

EDUCATING VACCINATION COMPETENCE

Intensive Course

Syllabus



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	Educating Vaccination Competence (EDUVAC)
Type of course	Undergraduate
ECTS	2
Duration	One week
Method	Face-to-face or blended
Objectives	The Intensive 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.
Previous student requirements	This course is suitable for undergraduate health sciences students who have basic knowledge of physiology, anatomy, and health care clinical skills. Students should have a B2 level in English language.

Background

Vaccines are one of public health's most cost-effective interventions (World Health Organization [WHO], 2018a). Immunisation should be recognized as a core component of the human right to health and an individual, community and governmental responsibility (WHO, 2013).

In any case, health professionals who implement vaccinations should be authorized to administer vaccines, have distinctive personal qualities, theoretical knowledge and practical skills (Nikula et al., 2009). In addition, there are several studies that support the need to educate future health professionals on vaccinations. For example, Bralic & Pivalica (2019) have concluded that evidence-based education, especially the experience and attitudes of all health professionals, as potential educators of the population, is the foundation for successful vaccination, and thus, it is essential to strengthen the quality in vaccination education in order to overcome the vaccine hesitancy issue. Health professionals are important in communicating information about vaccination and are trusted by the public (Public Health England, 2018). Moreover, improving vaccine confidence among healthcare workers is crucial as they have been shown to have the potential to influence patient vaccination uptake (European Centre for Disease prevention and Control [ECDC], 2015a), as well as health professionals' high level of knowledge and a

positive attitude to immunisation have a positive impact in high vaccination (Simone et al., 2012).

Finally, it has been supported that vaccinations competency among health professionals should be ensured (Sakellari, 2019) and therefore, curricula and training programmes should aim that health professionals will (a) readily understand and support vaccination with minimal introduction and will not need to subsequently revisit the topic in their continual professional development, and (b) have the skills to improve attitudes to vaccination among the general population effectively (Yaqub et al, 2014). Hence, the current Intensive Course was developed within the Erasmus+ funded project “EDUVAC”.

The Intensive Course 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).

EDUVAC Intensive Course sections rationale

The EDUVAC course is developed in sections based on the review of the literature and reports by health authorities, such as the WHO, the ECDC, the Centers for Disease Control and Prevention [CDC] and national (public) authorities among the partner countries. The review of the literature was conducted using different databases (e.g. PubMed, ScienceDirect, Scopus, CINAHL) and the internet (see literature review list at the end of the syllabus). Furthermore, examples and guidelines about how a syllabus should be, were reviewed.

Thus, the project team after reviewing the literature and discussing thoroughly, concluded to include the following six evidence-based sections:

1. *Vaccination basics*
2. *Vaccination procedure*
3. *Counseling people*
4. *Vaccinating refugees, migrants, and asylum seekers*

5. *Vaccinating travellers and people on the move*

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

As mentioned above, all these sections which form the content of the course were decided based on relevant literature. The sections “Vaccination basics” has been supported by the WHO webpages dedicated to immunization and the Global Vaccine plan by the WHO (2018b). The section “Vaccination procedure” was decided, taking as an example, among other sources, the different material produced by the Finnish Institute of National Health and Welfare (2020a) and the WHO (2015a) recommendations on reducing pain at the time of vaccination, and the “Pink Book” by CDC (2015). The section “Counseling people” was decided to be included based on the WHO (2017b).

An important part of the course is “Vaccinating refugees, migrants and asylum seekers” which is a population group with special needs and it is supported by the literature and EU policies (e.g. WHO-UNHCR-UNICEF, 2015b, Rechel et al., 2011). Other population group that has extra vaccination needs are travelers and people on the move with the CDC, NHS (UK) and the W.H.O. dedicating specific part its webpages for this purpose in addition to the rich publications (Allen et al., 2016; Avni et al., 2018; Brent et al., 2018; Dolan et al., 2014; Hagmann et al., 2017; Hamer et al., 2018; Kamata et al., 2017a, 2017b; Lee et al., 2017; Rossi et al., 2012; Tan et al., 2019; Zafer et al. 2018).

Furthermore, the vaccine hesitancy and anti-vaccination groups section because this is a new movement across the world and there is rich literature on this (e.g. Berry et al., 2017; Chung et al., 2017; Hussain et al., 2018; Greenberg et al, 2017; Opel et al., 2013), and future health professionals need to be competent in order to address this challenge.

EDUVAC Intensive Course objectives

The Intensive 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 clients of different age groups and their families.

