

EDUVAC WEB-BASED COURSE

3 ECTS

TEACHERS' GUIDE



Introduction

It is widely known that vaccines are one of public health's most cost-effective interventions (World Health Organization [WHO], 2013a). The W.H.O. vision of the Decade of Vaccines 2011–2020 is a world in which all individuals and communities enjoy lives free from vaccine-preventable diseases (WHO, 2013b). Thus, health professionals can play an important role in providing proper consultation and increase the vaccination coverage and therefore, their competence in vaccination should be developed.

The use of e-learning for improving skills and knowledge has constantly increased among health professionals worldwide (Vaona et al., 2018). This way of learning has also attracted the attention of educators (Alonso et al., 2005), by approving that is equal to the traditional learning (George et al., 2014). Moreover, e-learning can be usable to health professionals as an ongoing learning process by enhancing their self – efficacy (Laine et al. 2019).

E-learning is defined by the European Commission in 2000 “is the use of new multimedia technologies and the Internet to improve the quality of learning by facilitating access to resources and services, as well as remote exchange and collaboration” (European Commission, 2001). It is a learning/training model aiming to achieve assisted and personalised teaching (Alonso et al., 2005). Asynchronous e-learning can be flexible, with no limitation of time and place by learner while synchronous is intervened by an educator and learner react in real time (Lawn et al, 2017).

The role of teachers is to ensure that the learning environment provided takes account of learners' needs and ensures that they are effectively prepared and supported (Chumley-Jones et al., 2002). There is a wide range of various e-learning approaches including Interactivity, practice exercises, repetition and feedback that play pivotal roles in e-learning and seem to be associated with improved learning outcomes (Cook et al., 2010, Vaona et al., 2018). Technical advantages of e-learning such as universal accessibility, ease in updating content, and hyperlink functions that



permit cross referencing to other resources fit the constructivist learning theory, where learners search out and create their own knowledge bases (Haag et al., 1999).

Hence, the current web-based course was developed within the Erasmus+ funded project “EDUVAC” (Sakellari, 2019) The web-based course (3 ECTS) is in English language using the Moodle platform. It is developed by a collaboration among University of West Attica (Greece), Metropolia University of Applied Sciences (Finland), Trnava University (Slovakia), University of Vic (Spain) and University of Modena and Reggio Emilia (Italy). More about the EDUVAC project can be found at the website: www.eduvac.eu (Educating Vaccination Competence [EDUVAC], 2019).

EDUVAC web-based course objectives

The web-based course's objective is to enhance the quality and relevance of the learning about vaccinations and strengthen the knowledge, skills, and attitudes of students in vaccinating different population groups and counselling people of different age groups and their families.

Learning outcomes

At the completion of the vaccination education, students will:

- have knowledge on immunity system and vaccination
- have knowledge on evidence-based practice in vaccinations
- have knowledge on the different vaccination needs among special population groups
- be able to screen and identify migrant people on vaccination needs and exposures to contagious diseases.
- be able to provide information, counselling, and support about vaccines to migrants
- be able to access vaccination needs and vaccination coverage of different population groups
- be aware of different vaccination schedules in different countries and be able to find the different schedules for different populations target groups
- be able to administrate vaccines in theory
- will develop their critical thinking and will raise their awareness and knowledge on different



cultural backgrounds and social values

- be aware of the ethical issues raised in the vaccination healthcare provision
- will improve their communication skills, and be familiar with different learning/teaching means
- will improve their English skills
- be able communicate and study in English in international student groups

At the description of each section, below, the learning outcomes of each section are described in more details.

