

# Erasmus+ Moby Dig Transnational course in Biomaterials and Chemistry

Agenda	Topics	Who
1. Introduction	General introduction to the MobyDig project	
	Introduction of participants	Everyone (teachers and participants) introduce themselves with a few sentences
2. Modules (content, structure, tools)	Basic chemistry (CANVAS, calendar function, quiz, discussion board)	Julian
	Organic chemistry, Peerwise	Matti, Johanna
	Biomaterials	Linn
3. ISP	Karlsruhe	Julian
	Sweden	Linn
	Finland	Matti, Johanna
4. Other things		









# Online course – Part II Organic chemistry



## **Online course teachers**

## Dr. Johanna Kärkkäinen



Dr. Matti Niemelä

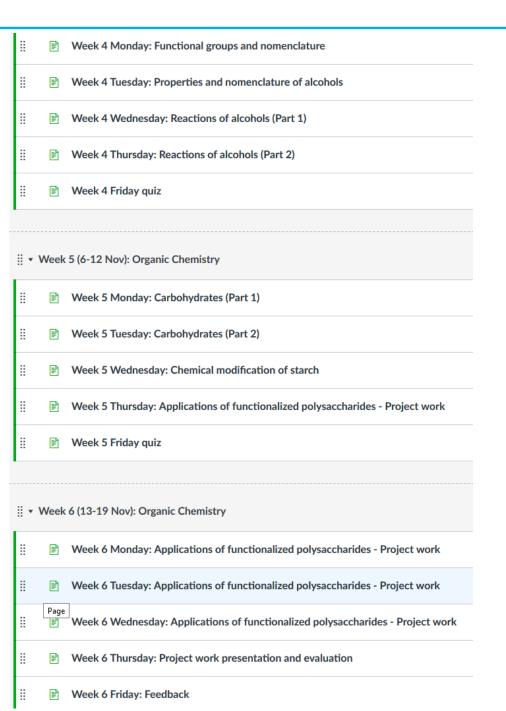






## Organic chemistry online module

- Introduction to organic chemistry
- Nomenclature of organic compounds, especially alcohols and phenols
- Basic reactions of organic compounds, especially alcohols and phenols
- Applications of functionalized polysaccharides





## Organic chemistry online module

29.10-18.11

## **Learning techniques**

Daily handouts and exercises, videos, examples, PeerWise questions, groupwork, Friday quizzes

### **Tools**

Peerwise Padlet Zoom

## **Evaluation**

Pass/Fail

#### Video Lectures

Alcohol properties (Khan Academy) ≥





How to draw an abbreviated structural formula for ethanol ₽

#### **Exercises**



Properties and nomenclature of alcohols

#### Student-generated questions

Create a question in PeerWise ≥ that covers some of yesterday's and today's content.

Answer another students question as well!

Logon instructions

#### Discussion





## Organic chemistry - PeerWise instructions

This term we will be using PeerWise as a place for you to create, share and evaluate assessment questions with your classmates. Start by visiting PeerWise here:

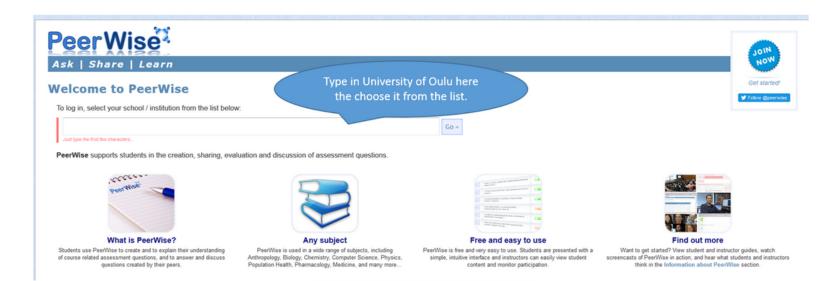
#### https://peerwise.cs.auckland.ac.nz/ 2

If you have not used PeerWise before, just click the "Registration" link and follow the prompts. All you need to do is choose a user name and a password for your PeerWise account.

If you have used PeerWise before, simply log in and then select "Join course" from the Home menu.

To access our course, "TCBC module 2 Organic chemistry", you will need to enter two pieces of information:

- 1) Course ID = 15975
- 2) Identifier = Please enter your identifier for this course (Your identifier is your email address e.g. johanna.karkkainen@oulu.fi)



**PeerWise** 



## ISP - Oulu

Polysaccharides, their structure characterization and their utilization in some applications



#### Friday 11.1 Welcome

Introduction to chemistry research and ISP

### **Saturday 12.1 – Social program**

- Social program: City of Oulu
- Video meeting with the other ISP participants

**Sunday 13.1 - Social program** 

Monday 14.1 - Lab day

**Tuesday 15.1 - Lab day** 

Wednesday 16.1 – Social program

Visit to local chemistry companies for chemistry students and exchange students

Thursday 17.1 - Lab day

Friday 18.1 - Lab day

Saturday 19.1 – Conclusions, feedback and social program

**Sunday 20.1 - Social Program** 

# **OULU - ISP ORGANIC CHEMISTRY**

- Modification of various biomasses
  - Preparation of cationic biomaterials and levulinic acid with microwave reactor
- Biomaterials in water purification applications
- Introduction to analysis methods such as ICP-OES, HPLC, GC, IR and NMR

