


NET - New Approach in Educational Technology

Erasmus + Strategic Partnership

2019-1-SK01-KA201-060658

IO1 - Curriculum & Training scheme

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Learning module 1: Planning the lessons

Organisation: SUA
Course: Planning the lessons
Teaching hours: 5+
Mode of delivery: Web 2.0
EQF level: level 5-6

Assessment methods:

- online learning materials
- class deliverables
- papers, projects, presentations,
- portfolio.

Learning outcomes of the learning module:

The theoretical objectives of this course are to introduce the thinking required to planning and preparation of the education process with using ICT effectively. It seeks to do this both by explaining a number of fundamental issues and presented to the students/trainees examples of good practice and listed additional reading sources where further guidance can be found.

The practical objectives include developing teaching skills like organisational and didactical skills, collaborative learning development, increasing students´ motivation, giving feedback, student´s assessment. This module refers to multiple areas of instruction and teaching.

Learning activity content:

The units forming the learning module syllabus:

- Planning and preparation
- Subject teaching
- Needs
- Sources and technologies

Recommended or required reading / links:

1. https://www.academia.edu/23296572/Complete_Guide_to_Lesson_Planning_and_Preparation_-_Copie
2. Dils, A.K. (2004). The Use of Metaphor and Technology to Enhance the Instructional Planning of Constructivist Lessons. *Contemporary Issues in Technology and Teacher Education, 4*(2), 214-224. Waynesville, NC USA:




Society for Information Technology & Teacher Education. Retrieved August 2, 2020 from https://www.learntechlib.org/primary/p/21915/.

3. Willis, B. (1998). Effective Distance Education Planning: Lessons Learned. *Educational Technology, 38*(1), 57-59. Retrieved August 2, 2020, from www.jstor.org/stable/44428449
4. Mobile Web 2.0 tools and applications in online training and tutoring. In Handbook of mobile teaching and learning. Heidelberg : Springer. (2015), s. 437--455. ISBN 978-3-642-41981-2. URL:http://link.springer.com/referenceworkentry/10.1007/978-3-642-41981-2_73-1#page-1.

Language of the course:

English, Slovak, Greek, Czech, Polish, Italian

Name of the teacher:

Zuzana Palková, Ondrej Lukáč

Supervisor:

Zuzana Palková

Feedback for evaluation:

- Online questionnaires
- Feedback from students through focus-group meetings




Learning module 2: Multimedia posters and interactive resources

Organisation: ZS Benkova 34
Course: Multimedia posters and interactive resources in educational process
Teaching hours: 10+
Mode of delivery: Web 2.0
EQF level: level 5-6

Assessment methods:

- online learning materials
- class deliverables
- papers, projects, presentations,
- portfolio.

Learning outcomes of the learning module:

The theoretical objective of this module is to learn about the possibilities of certain interactive resources and multimedia posters use in education/learning process, to use online tools in different stages of a learning/teaching unit, to develop learning/teaching materials.

The practical objectives include developing teaching skills like organisational and presentation skills, collaborative learning development, increasing students´ motivation, giving feedback, student´s assessment. This module refers to multiple areas of instruction and teaching. Learning module also provides some example of good practices.

Learning activity content:

The units forming the learning module syllabus:

- Logging in application
- Creation of a didactic material
- Creation of a virtual classroom
- Sharing, commentating and evaluation of the material
- Applicability of the learning material in different stages of education/learning process

Recommended or required reading / links:

1. LABBO, L. D. (2005). Fundamental qualities of effective internet literacy instruction: An exploration of worthwhile classroom practices. (Základné kvality efektívnej výučby internetových gramotností: Prieskum užitočných vyučovacích postupov) In R.A. Karchmer, M.H. Mallette, J. Kara-Soteriou, & D.J. Leu (Eds.). Innovative approaches to literacy education: Using the internet to support new literacies

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(Inovatívne prístupy na výučbu gramotnosti) (s.165-180). Newark, DE: International Reading Association. RICHARDSON, W. (2010). Blogs, wikis, podcasts, and other powerful web tools for classrooms. (Blogy, wiki, podcasty a iné účinné internetové nástroje pre triedy) Thousand Oaks, CA: Corwin Press.