Learning outcomes

At the completion of the vaccination education, students will:

- foster the sense of collaboration and creation of a positive learning environment
- have knowledge on vaccines and immunization
- be able to consider ethical and cultural issues in regards to vaccinations
- have knowledge on evidence-based practice on vaccination
- be aware of different vaccination schedules and are able to find the different schedules targeting different population target groups
- be able to communicate and provide counseling to different populations by applying all the theoretical background knowledge obtained
- be able to administer vaccinations to different populations in theory
- will improve their English skills
- be able communicate and study in English in international student groups

General description of the EDUVAC Intensive course and outline

The (5 days) Intensive Course will be implemented via face-to-face or blended learning, self-study and different activities chosen by the organisation that implements it, which may include the following: lectures, case studies, discussions and presentations of students. Students will be able to have access to the EDUVAC web-based course if needed. The language during the course will be English. During the Intensive Course, the students will work in multicultural groups and prepare collaboratively the assignments of their groups.

Optional pre-assignment

A pre – assignment for all participating students is suggested. This can may be either to self-study learning

material from the web-based course (see below and also web-based course syllabus) or to study the National Vaccination Programme in order to be ready to compare it with other countries' vaccination programmes.

Intensive Course suggested programme

<i>Day 1</i>	<ul style="list-style-type: none"> - Introduction to the course - Get to know each other/breaking the ice - Vaccination basics - Vaccination procedure
<i>Day 2</i>	<ul style="list-style-type: none"> - Counseling people - Simulations - Introduction to the final assignment - Group work on the final assignment
<i>Day 3</i>	<ul style="list-style-type: none"> - Vaccinating refugees, migrants, and asylum seekers - Vaccinating travellers and people on the move - Simulations - Group work on the final assignment
<i>Day 4</i>	<ul style="list-style-type: none"> - People who hesitate to take vaccines and anti-vaccination groups - Simulations - Group work on the final assignment
<i>Day 5</i>	<ul style="list-style-type: none"> - Final preparations of the presentations in student groups - Presentations of the students' final assignments (see suggested final assignment below in details) and discussion - Reflections - Conclusions

Learning activities

There are several learning activities that can be considered to be included in the Intensive Course

- Group works
- Workshops
- Study visits
- Seminars
- Simulations and role playing (please see below in more details)
- Lectures
- Interactive games
- Discussions
- Students presentations

Blended option with the use of the EDUVAC web-based course

EDUVAC project has developed a web-based course which can be used in case the organisation implementing the Intensive Course decides to use the approach of blended learning. Blended learning offers flexibility and allows the students to have access in a wider range of learning resources. (See EDUVAC web-based course syllabus for more details).

Use of simulations as a pedagogical approach

Simulation-based education promotes active and experiential learning (Keskitalo, 2015). Simulations for educational purposes are a learning method in order to simulate real life situations (Barjis, 2011). The advantages of simulation-based education in health care education include a provision of a safe and realistic environment in which to repeatedly practice and maintain the competences of the professionals teach different events and integrate theory into practice (Keskitalo, 2015).

Simulations can be used in the Intensive Course in order to promote learning and develop competences in vaccinations. EDUVAC project team had developed a learning package for the simulations as a pedagogical approach that can be integrated into the learning activities of the Intensive Course (see Simulations Guides for detailed instructions and simulation cases/scenarios).

Final assignment

The final assignment is done in groups and instructions can be given during the second day of the Intensive Course. Teachers will be guiding the students through the group work when needed in order to facilitate and support the process.

The final assignment includes the following:

Each group of students should freely choose one of the topics discussed during the Intensive Course, and elaborate it further in a digital format. This should be presented on the last day of the Intensive Course using no more than 15'. For example, it could be a power point presentation, an e-poster, a video or any other digital format you would like in order to present as whole the topic you have chosen. The presentations should be based on evidence-based references and they should be cited. In addition, an overall impression/reflection of the Intensive Course and the learning process could be also shared. The topic maybe assigned by the teacher or freely decided depending on each organisation that impelments the Intensive Course.

In the final assignment the students will show that they:

- can find relevant evidence-based source material and data concerning this topic
- have a clear vision on the role they play in a group process and they are able to reflect on their role (strengths and weaknesses)
- can deliver a creative presentation as the outcome of the Intensive Course
- have a clear insight of vaccination competencies

Students' evaluation and grading system

Students will be evaluated through their active participation in workshops and assignments. Grading system is based on pass or fail or according to local grades (depending on the University system). This Intensive Course leads to 2 ECTS.

Relevant literature

Scientific articles, reports, guidelines, and other scientific sources reviewed to help the EDUVAC project team to develop this web-based course

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Relevant peer reviewed journals

- Vaccine
- Vaccine Reports
- European Journal of Immunology
- Human Vaccines and Immunotherapeutic
- Tropical Diseases, Travel Medicine and Vaccines

- Global Vaccines and Vaccination Journal
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- International Journal of Vaccines and Immunization
- International Journal of Vaccines and Research
- International Journal of Vaccines and Vaccination
- Journal of Immunology Research
- Journal of Vaccines and Clinical Trials
- Journal of Vaccines and Immunology
- Journal of Vaccines, Immunology and Immunopathology
- Journal of Vaccines and Vaccinations
- SM Vaccines and Vaccination Journal
- The Journal of Immunology- Vaccine and Vaccination Studies
- International Journal of Environmental Research and Public Health