



Central European Institute of Technology
BRNO | CZECH REPUBLIC

Selected topics from contemporary neuroscience

Intro to the organization of the course

Mgr. Martin Jáni,

Mgr. Luboš Brabenec, Mgr. Jakub Kraus, Mgr. Bc. Pavla Linhartová, Ph.D.

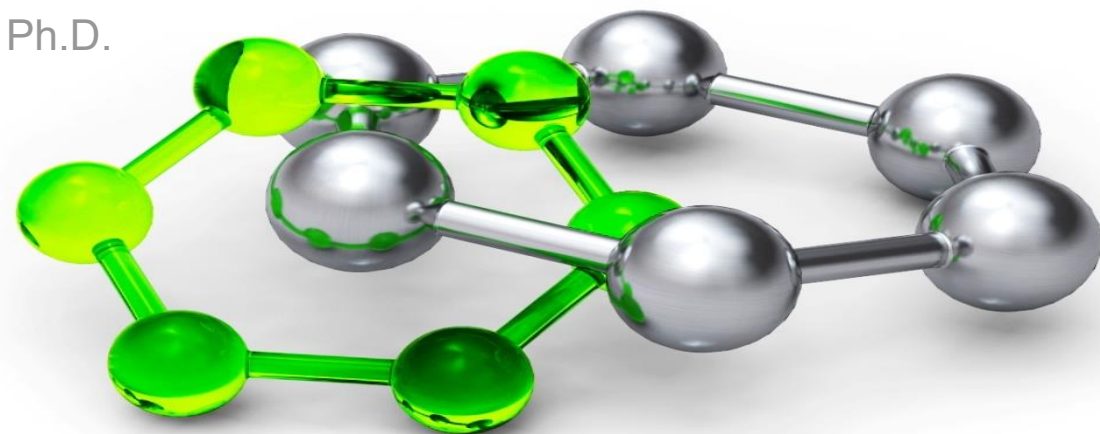
Klára Marečková, Ph.D., M.Sc. Mgr. Kristína Mitterová, Mgr. Monika

Pupíková, Mgr. Lenka Sakálošová, Miguel Salazar Adams, M.Sc.

Mgr. Patrik Šimko, Mgr. Jaroslav Točík



EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND
INVESTING IN YOUR FUTURE



WELCOME!



Lecturers and important people



- doc. Mgr. Lenka Lacinová, Ph.D.: lacinova@fss.muni.cz
- Mgr. Martin Jáni: 217488@mail.muni.cz
- Klára Marečková, Ph.D., M.Sc.: klara.mareckova@ceitec.muni.cz
- Miguel Salazar, M.Sc.: miguel.salazar@ceitec.muni.cz
- Mgr. Pavla Linhartová, Ph.D.: pavla.linhartova@gmail.com
- Mgr. Lenka Sakálošová: lenka.sakalossova@ceitec.muni.cz
- Mgr. Patrik Šimko: patrik.simko@ceitec.muni.cz
- Mgr. Jaroslav Točík: jaroslav.tocik@ceitec.muni.cz
- Mgr. Kristína Mitterová: kristina.mitterova@ceitec.muni.cz
- Mgr. Monika Pupíková: monika.pupikova@ceitec.muni.cz
- Mgr. Luboš Brabenec : lubosbrabenec@seznam.cz
- Mgr. Jakub Kraus: jakub.kraus@mail.muni.cz

Lecturers and important people



- **doc. Mgr. Lenka Lacinová, Ph.D.:** lacinova@fss.muni.cz
- Mgr. Martin Jáni: 217488@mail.muni.cz
- Klára Marečková, Ph.D., M.Sc.: klara.mareckova@ceitec.muni.cz
- Miguel Salazar, M.Sc.: miguel.salazar@ceitec.muni.cz
- Mgr. Pavla Linhartová, Ph.D.: pavla.linhartova@gmail.com
- Mgr. Lenka Sakálošová: lenka.sakalossova@ceitec.muni.cz
- Mgr. Patrik Šimko: patrik.simko@ceitec.muni.cz
- Mgr. Jaroslav Točík: jaroslav.tocik@ceitec.muni.cz
- Mgr. Kristína Mitterová: kristina.mitterova@ceitec.muni.cz
- Mgr. Monika Pupíková: monika.pupikova@ceitec.muni.cz
- Mgr. Luboš Brabenec : lubosbrabenec@seznam.cz
- Mgr. Jakub Kraus: jakub.kraus@mail.muni.cz