2. Handsfield, L.J., Dean, T.R., & Cielocha, K.M. (2009). Becoming critical consumers and producers of text: Teaching literacy with Web 1.0 and Web 2.0. The Reading Teacher, 63(1), pp. 40–50.
3. Larson, L.C. (2010). Digital readers: The next chapter in e-book reading and response. The Reading Teacher, 64(1),15-22.
4. Zawilinski, L. (2009). HOT blogging: A framework for blogging to promote higher-order thinking. The Reading Teacher, 62(8), pp. 650–661.
5. What is Glogster?
6. How to use Glogster?
7. https://twitter.com/glogster
8. https://www.pinterest.com/glogster/
9. https://www.facebook.com/Glogster/
10. http://blog.edu.glogster.com/

Language of the course:

English, Slovak, Greek, Czech, Polish, Italian

Name of the teacher:

Mariana Štangová, Eva Berešová

Supervisor:

Zuzana Formelová

Feedback for evaluation:

- Online questionnaires
- Feedback from students through focus-group meetings




Learning module 3: Interactive Robotics Hardware

Organisation: VSTE
Course: Interactive Robotics Hardware
Teaching hours: 8+
Mode of delivery: Web 2.0
EQF level: level 5-6

Assessment methods:

- Online learning materials
- Performance tasks
- Class deliverables
- Portfolio assessment

Learning outcomes of the course unit:

The theoretical objective of this lesson is to learn the teachers how to improve science and engineering education through the new concept (with the power of robotics), that allows to help them to teach fundamental fundamental concepts of classical mechanics in a fun, hands-on and minds-on learning. With robotics, the students can have a different opportunity for developing their logical ability and their creativity. The course will consist in specifics aims and skills developed in activities, increasing and pursuing students competences. The teachers will gain these specific competences, so they will be modernized on the topic of theoretical robotics.

The practical objectives include educational practices through the STEM principle. This includes interactive lectures in which students are active participants, collaborative learning activities, lecture-tutorial approaches, and laboratory experiences that incorporate realistic scientific practices and the use of technology.

Learning activity content:

The units forming the learning activity syllabus:

- Definition of educational objectives
- Planning the content and activities with the students in classes
- Interactive learning (Role-playing, debates, problem-solving, brainstorming)
- Experimental learning (Simulations, laboratory experiments, field experiences/practicums)
- Independent learning (Research papers, self-directed study)

Recommended or required reading:

1. https://emanual.robotis.com/docs/en/edu/bioloid/stem/




2.https://emanual.robotis.com/docs/en/dxl/ax/ax-12a/

3.http://en.robotis.com/service/downloadpage.php?ca_id=10

4.http://www.megarobot.cz/index.php?route=information/information&information_id=9

5.http://www.robotis.us/steam-edutainment/

Language of the course:

English, Slovak, Greek, Czech, Polish, Italian

Name of the teacher:

Milena, Kušnerová, Jan Valíček, Michal Řepka

Supervisor:

Marta Harničárová

Feedback for evaluation:

Open-Ended Questions (COURSE EVALUATION QUESTIONNAIRE)




Learning module 4: Virtual reality

Organisation: UPAT
Course: Virtual Worlds
Teaching hours: 5+
Mode of delivery: Web 2.0
EQF level: level 5

Assessment methods:

- online learning material
- practical exercises / quizzes
- projects
- performance tasks

Learning outcomes of the course unit:

The teachers that will attend this course, will gain an understanding about what the Virtual Worlds are about and their capabilities. They will be able to set up a virtual world using the popular, open source platform Opensimulator and prepare areas in it. They will be able to use the interface of 3D Viewer applications to connect to a Virtual World and handle an avatar. They will be able to create or import 3D objects or other material. Finally, they will learn about scripting and how it can be used to plan and implement learning activities.

