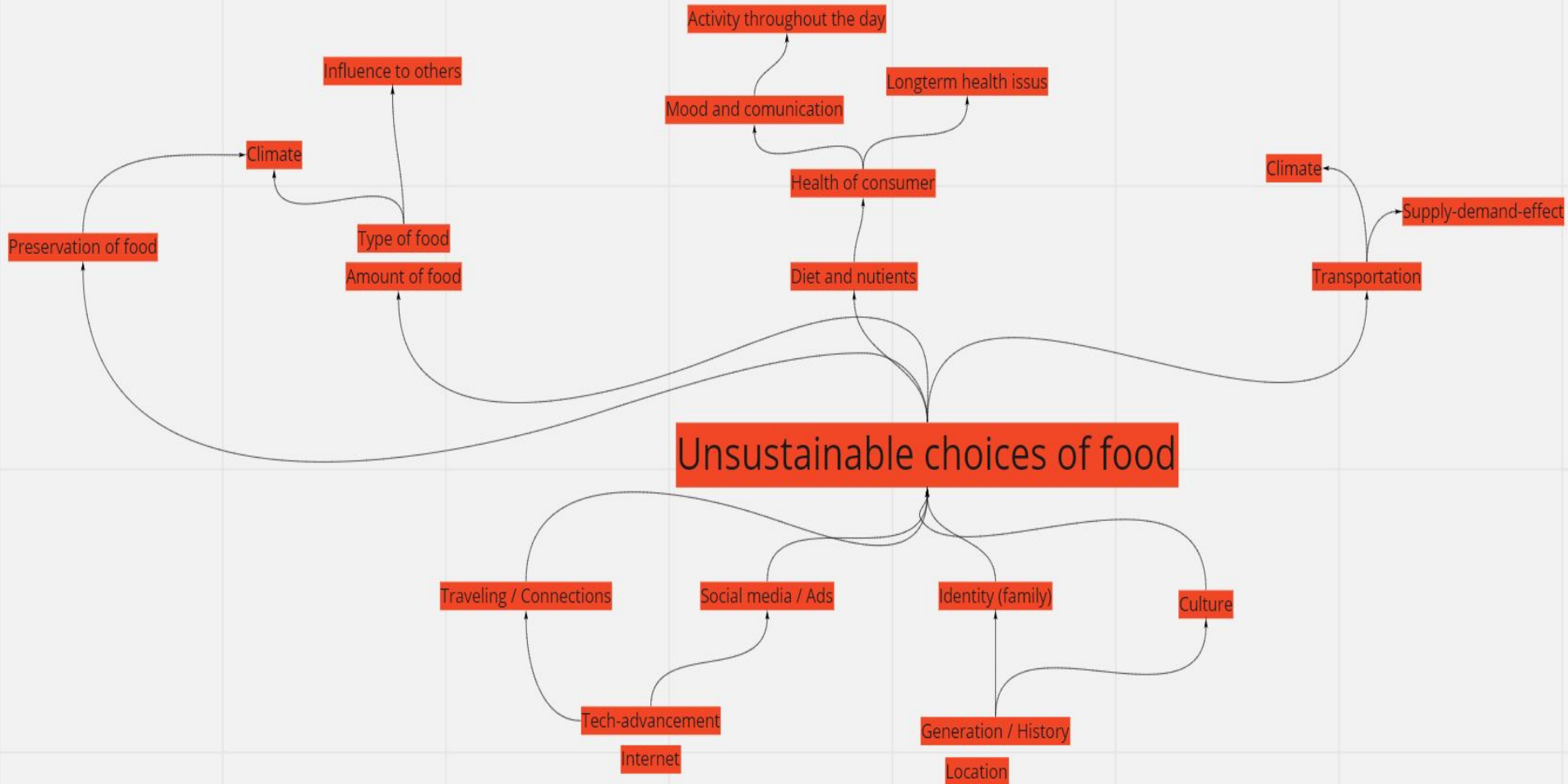
Our one main problem

- Problems of food transportation
- **Unsustainable choices of food**
- Food waste

... and ended up choosing or ONE main topic for this project

Image: <https://online.visual-paradigm.com/knowledge/root-cause-analysis/how-to-use-five-whys-tree-diagram/>