Lecturers and important people



- doc. Mgr. Lenka Lacinová, Ph.D.: lacinova@fss.muni.cz
- **Mgr. Martin Jáni: 217488@mail.muni.cz**
- Klára Marečková, Ph.D., M.Sc.: klara.mareckova@ceitec.muni.cz
- Miguel Salazar, M.Sc.: miguel.salazar@ceitec.muni.cz
- Mgr. Pavla Linhartová, Ph.D.: pavla.linhartova@gmail.com
- Mgr. Lenka Sakálošová: lenka.sakalossova@ceitec.muni.cz
- Mgr. Patrik Šimko: patrik.simko@ceitec.muni.cz
- Mgr. Jaroslav Točík: jaroslav.tocik@ceitec.muni.cz
- Mgr. Kristína Mitterová: kristina.mitterova@ceitec.muni.cz
- Mgr. Monika Pupíková: monika.pupikova@ceitec.muni.cz
- Mgr. Luboš Brabenec : lubosbrabenec@seznam.cz
- Mgr. Jakub Kraus: jakub.kraus@mail.muni.cz

- Today

1. **Martin Jáni:** Course introduction
2. **Klára Marečková:** Introduction to Contemporary Neuroscience
3. **Kristína Mitterová:** Cognitive reserve

- 11.10. at 8.00, FSS U43

1. **Klára Marečková**: Biomarkers and underlying mechanisms of psychiatric diseases
2. **Jakub Kraus**: Neurobiology of attachment
3. **Miguel Salazar** : Exploring communication in neuroscience

- 1.11. at 8.00, CEITEC

- 1. **Lenka Sakálošová:** Research methods in neuroscience
- 2. **Lenka Sakálošová:** Magnetic resonance imaging
- 3. **Luboš Brabenec:** Repetitive transcranial magnetic stimulation
- 4. EEG, TMS & MRI demonstrations

- University Campus at Brno-Bohunice, building A35, **room TBA**
buses 50, 60, 61, E56, trolleybuses 25, 37
bus stop Univerzitní kampus

V okolí kruhového objezdu stojí linky trolejbusu č. 25 a 37 nebo bus č. 50, 60, 61, 69, 82
Zastávky- **Univerzitní kampus.**

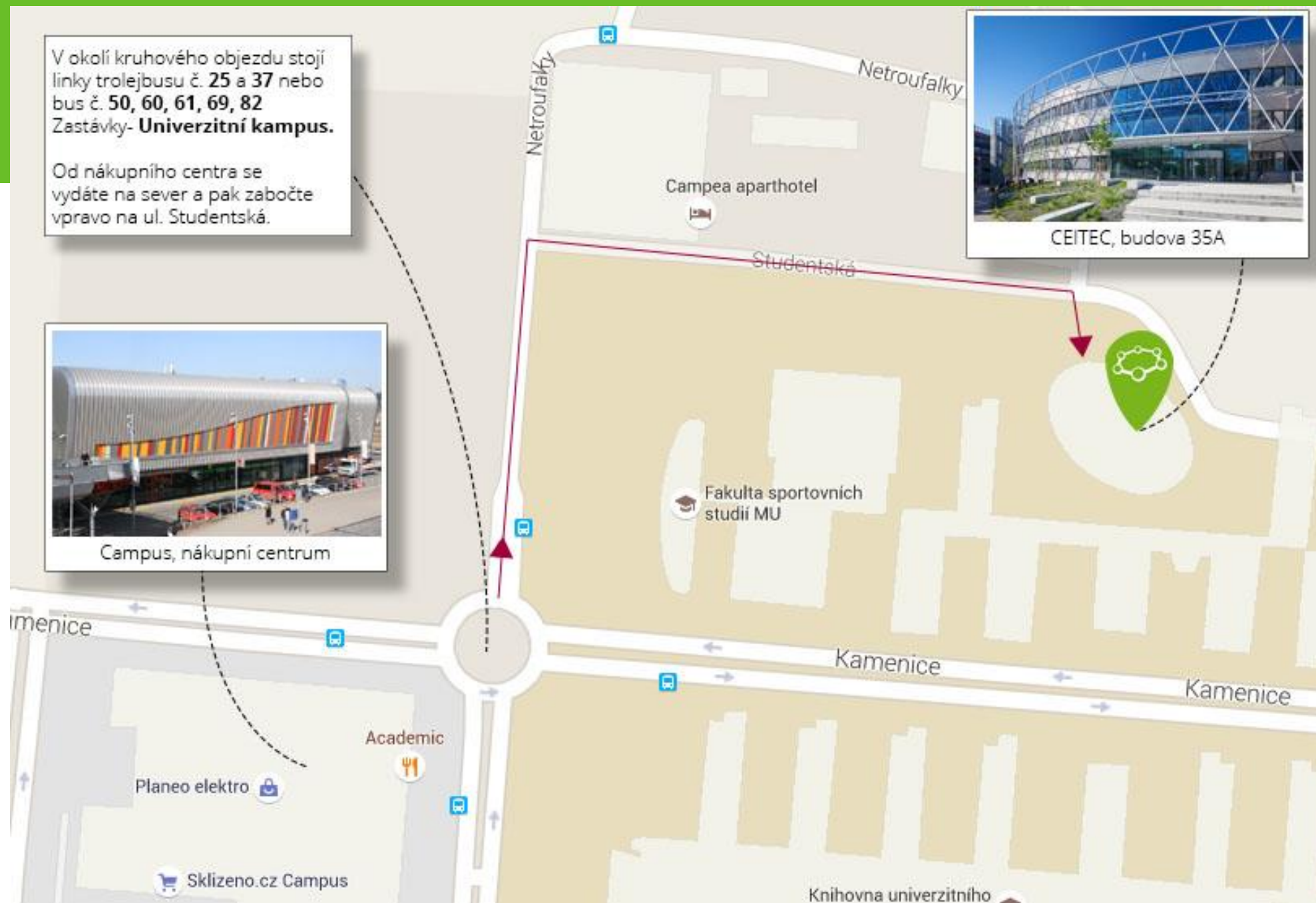
Od nákupního centra se vydáte na sever a pak zabočte vpravo na ul. Studentská.