Learning activity content:

The units forming the learning activity syllabus:

- Virtual Worlds & OpenSim
- Installation & Configuration
- Movement & Navigation
- Object Creation & Customization
- LSL/OSSL Scripting

Recommended or required reading:

Recommended: (useful resources, links)

1. *http://opensimulator.org/wiki/Main_Page*
2. *http://wiki.secondlife.com/wiki/LSL_Portal*

Language of the course:

English, Slovak, Greek, Czech, Polish, Italian

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Name of the teacher:

Nikolaos Gorgkolis

Supervisor:

Eleni Voyiatzaki

Feedback for evaluation:

- Online questionnaires
- Feedback from students through focus-group meetings

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Learning module 5: Collaborative tools and social media

Organisation: FOO
Course: Collaborative tools and social media (MS Teams, Zoom, Google for Education)
Teaching hours: 10+
Mode of delivery: Web 2.0
EQF level: level 5-6

Assessment methods:

- online learning contents
- class deliverables
- projects, papers ,presentation
- online discussion boards

Learning outcomes of the course unit:

The theoretical objectives of this course is to learn about the possibilities of certain collaborative tools use in education/learning process and to use social media in different stages of a learning/teaching unit.

The practical objectives of this module is to encourage students' active engagement, collaboration and participation in class activities, to provide interactive experience and to facilitate group work.

This course aims to explore how students engage in learning through use of social media (Facebook, WhatsApp, zoom, Skype …) to transfer, share and construct knowledge among peers in asynchronous and synchronous modes. It provides students with the virtual community experience, they can comprehend the content and create networks via different sources.

Learning activity content:

- Creation of a virtual classroom
- Creation of interactivity among student group members
- Creation of collaborative learning
- Applicability of the learning material in different stages of education/learning process
- Social media

Recommended or required reading:

1. *https://www.nextthought.com/thoughts/practical-tips-for-using-social-media-in-the-virtual-classroom*
2. *https://www.researchgate.net/publication/268684323_Using_social_media_in_the_online_classroom*




3. https://iopscience.iop.org/article/10.1088/1757-899X/420/1/012110/pdf
4. https://files.eric.ed.gov/fulltext/EJ1004891.pdf
5. https://pluginandpowerup.wordpress.com/2016/06/06/10-ways-to-incorporate-collaborative-learning-daily/
6. https://www.researchgate.net/publication/334083571_Development_of_Teaching-Learning_Materials
7. https://files.eric.ed.gov/fulltext/EJ1126307.pdf
8. https://pluginandpowerup.wordpress.com/2016/06/06/10-ways-to-incorporate-collaborative-learning-daily/
9. https://www.semanticscholar.org/paper/Social-media-use%2C-collaborative-learning-and-a-of-Al-Rahmi-Alias/ea52add66c314e1c77df7485014bb5e8c15ddde5

Language of the course:

English, Slovak, Greek, Czech, Polish, Italian

Name of the teacher:

Bengü Bozdağ

Supervisor:

Halil Kocatürk

Feedback for evaluation:

- Online questionnaires
- Feedback from students through focus-group meetings




Learning module 6: Video and image processing, YouTube channels

Organisation: ARID
Course: Video and image processing,, YouTube channels
Teaching hours: 5+
Mode of delivery: Web 2.0
EQF level: level 5

Assessment methods:

- online learning contents
- class deliverables
- presentations
- practical exercises

Learning outcomes of the course unit:

The theoretical objective of this course is to gain knowledge about interactive materials that can be used in teaching methods, to learn something about video and image processing and about using YouTube channels in learning/teaching.

The practical objective of the course is to gain skills of using videos and images in teaching and of educational preparing videos for students, to get the tips of how to be a good presenter and how to catch students' attention, to learn how to use basic programs to creating movies.

The aim of this module is to show teachers and students that learning/teaching can be a pleasure and that using videos and images increases accessibility and understanding of the learning content.

Learning activity content:

- How to be a good presenter in educational movies?
- How to catach student's attention?
- What programs can we use to assemble the movie?
- Using movies and other resources from the Internet
- Practical guide of how to prepare the movie

Recommended or required reading:

1. Ciechański Ł., 2019. Jak mówić, żeby dobrze mówić, https://www.youtube.com/watch?v=Rnt0NsQi_Vc (accessed 21.09.2020).
2. FlStrefa, n.d.. Czym jest człowiek charyzmatyczny? Co to jest charyzma? Definicja, znaczenie, https://www.flstrefa.pl/charyzma.html (accessed 21.09.2020).

