2. HIGHER EDUCATION

A. WARM-UP

B. HOMEWORK No1:

In small groups present each other the information about a foreign university that you have prepared as your homework. The listeners can ask questions about details of studies there. After you have discussed your information, choose which university would be the most attractive place to study and present the information about it to the whole class.

C. ACADEMIC AND STUDY SKILLS

Which of the following skills do you think are the most important for undergraduate students?

- technical ability
- creativity
- ability to communicate well
- being good at solving problems
- time management
- dealing with people
- giving presentations

Watch the video about the skills the graduate engineers say they need in their current jobs. What are their priorities?

http://www.careerplayer.com/tips-and-advice/engineering/key-skills-for-engineering/

What skills are essential in your study?

D. BRITISH, AMERICAN AND CZECH UNIVERSITIES

You will listen to a woman talking about higher education. Listen for the first time and answer the following questions:

1. According to the text, what is the difference between B.A. and M.A.?
1. What does the word "Highers" refer to?
2. Are school-leaving exams in England and Scotland identical?
3. How do students choose the universities and courses they are interested in?
4. What makes admission to the universities of Oxford and Cambridge different?
5. What is UCCA form?
6. In what order do students have to list chosen universities?
7. How much money do students applying for university study have to pay?
8. What does "conditional place" mean?

Now listen for the second time. What is the purpose of the spoken text? (only 1 answer is correct)

- **to explain** why it is best to study at Oxford or Cambridge
- **to inform** about the process of entering universities in Britain
- **to instruct** on communication with UCCA who help students

What did YOU have to do to apply for university study?

What do Czech and British students have to do to apply for university studies? Compare and contrast the two systems. Use as many expressions from the chart below as possible.

Sentence patterns: comparing similarities

Magnesium is | like / similar to / comparable to / as important as | aluminum.

Magnesium | resembles / parallels | aluminum in many ways.

Both carbon dioxide **and** hydrogen are gases.
Carbon dioxide and hydrogen are **both** gases.

Sentence patterns: contrasting differences

Iron | Is unlike / is different from / differs from | aluminum.

Unlike iron, / In contrast to iron, / Compared to iron, / In comparison to iron, | aluminum is light.

Iron is | (far/much) heavier than / less abundant than / not as/so soft as | aluminum.

Iron is a | relatively / comparatively | soft metal.

Who would say the following sentences/expressions? An American (A) or a British (B) student?

Are you faculty or student?	
The faculty will have to come to a decision on this.	
I attended Masaryk University.	
I went to university in Slovakia.	
She graduated from university in 2011	
They took some fascinating courses at college.	
I went to secondary school in Boskovice, then I went to university in Brno.	
Paul went to school at Stanford.	
He is a freshman.	
sophomore, junior, senior	
first year student, second-year student, third-year student, fourth-year student	

E. SCIENTIFIC DISCIPLINES

Brainstorm for a few examples of academic disciplines that can be studied at Masaryk University.

How would you put them into groups?
Which of the categories does your own area of study fit into?

Adapted from E. de Chazal, S. McCarter, Oxford EAP, OUP, 2012

Chemistry can be divided into several branches. Read their descriptions and supply names of the branches.

a. focuses on chemical and biochemical phenomena that occur in natural places. It should not be confused with green chemistry, which seeks to reduce pollution. It can be defined as the study of the sources, reactions, transport, and effects of chemical species in the hydrosphere, atmosphere and lithosphere.

b. describes the nature of matter, solutions and gases; introduces concepts such as stoichiometry, prediction of reaction products, thermodynamics, nuclear chemistry, and chemical kinetics.

c. chemistry of materials from non-biological origins; typically, this refers to materials not containing carbon-hydrogen bonds.

d. practical application to solve problems, usually in industry; design, construction and operation of machines and plants that perform chemical reactions to solve practical problems or make useful products.

e. branch that applies physical principles and measurements to understand the properties of matter, this includes the applications of thermodynamics and quantum mechanics to chemistry.

f. the study of the chemistry of matter and the development of tools for measuring properties of matter, it includes the identification of compounds & mixtures (qualitative analysis) and the determination of the proportions of the constituents (quantitative analysis).

g. studies compounds containing carbon (originally defined as the chemistry of substances produced by living organisms but now extended to substances synthesized artificially).

h. is concerned with the structure and chemical processes of proteins, carbohydrates, lipids, nucleic acids and other molecules found in or produced by organisms.

General Chemistry Inorganic Chemistry Organic Chemistry Analytical Chemistry Environmental Chemistry Chemical Engineering Biochemistry Physical Chemistry

What is the name of your discipline?