# Unsustainable choices of food (Main option)



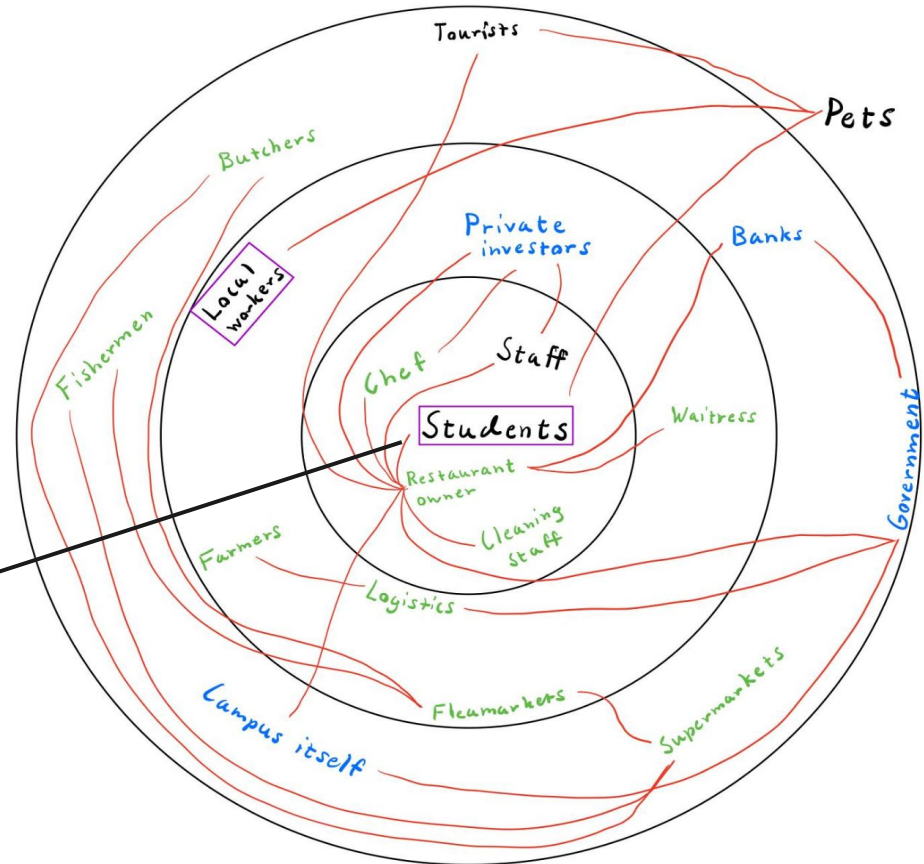


# From start to idea

- INVESTORS
- EMPLOYES
- CUSTOMERS
- COMMUNITIES
- SUPPLIERS

After choosing our one main topic, we did a stakeholder map to locate the main stakeholders of the project:

NR. 1: **STUDENTS**







## From start to idea

The *How Might We* (HMW) technique ...

How might we **ACT** to **CHANGE**  
**SOMETHING** for **WHOM**.

Now we wanted one main question to focus on, so we used HMW- technique



For us, HMW became:

How might we **INFLUENCE**  
**STUDENTS** to **CHANGE**  
**Their FOOD HABITS** to **Be**  
more **SUSTAINABLE**?





# From start to idea

Brainstorming solutions to our HMW-question:

1. Individual brainstorming of solutions for some minutes
2. Presentation of our ideas to the group
3. Clustering the similar ideas together, which got us the following topics:
  - Change through *education system*
  - Change through *marketing*
  - Change through *the lunch system*
  - Change through *statistics*
  - *Some Crazy ideas*

Group  
Voting

**Education system**

How might we **INFLUENCE**  
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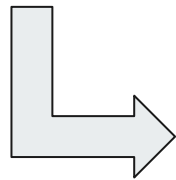


## From start to idea

We had some speed bumps after choosing our solution *EDUCATION SYSTEM*:

- Obstacles of the different approaches of this problem
- Going back and redoing some points
- Different opinions within the group

But we managed to get our thoughts together and came up with the following solution:



University course called *Foodprint*





**SOLUTION**

***Foodprint***



# Solution *Foodprint*



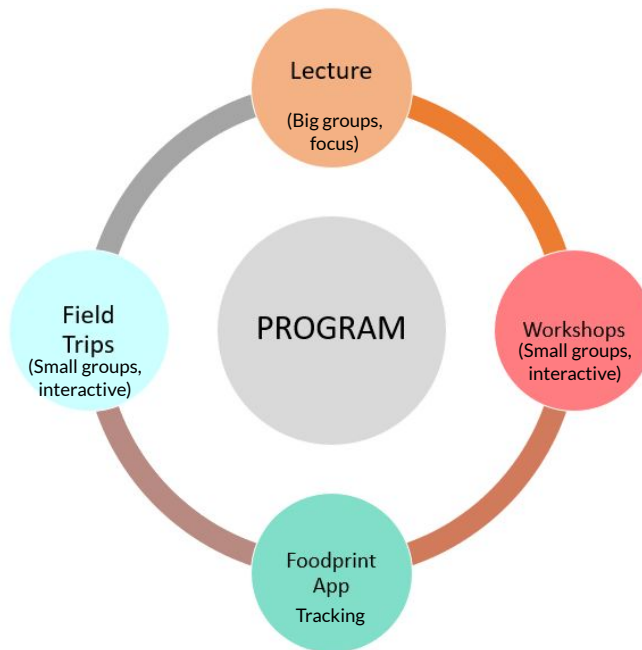
Source: <https://www.flickr.com/photos/psulibscollections/33002738884/in/photostream/>

