**UČNA PRIPRAVA ZA TIMSKO POUČEVANJE**

***Team Teaching Lesson Plan***

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| **Predmet *Subject*** | **English and Control Systems** |
| **Letnik, razred**  ***Class*** | Electronics and Electrical Engineering (E classes) |
| **Učni sklop, tema**  ***Topic*** | Pneumatics |
| **Zaporedna št. ure**  ***No. of lessons*** | 2 |

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| **Žarišče ure oz. sklopa:**  ***Lesson focus:*** Professional literacy in the English class | |
| **Vrsta timskega poučevanja**  ***Team teaching type*** | Traditional, Dialogue, Supportive |
| **Učna oblika**  ***Teaching design*** | frontal, individual, pair work |
| **Učna metoda**  ***Teaching method*** | group work, discussion, explanation, demonstration |
| **Učna sredstva in pripomočki**   * **za učitelja** * **za dijake**   ***Teaching aids, devices***  ***- teacher***  ***- student*** | **Teachers**  - computer, internet, projector, speakers, teacher handout, basic pneumatic components  **Students**  - student handout, writing materials |
| **Potrebno predznanje dijakov / *Prior required knowledge***  Students need to have some experience connecting pneumatic parts. | |
| ***Goals***   * revising vocabulary related to Pneumatics * exploring real-life applications of Pneumatics and explaining which parts of those processes use compressed air * labelling and translating the name of the parts of a simple pneumatic system and explaining how they all work together * watching videos of actual pneumatic systems and explaining their operation * analysing the main advantages of Pneumatics over other systems * exploring types of pneumatic cylinders * familiarising students with pneumatic circuit symbols   ***Learning outcomes***  At the end of the lesson, students will be able to:   * define the key words related to Pneumatics * specify which parts of a set of real-life applications use Pneumatics * label and translate the main parts of a pneumatic system * explain how a simple pneumatic system works, as shown on a video * analyse the main advantages of Pneumatics over other systems * formulate/articulate clear conclusions about pneumatics, based on the above * differentiate between the different types of pneumatic cylinders (single-acting, double-acting and reverse-acting) * identify specific circuit symbols for selected pneumatic components | |

**Lesson 1 Activities**

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| **POTEK UČNE URE / *Teacher and student activities*** | | | |
| **Activity** | **English Teacher** | **Foreign Teacher** | **Students** |
| **1. Warm-up**  *5 m* | Help students guess with a few clues | Play the video collage of real-life applications of Pneumatics and ask students to tell what they have in common | Identify the real-life applications and explain the parts that use compressed air |
| **2. Parts labelling**  *10 m* | Ask students to label the parts of a simple pneumatic system, using PPT | Check answers and demonstrate the components taken from the lab | Label and translate terms |
| **3. Video**  *15 m* | Show video of pneumatic scenario and ask students to answer the questions that follow | Check answers | Watch video and answer the questions |
| **4. Advantages**  *15 m* | Ask students to formulate their own conclusions based on the descriptions. | Help students and then check answers | Read, understand and formulate conclusions |

**Lesson 2 Activities**

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| **POTEK UČNE URE / *Teacher and student activities*** | | | |
| **Activity** | **English Teacher** | **Foreign Teacher** | **Students** |
| **1. Review**  *5 m* | Ask students to recall what was done in the previous lesson | Help students revise the key words | Recall main terminology |
| **2. Pneumatic cylinders**  *15 m* | Tell students that they are going to watch a video and answer questions afterwards | Play video and check answers | Watch video and complete task |
| **3. Pneumatic symbols**  *10 m* | Check answers and make sure students pronounce the words properly | Ask students to name symbols | Identify symbols and explain their differences |
| **4. Vocabulary**  *10 m* | Ask students to match the vocabulary to their correct definitions | Check answers | Complete vocabulary exercise |
| **5. Final review**  *10 m* | Ask students to summarise the main information from both lessons | Help students with guided questions | Summarise information by making simple sentences about Pneumatics |

**Evaluation**

At the end of the lesson, it was clear that students were able to define all the key words, label the diagrams and explain how a simple pneumatic system works, referring to concrete examples from real life. The analysis of the advantages of Pneumatics over other systems revealed that students were not so familiar with writing concluding statements. Not all of them could formulate clear conclusions, therefore more exercises of this nature should be included in future topics. Students found it very useful to see the actual components being demonstrated at the English lesson, by the foreign teacher. Most of them were able to differentiate between the different types of pneumatic cylinders (single-acting, double-acting and reverse-acting). I later found out that those who had problems were absent from the practical lessons. The same students also had problems identifying some of the circuit symbols. For example, there were confusions between the symbols for the push button and switch.