EDUVAC web - based course sections

1. *Vaccination Basics*

Description of the section:

- Why is vaccination important?
 - Why vaccination is important for global health?
 - Effectiveness of vaccination programme
- What is immunisation?
 - Immunisation-what it is
- Who is a competent vaccinator?
 - Who is vaccinator?
 - Article: Vaccination Competence
 - Article: Factors strengthening and weakening vaccination competence
- Vaccination programs in different countries
- Vaccination coverage in different countries
- Self-tests and assignments
 - Self-test: Immunization 1
 - Self-test: Immunization 2
 - Self-test: Immunity



- Assignment: Vaccinator
- Assignment: Vaccination coverage
- Further reading
 - Further reading about Vaccinations basics

Learning outcomes

At the completion of the section, students will:

- be aware of importance of vaccination
- be aware of qualities of competent vaccinator
- be aware of the National Vaccination Programs (NIPs) in different countries
- have knowledge on immunity system and vaccination

Learning resources and activities:

- power point presentation (in pdf format)
- self-tests
- pdf documents
- assignment
(portfolio assignment)*

2. Vaccination procedure

Description of the section:

- Ethics
- Vaccination step by step
- How to administer vaccines in practice
 - Contraindications for vaccination



- How to hold a child during vaccination
- Vaccination sites and administering vaccines
- Subcutaneous (SC) vaccination technique: steps and video
- Intramuscular (IM) vaccination technique: steps and video
- Make the vaccination as comfortable as possible
- Adverse events
- Storage and the cold chain of vaccination
- Self-tests and assignments
 - Self-test: Storage and the cold chain of vaccination
 - Assignment: Vaccination procedure
 - Self-test: Vaccination procedure
- Further reading
 - Further reading about Vaccination procedure

Learning outcomes

At the completion of the section, students will:

- have knowledge on vaccines and immunization, development of the vaccines and the way the immune system and vaccines work, vaccine preventable diseases and population health
- have knowledge on evidence-based practice in vaccinations
- have knowledge on different vaccination techniques
- be able to administer vaccines in theory
- be aware of ethical issues
- be aware of the storage and cold chain of vaccines
- have knowledge and be able to identify and manage adverse effects of vaccinations
- be able to record, monitor and survey of vaccination

Learning resources and activities:



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- power point presentation (in pdf format)
- technique videos and images self-tests
- pdf documents
- assignment

3. ***Counselling people***

Description of the section:

- What is good counselling
 - What constitutes counselling?
 - Elements of good counselling
- Ethics and counselling
- Counselling different population groups
- Immunocompromised people
 - Counselling parents about their child's vaccinations
 - Counselling adolescents
 - Counselling adults
 - Video: Example of vaccination counselling situation
- Self-test
 - Self-test about Counselling
- Further reading
 - Further reading about Counselling people

Learning outcomes

At the completion of the section, students will know:

- how to address clients' concerns about vaccination
- how to receive and give verbal and nonverbal client references



- how to improve and streamline decision making
- how to be aware of ethical issues

Learning resources and activities:

- self-test
- power point presentation (in pdf format)
- video
- pdf documents

4. ***Vaccinating refugees, migrants, and asylum seekers***

Description of the section:

- Introduction
- Ethical issues to consider
- Epidemiological data
- Screen for vaccination and controlling diseases
- Self-tests and assignments
 - Self-test
 - Optional Activity
- Further reading
 - Further reading about Refugees, migrants and asylum seekers

Learning outcomes

At the completion of the section, students will:

- be able to screen and identify migrant people on vaccination needs and exposures to contagious diseases
- be able to provide information, counselling, and support about vaccines to migrants



- be able to refer to other experts and/or health specialists when necessary
- be able to care people, respecting dignity, freedom, equality, health perception, without any distinction
- be aware of ethical issues
- be able to follow the guidelines and the evidence based public health recommendation
- be aware of health as a fundamental right

Learning resources and activities:

- power point presentation (in pdf format)
- narrated power point video
- self-test
(portfolio assignment)*

5. Vaccination travellers and people on the move

Description of the section:

- Pretravel consultation
- Self-evaluation questionnaire
- Traveller's Health history
- Immunisation condition before departure
- Vaccination for travellers
 - Vaccination for travellers
 - International Certificate of Vaccination or Prophylaxis
 - Other travellers' groups
- Self-tests and assignments
 - Self-test: Travellers vaccination
 - Assignment: Travellers' vaccinations
- Further reading
 - Further reading about Vaccinating travellers and people on the move