## 3 Main Actions

- Lectures (Educate)
- Workshops (Practice)
- Field Trips (Practice)
- Foodprint App (Tracking and monitoring tool for program)



Source: <https://www.vecteezy.com/free-vector/tree-planting>



Self created



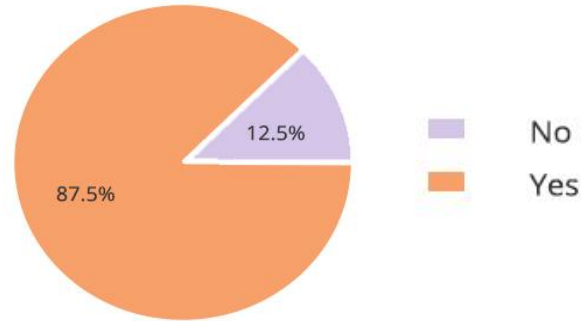


# Testing and Feedback

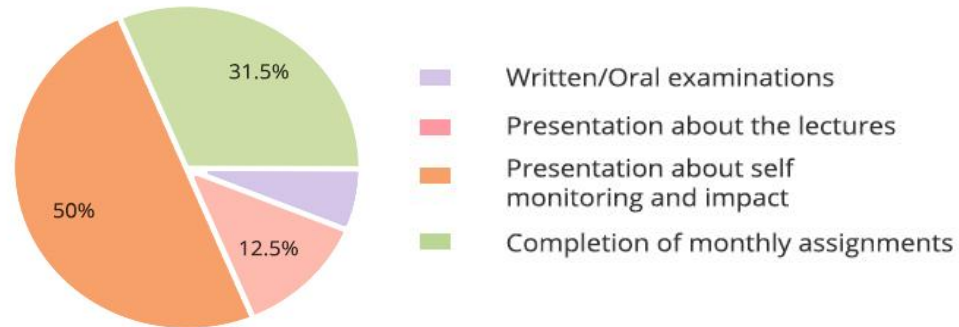
Based on studies and a survey, we decided to implement certain decisions.

The most important questions were as followed.

*Would this course improve your food habits?*



*How would you like to be examined?*

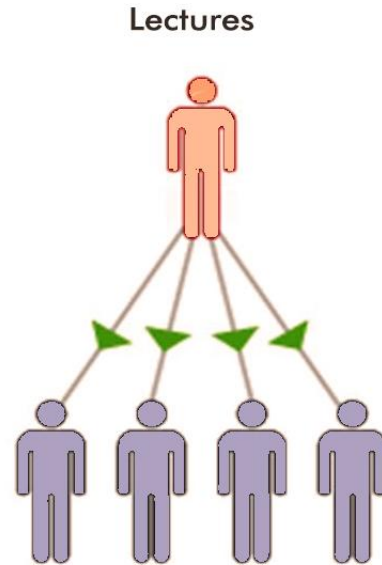




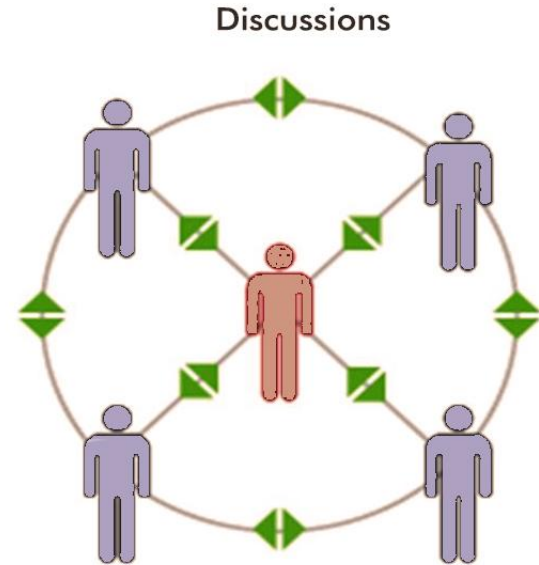
Different methods of teaching would be required to cater to the audience.

