

Topic 1.

Part 1. Higher Education Today:

1) levels of higher education and length of study in Belarus, the UK and the US.

A three-level system of tertiary education acts in Belarus: Specialist's Diploma, Master's Degree Diploma, Researcher's Diploma, full Doctor of Science.

Degree programs in the US take about one year longer than programs in the UK.

The training program in higher educational institutions of Belarus is designed for 4-6 years, as in US. The training program in higher educational institutions of UK is designed for 3 years.

2) university organization in Belarus, the UK and the US

All high educational institutions in Belarus are made up of faculties according to the specialties they provide. University organization in the UK are made up of "colleges". In the US you apply to the larger university and for the first year or more, you take courses from a variety of fields and only announce a major at the end of the first year

3) course of study in Belarus, the UK and the US

An academic year in Belarus is divided into two terms. Most universities in the US last for 2 semesters. Academic year in UK universities consists of trimesters.

4) assignments and grades

In the US assignments are small writing project, major research papers and oral presentations throughout the course. In the UK most school are lecture-based, with only rare assignments throughout the semester. In Belarus on some subjects student are assessed according to their participation throughout the course, while the mark in other subjects depends on the final exam.

5) cost of study in Belarus, the UK and the US.

Universities in England may charge up to 9000 pounds per year for citizens of the UK, fees for international student can be higher. Private in-state institutions of US can cost up to 50000 dollars per year, public out-state institution are much more affordable. In public universities in Belarus, students with high grades in Centralized Testing are admitted on a cost-free basis, private universities in Belarus are more affordable then institutions in the UK and the US.

Part 2 My University

1) the mission of BSUIR and core areas of training.

The mission of BSUIR is to train high-qualified engineers and scientists.

Core areas of training of BSUIR:

- Computer Engineering
- Software Engineering and Technologies
- Cyber Security and Informatic Security
- Electronic Economy and Marketing
- Radio Electronics and Radio Informatics
- Infocommunication Technologies

- Nanotechnology and Nanoengineering
- Big DATA
- Internet of Things
- Cloud Computing
- Medical Electronics
- Game Design

2) the University framework

the University framework includes 8 faculties, 32 departments, 49 specialties, the Institute of Information Technologies, the Research and Development Department.

3) the teaching staff of BSUIR

the teaching staff of BSUIR consist of academicians, Corresponding members of the Belarus Academy of Sciences, professors, doctors, associate professors, senior lecturers and assistants.

4) Subjects being studied and the University curriculum

Subjects being studied are: physics, higher mathematics, technological drawing and social sciences. After first course student receive knowledge in electronics, cybernetics, computing machinery and so on.

5) University facilities at the students disposal

University facilities at the students disposal include a number of computer classes and modern engineering laboratories, video conferencing center and lecture theatres, library.

6) BSUIR as a scientific organization

BSUIR have 34 R&D (Research and Development) labs, 8 scientific centers and an IT business incubator. And BSUIR cooperate with more than 100 science organizations from more than 40 countries. BSUIR's students take part in various international scientific research.

7) the role of sport and extracurricular activities at the University life

The University regularly win the leading positions of student sports and compete at a national level. Student are engaged in athletics, soccer, basketball, volleyball, swimming, handball and other sports activities.

Part 3 student life

1) personal traits and skills needed for university success

In my opinion it's important to be able to communicate with people, be hardworking, patient and attentive. After all, this skills help to find a common language not only with classmates, but also with professors.

2) ways to be a better student

Try to attend your classes keep up with the workload and don't leave assignments or exam study until the last day. A good student manages his time well, adapts easily to any situation and can ask the right questions

3) your daily routine as a student

In the morning I get up and go to class. I have three or four classes a day. So I get back to the dormitory at 4 p.m. After that I have dinner, rest and then I sit down to my lab works.

4) the main characteristics of academic life and your workload

Many people say that student life is the most stimulating, busy, challenging, empowering, amazing, chaotic, fascinating time of their lives. Of course it's hard to study, but you came to university first of all to become a highly qualified specialist, didn't you?