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3. Krocz K., n.d. Język ciała – komunikacja niewerbalna, autoprezentacja, rodzaje gestów, zależności przestrzenne, https://portal.abczdrowie.pl/jezyk-ciala (accessed 21.09.2020).
4. Learn English With Benjamin, 2015. Speak as clearly as an actor, https://www.youtube.com/watch?v=AQNMCgKvOk0 (accessed 22.09.2020).
5. Lebda D., 2020. Charyzmy można się nauczyć, https://www.focus.pl/artykul/charyzmy-mozna-sie-nauczyc-cwiczenia?page=1 (accessed 21.09.2020).
6. Rośnijwsiłę, n.d. 10 sprawdzonych wskazówek, jak zwiększyć charyzmę, https://rosnijwsile.pl/jak-zwiekszyc-charyzme/ (accessed 21.09.2020).
7. StageMilk, 2020. Articulation Exercises for Actors, https://www.youtube.com/watch?v=8sQoYa8TptI (accessed 22.09.2020).
8. Bajczyk D., 2019. Sprawdź 20 sposobów na przyciągnięcie i utrzymanie uwagi czytelnika, https://www.senuto.com/pl/blog/sprawdz-20-sposobow-na-przyciagniecie-i-utrzymanie-uwagi-czytelnika/ (accessed 22.09.2020).
9. Bordman, n.d. Profesjonalny orator – czyli jak przyciągnąć uwagę widza i słuchacza, http://bordman.pl/blog/wystapienia-publiczne-blog/profesjonalny-orator-czyli-jak-przyciagnac-uwage-widza-i-sluchacza/# (accessed 22.09.2020).
10. Gardynik J., 2018. Jak przyciągnąć uwagę uczniów? 7 faktów o uwadze, które Ci w tym pomogą, https://proszepani.com/uwaga/ (accessed 22.09.2020).
11. YouTube Creators, 2015. The 10 YouTube Fundamentals, https://www.youtube.com/watch?v=6R6UO_a34FM&feature=youtu.be (accessed 22.09.2020).
12. Giedrys-Majku K., 2014. Edukacja przez filmy, https://madrzy-rodzice.pl/2014/11/edukacja-przez-filmy/ (accessed 28.09.2020).
13. Górecka D., n.d., Film jako atrakcyjne narzędzie realizacji wymagań podstawy programowej w reformującej się szkole podstawowej, http://edukacjafilmowa.pl/film-jako-atrakcyjne-narzedzie-realizacji-wymagan-podstawy-programowej-w-reformujacej-sie-szkole-podstawowej/ (accessed 28.09.2020).
14. Mirska-Czerwińska A., n.d. Jak pracować z filmem na zajęciach szkolnych – wybór metod, http://webcache.googleusercontent.com/search?q=cache:Yiri67FKBhYJ:spskalmierzyce.noweskalmierzyce.pl/sites/spskalmierzyce.noweskalmierzyce.pl/files/zdjecia/jak_pracowac_z_filmem_na_zajeciach_szkolnych.doc+&cd=11&hl=pl&ct=clnk&gl=pl (accessed 28.09.2020).
15. Rewińska E., 2018. Film w szkole – niezbędnik dla początkujących, http://edukacjafilmowa.pl/film-w-szkole-niezbednik-dla-poczatkujacych/ (accessed 28.09.2020).
16. Kurzak T., 2015. Jak zostać YouTuberem i zrobić to dobrze? 7 porad dla początkujących na YouTube, https://softonet.pl/publikacje/poradniki/Jak.zostac.YouTuberem.i.zrobic.to.dobrze.7.porad.dla.poczatkujacych.na.YouTube,1422 (accessed 29.09.2020).
17. Łyszkowski J., 2020. Jak zostać YouTuberem? – co trzeba wiedzieć na starcie kanału, https://lenovozone.pl/blog/jak-zostac-youtuberem/ (accessed 29.09.2020).
18. Maluszyńska B., 2014. 7 BŁĘDÓW, które popełniasz, przygotowując kursy video, https://filmpoint.pl/blog/7-bledow-ktore-popelniasz-przygotowujac-video-edukacyjne/ (accessed 29.09.2020).




19. Sławiec U., 2014. Montaż i postprodukcja, http://www.nam.home.pl/foto/index.php/aktualnosci/101-10-pomyslow-na-zastosowanie-filmow-w-edukacji (accessed 29.09.2020).