# Education

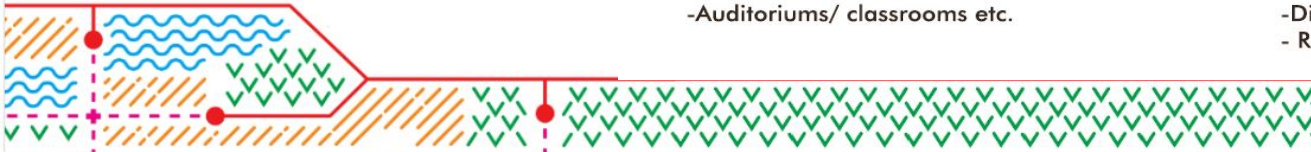
For the course, a hybrid model of teaching was selected



**Teacher oriented**  
-Auditoriums/ classrooms etc.

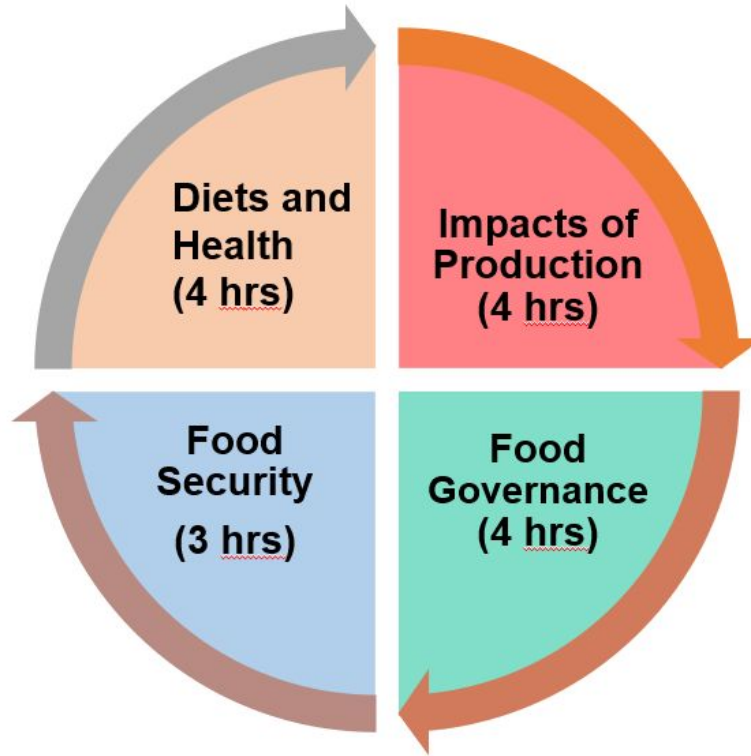


**Student based**  
-Discussion rooms, non-barrier platforms  
- Requires an additional facilitator





# The course



## Effort- 35 Hours total (1 year)

- 11 Hours- Lecture
- 8 Hours- Field trip
- 6 Hours- Workshops
- 10 Hours- Final Presentation & Report







# Syllabus



- **Diets and Health (4 Hrs)**
  - Changing food cultures
  - Diets for personal and planetary health
  - The drivers of eating behavior
  - Sustainable eating
- **Impacts of Production (4 hrs)**
  - Crop production
  - Over-fishing and fisheries
  - Livestock farming and the environment
  - Transportation
- **Food Security (3 Hrs)**
  - Adapting to climate change
  - Novel technologies
  - Reducing wastage
- **Food Governance (4 Hrs)**
  - Empowering farmers and smallholders





# The Course arrangement

Different types of assignments can be handed out for tracking and monitoring impact and improvement.

1. Daily assignments : Tracking of food habits (Through application)
2. Monthly assignments : Based on the topics taught. Can be group works, and further studies to compare change in habits.
3. Counselling and discussions for better performances and formation of habit.

Incentives and gamification may improve the performances.