5) the main characteristics of student social life and your extracurricular activities

This is a time to gain new experiences, meet new people. You can join the student council or go to some conference and always find new acquaintances.

6) how to reach the balance between academic and social life at university

Unfortunately, studying is not always easy. Sometimes time is critically short. I think to achieve a balance between academic and social life you should determine the start and end time of the working day — and do not forget to follow these limits.

Topic 2

Part 1 Youth Issues

1)the youth problems that Americans, British, Belarussian teenagers face

The problems of young people in America, Britain and Belarus are similar in many ways: technology addiction and internet addiction, family problems, pressure of materialism, issues related to body image.

2)how to build a path to problem-solving

First: identify the problem;

Second: think about why It is a problem

Third: brainstorm possible solutions to the problem

Fourth: evaluate the solution to the problem

Fifth: put the solution into action

Sixth: evaluate the result of your problem-solving process

3)how to solve youth problem

In my opinion to solve youth problems we need to promote a healthy lifestyle and refusal to use the social network in large volume.

4)role of family in a teen's life

Family influence teens choice in education, influence the forming of the life principles of teens. Behavior of children is a reflection of the behavior of their parents.

5)why the problem shouldn't be hidden

Some issues such substance abusing, cyberbullying and internet addiction and many more arise as a result of the change in the trends of this fast-paced life. So it's important to understand such issues to find solutions.

Part 2 Tech Addiction

1)types of tech and Internet addiction

Types of tech and Internet addiction are: nomophobia, Tv addiction, screen addiction, social media addiction, gaming addiction, gambling addiction, online shopping addiction and so on.

2)problems that can be caused by tech and Internet addictions:

Short attention spans, depression, anxiety, visual impairment, problems with studying can be caused by tech and internet addictions.

3)reasons for becoming tech and internet addicted

Technologies have become a basic tool for trading, entertainment, communication and education around the world. That's why people are starting to use technology and the Internet every day.

4) positive and negative sides of the Internet and technology

positive sides:

- Internet and technology make life easier
- Available information on the Internet
- thanks to technology and internet you can find entertainment to your taste
- You can communicate with a person from anywhere in the world.

negative sides:

- virtual communication replaced live communication
- cyber-bullying
- thanks to internet the level of education is falling rapidly
- thanks to internet and technology we can feel us loneliness
- Internet and technology addiction can cause short attention spans, depression, anxiety, visual impairment, problems with studying

5) how to avoid tech and internet addiction

To avoid tech and internet addiction you should:

- control your tech
- institute tech breaks
- set tech-free zones and times
- use programs to limit the time of phone and internet use

Part 3 Generation Gap

1)Types of generations and their characteristics

Here are the main generations and their characteristics at work:

Traditionalists – value workplace that are conservative, hierarchical.

Baby Boomers – value workplace that have flat hierarchies culture.

Gen X – value workplaces that are positive, fast-paced, flexible.

Millennials – value workplaces that are collaborative, achievement-oriented, fun, flexible.

Gen Z – is motivated by security, may be more competitive, can multi-task.

2)how we can prevent the generation gap

To prevent the generation gap we can:

- keep an open mind
- simply talk about each other's day at the end of the day
- Understand each other
- Give more freedom for kids

3)What each generation can bring to the workplace

Traditionalists can bring to the workplace rigid rules and hierarchical.

Baby boomers – warm and friendly environment.

Gen X – balance between work and personal life.

Millennials – creativity and possibilities of a non-standard methods to traditional task

Gen Z – freedom to create and inspire

4)what barriers can affect communication

Older workers grew up before cell phones and email, so they prefer to communicate via in-person conversation or phone call. Young workers prefer to be with texting emails or social media posting

5) how we can manage different generations at the workplace

To manage different generations at the workplace you need:

Don't focus on the differences

Create collaborations

Create opportunities for generations to interact

Consider life paths

TOPIC 3. CAREER PATH

Part 1. Being a Successful Specialist

1) factors of career success

I think factors of career success are efficiency and good relationships within the team. But everything depends on the values of the person, so everyone knows the answer to this question only for himself.