Learning outcomes

At the completion of the section, students will:

- be able to access vaccination needs and vaccination coverage of travellers and people on the move
- be aware of pre-travel consultation
- be aware of ethical issues
- be familiar with the use of sources needed for proper consultation (e.g. CDC, ECDC, WHO)
- have knowledge and be able on history taking and vaccination history in order to provide proper vaccination consultation
- have knowledge on vaccination of travellers with special medical problems or special conditions
- have knowledge on ethical and cultural issues regarding vaccinating travelers and people on the move

Learning resources and activities:

- power point presentation
- power point presentation (in pdf format)
- narrated power point presentations
- video
- assignment
- self-test
(portfolio assignment)*

6. People who hesitate to take vaccines and anti-vaccination groups

Description of the section:

- A description of the phenomenon
 - Vaccine hesitancy and antivaccination phenomenon



- Antivaccination movement
- Vaccine hesitancy among healthcare workers
- How communication can influence vaccine uptake and address vaccine hesitancy
 - Communication strategies
 - Face to face interventions to address hesitancy and motivational interview
 - How to talk to anti-vaxxers
- Self-tests
 - Self-test
 - Self-test
- Further reading
 - Further reading about People who hesitate to take vaccines and anti-vaccination groups

Learning outcomes

At the completion of the section, students will:

- have knowledge about the vaccine hesitancy and anti-vaccination movement phenomenon
- have knowledge on the different vaccination needs among special population groups
- be aware of ethical issues
- be able to communicate and provide consultation to different population groups by applying all the theoretical background knowledge obtained

Learning resources and activities:

- PowerPoint presentation
 - Interactive video
 - self-test
 - pdf documents
- (portfolio assignment)*



* *The portfolio assignments are not included in Moodle platform or in this teachers' guide version. However, they are available for teachers upon request (Please contact us by email: eduvac@uniwa.gr).*

7. Glossary

In this section, the students can find several useful terms explained and clarified in order to help their learning.

Learning resources and activities

EDUVAC web-based course has produced different learning material in order to promote learning and motivate students in their learning process. The resources and activities included in EDUVAC web-based course include:

- *PowerPoint presentations* that allow students to study a topic through the PowerPoint presentation. There are for example presentations where they provide information in a text or other more animated that illustrate something that needs to be performed by students.
- *Documents* that provide knowledge and may also refer to other sources by for example links to online scientific sources/websites for studying or further reading if the students would like to deepen more their knowledge on a subject.
- *Videos* include illustrative information and they can be an effective study method for students who can identify themselves as health care providers/vaccinators in those
- *Self-tests* with which students can test their knowledge after they study a topic. The students get immediate feedback and they can repeat the test several times.
- *Assignments* are interactive or reflective to help the students learn more and go deeper in a topic. Students should first study the topic, read the instructions, and then do the assignment.



- *Portfolio Assignments* are those that teachers need to evaluate. Students firstly read the instructions and then they work on the assignment. There are 5 assignments for the portfolio. Students should complete all assignments required for the portfolio in order to be evaluated. Teachers should give a written feedback on the portfolio assignments through the e-learning platform (Moodle). They can allow students to have a second try on portfolio assignments if they haven't succeeded.

Teachers' role

The teachers' role in EDUVAC web-based course is to guide the students through this learning experience. They should encourage active learning which allows the students to take more control over their learning and give more options over their learning.

The teachers need to evaluate the portfolio assignments which are the final assignments for obtaining the ECTS. For the evaluation please see below the portfolio assignments evaluation-key for teachers. Teachers should give feedback to each student on their portfolio assignments and ask for corrections and resubmission when needed.

Students' evaluation and grading system

Students will be evaluated through five assignments included in their portfolio. All assignments should be successfully completed in order for the students to pass the course. Grading system is based on pass or fail or according to local grades (depending on the University system). This web-based course leads to 3 ECTS.



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