Source:<https://thimpress.com/product/assignments-add-on-for-learnpress/>





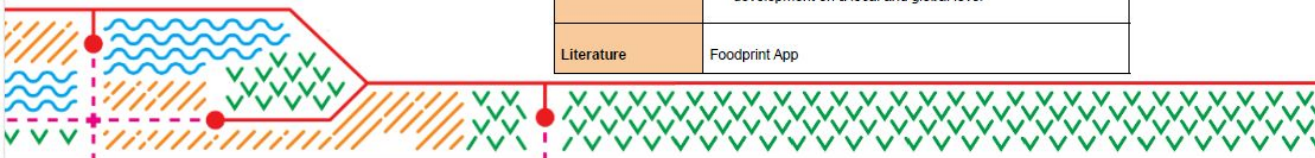
# Course Description Prototype



Course name	Foodprint
Language	English, polish
Credit points	2,0
Effort	35-40 hrs
Examiner	-
Cognizance	Basic competence for basic level
Purpose	The course is mostly intended to raise awareness in students on the ecological impact of food production, transportation, consumption & disposal and to influence them to change their mindset and eating habits to be more sustainable
Content	The course contains: <ul style="list-style-type: none"> <li>- Basic systems thinking (bases of the earth system)</li> <li>- Natural and human-caused changes, such as ozone depletion, greenhouse gas emissions, deteriorating air quality and the extraction of natural resources</li> <li>- Food systems impact on the climate, like acquisition, processing, packaging, transportation</li> <li>- End customer options to affect the sustainability (food preservation, final consumption, final disposal)</li> </ul>
Learning outcomes	After the course the student shall know: <ul style="list-style-type: none"> <li>- Natural climate effects and human-caused changes and give such examples</li> <li>- How food systems affect the environment on a global and local level</li> <li>- How and why the end customer can affect the environmental development on a local and global level</li> </ul>
Literature	Foodprint App

Organization	<ul style="list-style-type: none"> <li>- Lectures</li> <li>- Workshops</li> <li>- Assignments (self-monitoring of food habit and studying of the topics)</li> </ul>																
Examination arrangements	<p>Examination arrangement: Assignments</p> <p>Grade: Letters</p> <table border="1"> <thead> <tr> <th>Evaluation</th> <th>Weighting</th> <th>Duration</th> <th>Examination aids</th> </tr> </thead> <tbody> <tr> <td>Attendance</td> <td>5/10</td> <td></td> <td></td> </tr> <tr> <td>Assignments</td> <td>3/10</td> <td></td> <td></td> </tr> <tr> <td>Final Presentation</td> <td>2/10</td> <td></td> <td></td> </tr> </tbody> </table>	Evaluation	Weighting	Duration	Examination aids	Attendance	5/10			Assignments	3/10			Final Presentation	2/10		
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We looked into different universities and their coursework.

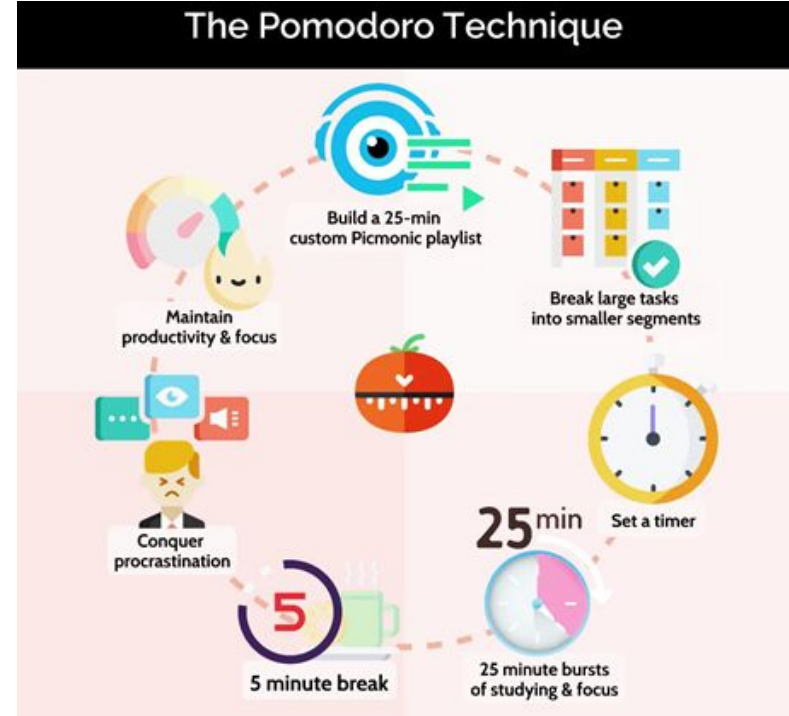




# Lectures

In order to ensure focus, the **pomodoro technique** is used- The lectures should be divided into **shorter** periods of :

25 min-interactive session-10 min-break-25 min-5 min break-25 min session (Pomodoro)