Language of the course:

English, Slovak, Greek, Czech, Polish, Italian

Name of the teacher:

Klaudia Miśkowicz

Supervisor:

Maciej Dymacz

Feedback for evaluation:

- Online questionnaires
- Feedback from students through focus-group meetings




Learning module 7: Gaming and Gamification

Organisation: VITECO
Course: Gaming and Gamification
Teaching hours: 5+
Mode of delivery: Web 2.0
EQF level: level 5 - 6

Assessment methods:

- online learning contents
- class deliverables
- presentations
- practical exercises / quizzes
- realization of mini games

Learning outcomes of the course unit:

This course aims to introduce the concept of gamification, the scenario of a Game-Based Learning and the impact of gaming in increasing students' skills. It explores how to use gamification to make teaching more catchy by balancing more theoretical learning material with practical exercises.

Understanding the difference among games vs. gaming vs. gamification is important for improving students' knowledge and technical competences. In a game-based learning environment, users learn new concepts and practice skills in a risk-free setting. The main use of gamification is to increase student's retention by integrating engagement software with existing learning contents. On the same wave line, serious games are generally considered to induce positive effects in the areas of learning motivation and learning gains.

Finally, the ADDIE Model will be examined as a method for designing educational games. It will follow an implementation practice phase where students will practically experiment the theoretical concept acquired with the final aim to create a mini game.

Learning activity content:

- Learning Games vs Gamification. How Are They Different?
- How gamification impacts on vocational training students
- The ADDIE Model
- Serious games
- Applying Game-Based Learning (GBL) and Gamification in education

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Recommended or required reading:

TEXTUAL

1. J.Högberg, J.Hamari, E.Wästlund: Gameful Experience Questionnaire:an instrument for measuring the perceived gamefulness of system use https://www.researchgate.net/publication/331398668_Gameful_Experience_Questionnaire_GAMEFULQUEST_an_instrument_for_measuring_the_perceived_gamefulness_of_system_use

2. J. Findlay: Game-Based Learning Vs. Gamification: Do You Know The Difference? https://trainingindustry.com/articles/learning-technologies/game-based-learning-vs-gamification-do-you-know-the-difference/

3. J. L. Plass http://orcid.org/0000-0001-5161-6989; B. D. Homer http://orcid.org/0000-0002-1832-6784 Foundations of Game-Based Learning https://files.eric.ed.gov/fulltext/EJ1090277.pdf

4. A.Pagano Blog: Introduzione delle dinamiche “ludiche” nel digital training – translation IT-EN https://alessandropagano.net/blog/gamification-e-game-based-learning-ostacoli-e-opportunita/

5. S.Nteliopoulou, V.Kratidis, A.Krassa: A step-by-step guide to gamify your elearning courses https://mathemagenesis.com/gamified-learning/

6. Serious games as didactic tool for teaching programing. Jože Rugelj Matej Zapušek, Irena Lancovska Šerbec University of Ljubljana Faculty of Education Chair of Didactics of Computer Science. https://www.slideserve.com/gene/serious-games-as-didactic-tool-for-teaching-programing

7. Defining Independent Games, Serious Games, and Simulation. Digital Right Management & Content Development. https://www.slideserve.com/thuy/defining-independent-games-serious-games-and-simulation-powerpoint-ppt-presentation
8. K.M.Kapp notes http://karlkapp.com/two-types-of-gamification/
9. University of Waterloo: Gamification in education https://uwaterloo.ca/centre-for-teaching-excellence/teaching-resources/teaching-tips/educational-technologies/all/gamification-and-game-based-learning

VIDEOS AND GAMES

10. https://www.youtube.com/embed/Uj_8C2L9bXI
11. https://www.youtube.com/watch?v=AQhT8HmQC_Y
12. https://www.youtube.com/watch?v=SWPDYhtX96Y
13. https://vitecoelearning.eu/wp-content/uploads/SCORM/Demo-3/story_html5.html
14. https://vitecoelearning.eu/wp-content/uploads/SCORM/Demo-4/story_html5.html
15. https://vitecoelearning.eu/en/serious-games/

Language of the course:

English, Slovak, Greek, Czech, Polish, Italian

Name of the teacher:

Luca Porcaro




Supervisor:

Giuseppe Ursino

Feedback for evaluation:

- Online questionnaires
- Feedback from students through focus-group meetings

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