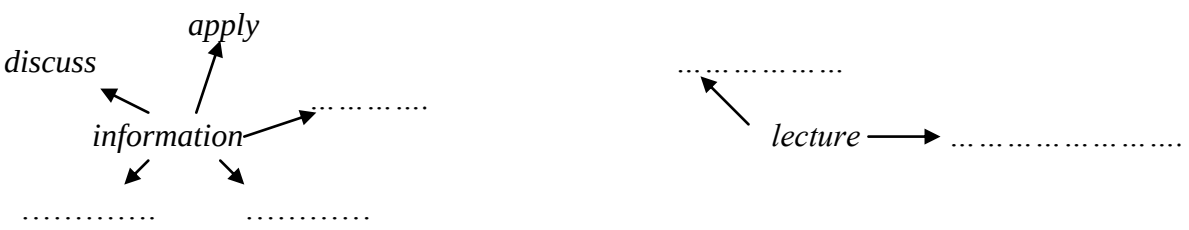
F. TYPES OF LEARNERS (http://www4.ncsu.edu/unity/lockers/users/f/felder/public/ILSdir/styles.htm)

Questions
1. What different learning styles do you know?
2. What works for you when you have to learn things?
3. Give an example of your learning experience, e.g. when you learned something difficult or when you applied a really effective way.

Read the text below and complete the table with typical features for each type.

Active learner	**Reflective learner**
Sensing learner	**Intuitive learner**
Visual learner	**Verbal learner**
Sequential learner	**Global learner**

Vocabulary from reading
Complete the diagrams with verbs used in connection with <u>information</u> and <u>lecture.</u> (1st part)



2. Write three things Sensors dislike:

3. Write three things Intuitors dislike:

4. In the fourth part find words which mean: 1) unsystematically, without specific purpose
2) in small stages, one thing at a time

LEARNING STYLES AND STRATEGIES

ACTIVE AND REFLECTIVE

- Active learners tend to retain and understand information best by doing something active with it - discussing or applying it or explaining it to others. Reflective learners prefer to think about it quietly first.
- "Let's try it out and see how it works" is an active learner's phrase; "Let's think it through first" is the reflective learner's response.
- Active learners tend to like group work more than reflective learners, who prefer working alone.
- Sitting through lectures without getting to do anything physical but take notes is hard for both learning types, but particularly hard for active learners.

SENSING AND INTUITIVE

- Sensing learners tend to like learning facts, intuitive learners often prefer discovering possibilities and relationships.
- Sensors often like solving problems by well-established methods and dislike complications and surprises; intuitors like innovation and dislike repetition. Sensors are more likely than intuitors to resent being tested on material that has not been explicitly covered in class.
- Sensors tend to be patient with details and good at memorizing facts and doing hands-on (laboratory) work; intuitors may be better at grasping new concepts and are often comfortable with abstractions and mathematical formulations.
- Sensors tend to be more practical and careful than intuitors; intuitors tend to work faster and to be more innovative than sensors.
- Sensors don't like courses that have no apparent connection to the real world; intuitors don't like courses that involve a lot of memorization and routine calculations.

VISUAL AND VERBAL

- Visual learners remember best what they see - pictures, diagrams, flow charts, time lines, films, and demonstrations. Verbal learners get more out of words - written and spoken explanations. Everyone learns more when information is presented both visually and verbally.

SEQUENTIAL AND GLOBAL

- Sequential learners tend to gain understanding in linear steps, with each step following logically from the previous one. Global learners tend to learn in large jumps, absorbing material almost randomly without seeing connections, and then suddenly "getting it."
- Sequential learners tend to follow logical stepwise paths in finding solutions; global learners may be able to solve complex problems quickly or put things together in novel ways once they have grasped the big picture, but they may have difficulty explaining how they did it.

Adapted from English for chemists, D. Dlabolová

Homework No_2

Read the texts on British and American universities (IS, study materials: Higher education UK, US, USxUK) and try to complete the tables below.

Type of study US	Degree awards	Length of the course	Courses	Abbreviation (science)	Degree in full (science)
undergraduate	community college →		terminal→employment		
		2 years	academic→transfer to a 4-year college/univ.	A.S.	Associate in Science
		4 years freshman sophomore junior senior	• core (1-2) (general basic/ distribution requirements) • major (3-4) • elective	B.S.	Bachelor of Science
	Master's degree	1-2			Master of Science
	Doctorate degree			Ph.D. (Sc.D.)	Doctor of Philosophy

Type of study UK	Degree awards	Length of the course	Abbreviation (science)	Degree in full (science)
		3-4	B.Sc	Bachelor of Science
Postgraduate	Master's degree	1-2		Master of Science
		3-more	Ph.D	