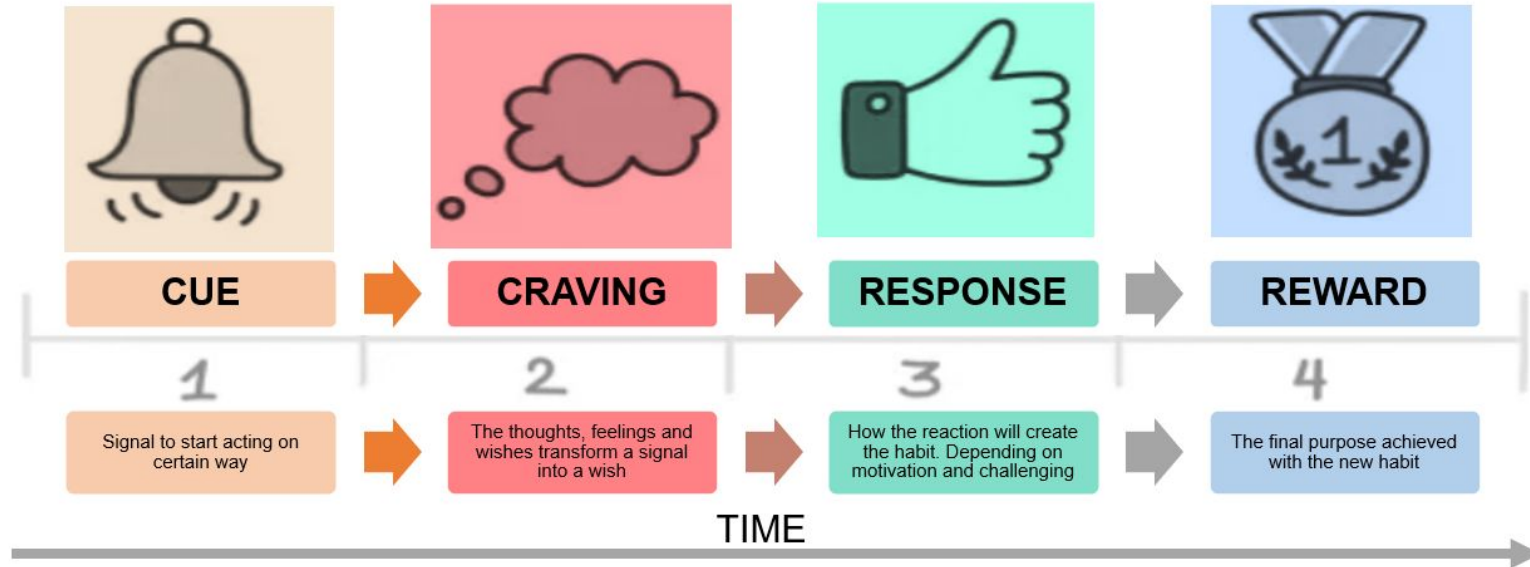
Source:<https://www.picmonic.com/pages/the-pomodoro-technique/>





# Habits

By creating a habit, we will improve chances that the students will continue with the program after the course it's completed. The 4 steps to create a habit will be **integrated** into the **learning program** and like this the chances of the students continue with this as a "lifestyle" increases.



Atomic Habits by James Clear

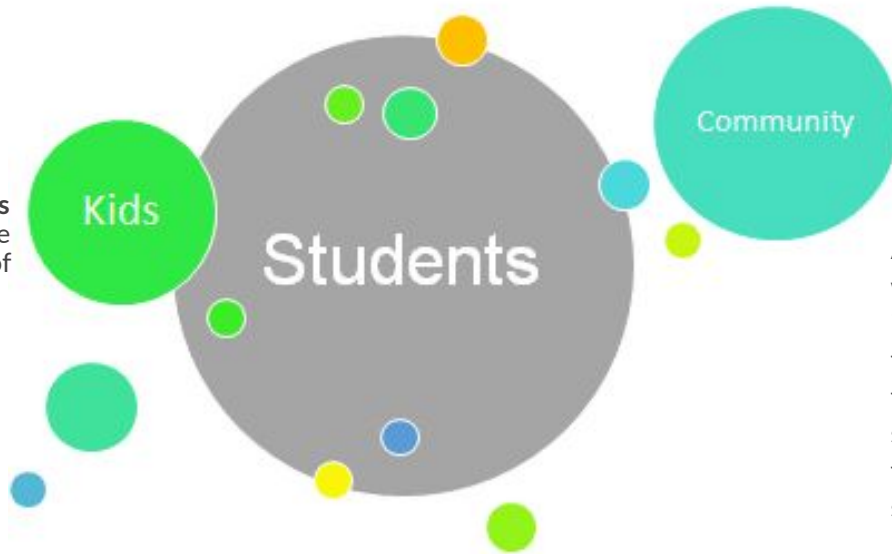




How might we **INFLUENCE MORE PEOPLE** to **CHANGE Their FOOD HABITS** to  
**Be more SUSTAINABLE?**

## Kids

Initiate similar concepts for **primary schools and kindergartens**. This might help to influence the **parents** also, and develop an early habit of choosing sustainable eating among the kids.