2) hard and soft skills of any successful specialist;

Soft skills of any successful specialist include: management skills, project management skills, communication skills, negotiation skills.

Hard skills include: knowledge of a foreign language, ability to use computer programs, knowledge of mathematics.

3) qualities of successful leaders;

In my opinion a true leader must have such qualities as patience, adaptability, passion, enthusiasm, stress resistance, etc.

4) typical functions of different departments in the organization;

The organization is divided into many departments with highly specialized professionals.

Here are some examples and their functions:

1. **Human Resources Department** – formalizes the contracts, managing social insurance.
2. **Marketing Department** – promotes the business, monitoring and managing social media.
3. **Administration Department** – controls of other departments activities.
4. **Finance Department** – managing company's cash flow, managing taxes.

5) principles of business ethics and business communication.

It is very important for any employee to abide business ethics and business communication. Abide a business ethics requires any professional to fulfill the following requirements:

1. **Be Punctuality.**
2. **Be Confidentiality.**
3. **Be friendly.**
4. **Show Empathy and attention to others.**

Part 2. My speciality

1) variety of jobs in the sphere of information technology;

The IT sphere is developing every day. There are many different IT professions. Here are a few of them:

1. Mobile application development
2. Database administrators
3. Web developers
4. IT help desk technicians
5. Network specialists
6. Video game developer
7. Graphic designer
8. IT security specialist
9. Software engineer
10. System analyst
11. Computer programmer
12. Hardware engineer

2) personal qualities of any IT specialist;

Technical skills are fundamentally important for any IT specialist. Nevertheless, if you want to become truly successful in your profession, you need other qualities. Such as:

1. ability to listen
2. Creativity
3. Negotiation skills
4. stress resistance

3) typical responsibilities and skills for different IT department jobs

Here are some examples of IT departments and their responsibilities and skills:

System analysts – manage IT solution to drive business goals. They need analytical skills

Mobile application developers – create software for mobile devices. They should be able to program

Software engineers – develop computer system and application. They should be able to design and develop PC applications

Hardware engineers – design and build computer systems. They should expertise technology, electronics and engineering

4) future skills for IT specialists and their importance.

I think future skills for IT specialists are:

1. **the ability to focus on effective learning**, because if you don't waste time on useless things, you can learn more
2. **Ability to draw conclusions and make decisions**. Because a quick reaction to the problem will help to solve the issue in the shortest possible time

Part 3. Professional Development:

1)personal vs professional vs continuous professional development (CPD)

The aim of personal and professional development is to help you to manage your own learning and growth throughout your career. CPD(Continuous professional development) is process of building, supporting and enhancing your knowledge and skills.

2) elements of CPD

CPD activities can range from formal educational activities such as training courses, workshops or seminars to more informal activities such as work-based learning or mentoring.

3) motivation as a key factor for professional development;

According to humanist psychologist Abraham Maslow, our actions are motivated in order to achieve certain needs. Motivation is a key factor contributing to people's professional development, because motivation sets us up for productive work.

4) training and its forms;

Training is teaching or developing in oneself or others any skills and knowledge of specific useful competencies.

Training has such forms as:

Group training – is when the training takes place in groups;

Frontal training – is when the teacher works with all the students at once;

A pair training - is a mutual learning of students in pairs;

5) the benefits of CPD

CPD helps to ensure that you have the knowledge and skills that you need to succeed as a professional. It helps you to build professional confidence.

Topic 4: ICT Concepts

Computer in our life

1) nature of ICT

Information and communication technologies (ICT) are a set of technologies developed to enhance the efficiency of information use and improve communication.

2) the role of ICT in our life

Modern information technology is a technique thanks to which the life of many people has become much easier. Thanks to ICT, it has become easier for people to communicate from anywhere in the world, quickly find various information and learn something new.

3) difference between data and information

Data are simply facts — bits of information, but not information itself. When data are processed, organized and structured they are called information.