Campus, nákupní centrum



CEITEC, budova 35A



- 22.11. at 8.00, FSS U23
1. **Monika Pupíková:** Non-pharmacological approaches to enhance neuroplasticity and cognition
 2. **Jaroslav Točík:** Lesion-Behavior mapping in contemporary cognitive neuroscience
 3. **Martin Jáni:** Social cognition in schizophrenia

○ 13.12., 8:00, FSS U43

1. **Patrik Šimko**: Visual processing
2. **Pavla Linhartová**: fMRI real-time neurofeedback
3. + 4. Presentations & Discussions

- Neuroscience research proposal

No need to present but more hustle to write

OR

- Presentation on a neuroscientific topic

Easier to write, but you will have to present in front of your peers on the 13th of December

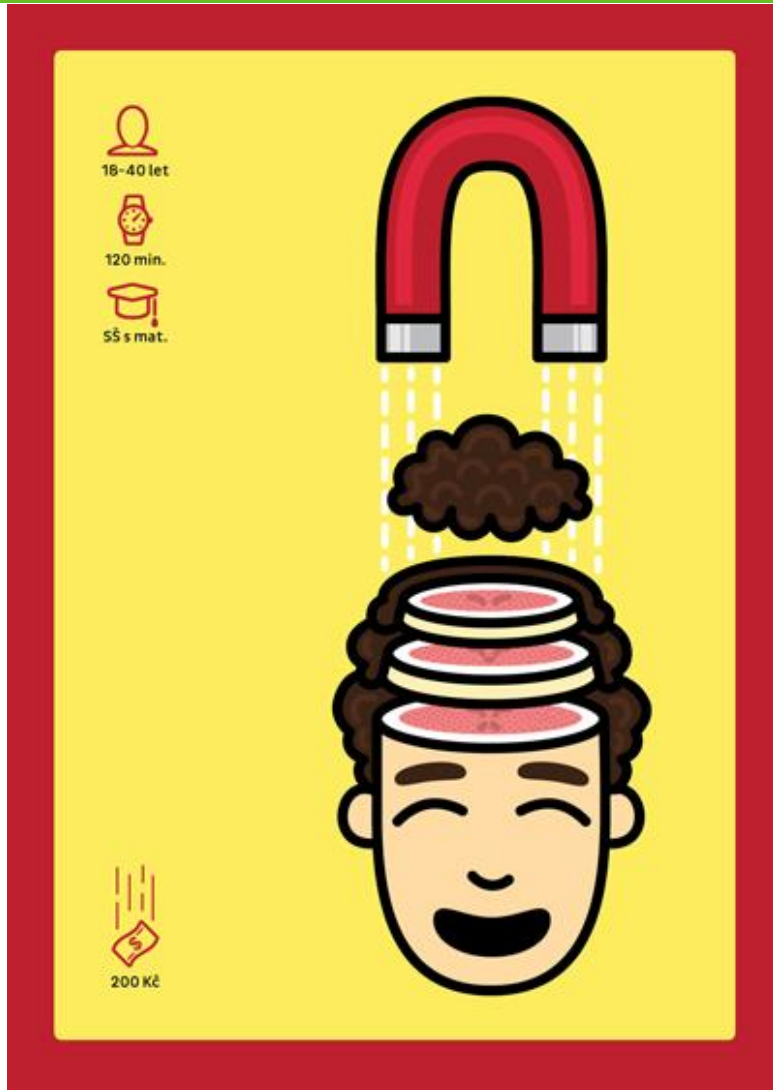
Deadline 3.11. (IS-> Study materials-> Homework Vaults-> Assignments) you will get feedback by 24.11., and you will have a chance to resubmit by 4.12.

Requirements to pass the course



- **Reading:** 1-3 papers prior to each block; fill in an online questionnaire on each paper
- **Writing:**
- a neuroscience research proposal: knowledge of the topic, relevance, feasibility and methodology will be evaluated
- presentation of a neuroscientific topic: knowledge of the topic, clarity, information value and the presentation skills will be evaluated
- **Attendance:** absence on 1 block, if you need to skip it, you will be asked to write an additional easy assignment, let me know in advance!

Want to get more involved?



- Become a participant in neuroscientific research!

OR

- Help us with recruitment

Any questions?

Thank you

AND ENJOY THE PRESENTATIONS