## Community

A monthly open door day at Campus where all the **surrounding community** is invited and will receive lectures from professionals, students and farmers about how to eat more sustainable. This can also be organized for **MNCs and other offices**, and supported by the in-house canteens.





# *Foodprint App.*

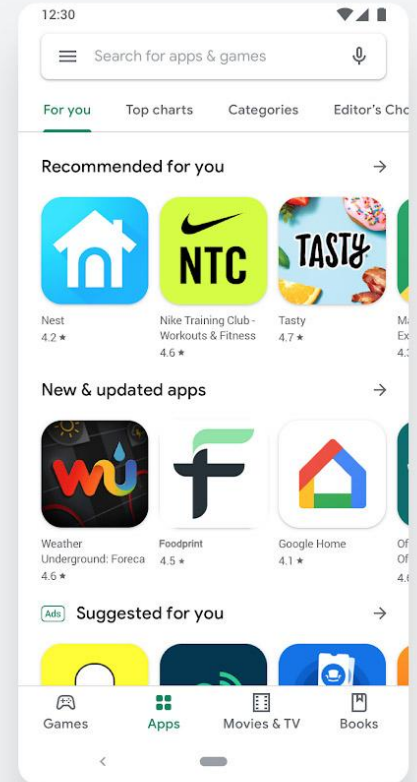


# Foodprint App



+

**Warsaw University  
of Technology**



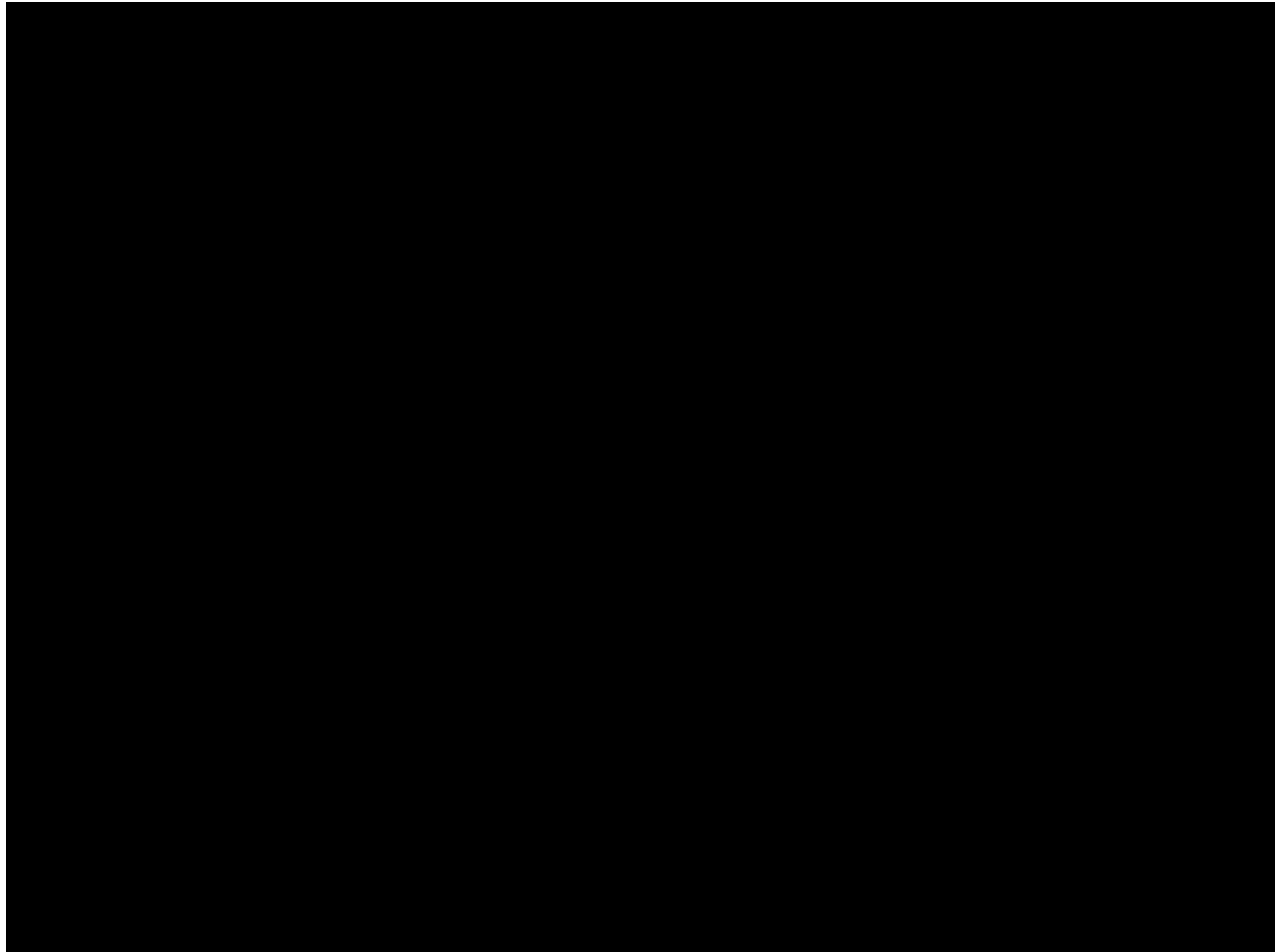




## Video of User Interface



This is the main **tool** for **self monitoring** in the course:





## 5 PARTS of the App

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Home

Stats

Scan

Suggestions

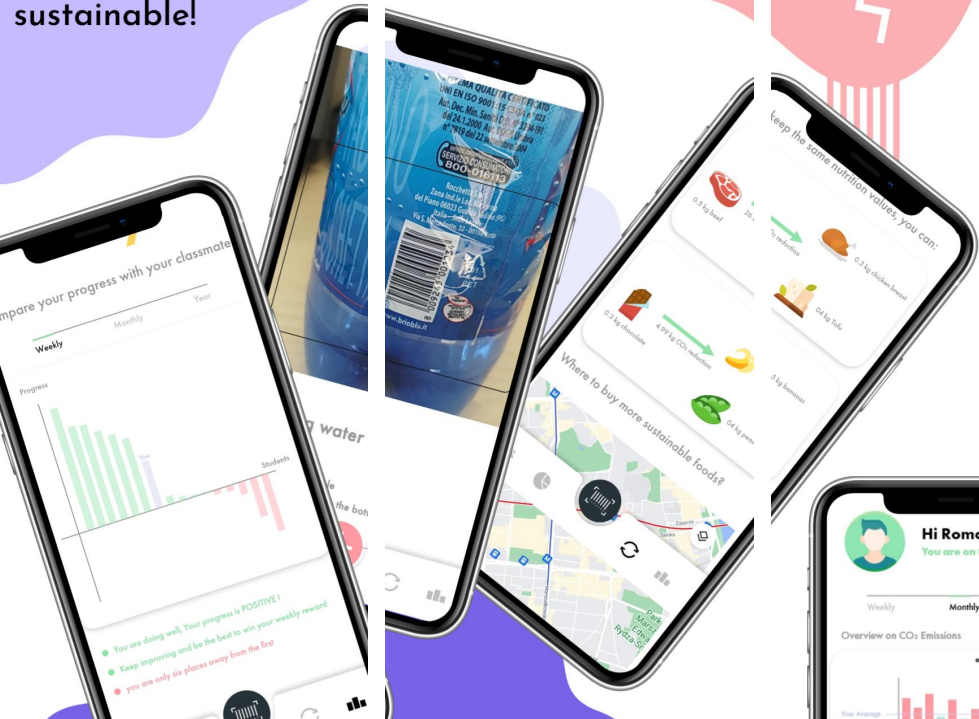