4) digital revolution

The Digital Revolution is the evolution of technology from analog electronic and mechanical devices to the digital technology available today, such as the computer.

5) core characteristics of a modern computer

A computer is an electronic machine that accept, process, stores and outputs information. A typical computer consist of three basic component: CPU, main memory, The peripherals.

Hardware

1) definition and types of a computer

There are some types of computer:

- desktop PC – the typical computer use for business and home using;
- laptop – a lightweight computer that you can transport easily;
- Tablet PC – personal pc, which looks like a book;
- PDA – a tiny computer that you can hold in one hand;
- wearable computer – computer that you can wear;

2) basic component of a computer

Computer have three basic component:

- The CPU – a microprocessor chip which used for process data and coordinate activities of other chips;
- The main memory – holds the instructions and data which are being processed by the CPU. Have a two main sections: RAM(Random Access Memory) and ROM(Read Only Memory);
- Peripherals are the physical units attached to the computer.

3) input/output devices

Peripherals include:

Input devices, which lets us enter data and commands(for example keyboard and microphone);

Output devices, which let us extract the results(for example Monitor, Printer);

4)processing devices

The processor, also called the CPU or central processing unit, is the brain of your computer.

CPU have three typical parts:

- the control unit, which examines instructions from memory and performs them;
- the arithmetic and logic unit(ALU), which performs arithmetic and logical operations;
- the registers, high-speed units of memory that used to store and control data.

5)Types of storage

There are many types of storage: magnetic disk and optical disk, hard disk is a magnetic disk with a large capacity, flash memory is a solid rewritable non-volatile memory.

The issues of E-Waste

Electronic waste or E-Waste from old computers and mobile phones can cause severe environmental and public health problems. To deal with this problem we should recycle ICT equipment (for example plastic from mobiles we can use to make something). Manufacturers should pay to finance recycling programs.

Topic 5 Software

Software

1) Definition software

Software is a set of instructions, data or programs used to control the basic functions of computer and perform specific tasks

2) Categories of software

Categories of software are system software, application software;

System software - controls the basic functions of a computer

Application software - lets you perform specific tasks

3) Programming software

Programming software enable developers to develop, write, test and debug other software programs

Programming software includes Visual Studio, Rider, VS Code and so on;

4) Utility software

Utility software is software that help analyze, configure and optimize a computer.

Types of utility software are:

- Antivirus.
- File Management System.
- Disk Management tools.
- Disk cleanup tools.

5) Device driver

A device driver is a special programs that controls a specific hardware device attached to a computer

Examples of device drivers are keyboard driver, USB drive driver, printer driver.

6) operating systems

Operating system is a set of programs that control the hardware and allow people and applications to communicate with the hardware.

Examples of Operating system:

The Windows – designed by Microsoft and used on most PCs

Mac OS – created by Apple and used on Macintosh computers

Unix – used on mainframes

Linux – developed under the GNU General Public License. It is used on PCs and small devices.

Buying and Installing Software

1) installation basics

Software installation is the process of placing a program into a computer so that it can be run.

2) pros and cons of using open source and proprietary software

An open platform provides (supply) higher flexibility, but it can be more difficult to operate and support. Proprietary software is easier to use but limits your options and involves higher costs.

3) copyright and software licenses

There are two categories of software: open source and proprietary. Open source software is not protected by copyright. Based on licensing rights, proprietary software is divided into:

- commercial software (buy before use)
- demoware (try some features)
- shareware (try all features)
- freeware (unlimited free usage)

4) basic maintenance – troubleshooting hardware and software problems

In general, troubleshooting is the identification or diagnosis of "trouble" in the software or hardware caused by a fail of some kind.

Software piracy

Software piracy is the illegal copying, distributing, sharing, selling or use of software. The End-User License Agreement (EULA) is a license used for most software. This agreement consists of rules for software use.

Piracy plays an important part of computer life. However, the use of unlicensed software has its advantages and disadvantages. For example:

- There is always a risk of downloading a file infected with viruses.
- Piracy helps small businesses that cannot afford expensive software.
- If you use an unlicensed program you can't get technical support.