**Comparisons**



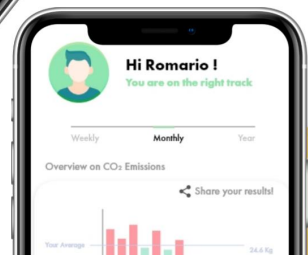
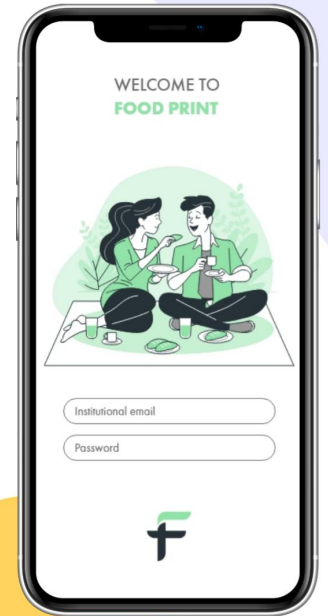


# Overview

Change your food habits to be more sustainable!



## Foodprint





“If you are planning for a year, **sow rice**; if you are planning for a decade, **plant trees**; if you are planning for a lifetime, **educate people.**”

- Chinese Proverb





# Now...

How might **YOU** improve your food habits to be more **sustainable**?



Let's start by approving **FOODPRINT**



*THANK YOU for your attention!  
Take care of the climate!*



Summer School 2021  
**'GREEN CAMPUS'**  
WARSAW 2021



**ENHANCE**

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With the support of the  
Erasmus+ Programme  
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