

YEARS 1 & 2 ELECTIVE COURSE

TITLE: Vaccine Literacy: Challenges and Impacts

COURSE NO.: SOMN 623

DEPARTMENT: Medical Education

DURATION: Full year

DIRECTORS: Coral D. Matus, MD, FAAFP

STUDENT DIRECTOR: Shalini Kota

SEMESTERS AVAILABLE: Fall and Spring (Year Long)

NUMBER OF STUDENTS: 35

LOCATION: Health Science Campus and various vaccine/ clinical sites as appropriate

COORDINATOR: Saraya Parnell

FACULTY: Various

GENERAL DESCRIPTION: Students will be required to attend a minimum of 80% of sessions offered through the elective and will be expected to participate in thoughtful discourse. Sessions will include education and discussion regarding policy guiding vaccine creation, approval, dissemination, and administration, including vaccination courts and ethical considerations throughout the immunization process. Interdisciplinary discussion will move beyond policy, where society, media, and technology affect patient perception and beliefs, and where a medical understanding of the immunization practices, intricacies of vaccine type and circumstances for obtaining informed consent can affect patient-physician communication. Students will apply this knowledge to focus on developing effective communication skills adaptive to various demographics, special populations, and ideologies, and apply this information in the clinical environment whenever possible. Students will be encouraged to participate in community- based opportunities to either distribute vaccine (when applicable) or to participate in community education opportunities, in which they may consult with patients regarding vaccination decisions throughout the academic year. Faculty will determine minimum required hours for community engagement based on availability and scheduling criteria, and will inform students of these hours at the beginning of the term; these volunteering requirements will typically be no more than 7 hours and no fewer than 2 hours per student.

EDUCATIONAL COURSE OBJECTIVES:

1. Describe various types of vaccinations, including which infectious diseases they prevent, the mechanism by which the vaccine induces immunity in the host, and indications and contraindication to various types of vaccines. **MK-6, MK-7, PBL-7**
2. Explain vaccine policy in hospital administration and the public health sector, including situations in which mandatory vaccination is appropriate or warranted. **MK-15, SBP-1, PB-6**
3. Differentiate between CDC guidelines and FDA approval policies, including Emergency Use Authorization, and implications of FDA approval. **SBP-1**
4. Describe vaccine policy at the federal, state, and local level, and how vaccine courts differ from standard judicial proceedings. **MK-15**
5. Explain the historical context, emergence, and typical proceedings of vaccination courts, and their effect on science, medicine, and society. **MK-15, SBP-1**
6. Explain the role of patient autonomy, beneficence, maleficence, justice, equity, and/or confidentiality in any level of vaccination (from vaccine creation and distribution to obtaining informed content for vaccine administration). **MK-9, PB-4**
7. Demonstrate effective communication skills in vaccine efficacy and risk, obtaining and ensuring informed consent, and conveying evidence-based medicine at all levels of educational background. **PC-5, MK-12, MK-7, PB-5, PB-7, IPC-1**
8. Demonstrate and practice cultural competency and effective communication on vaccines/vaccinations to patients of various ideologies, demographics and special populations (consider religion, education, parental/guardian, cultural beliefs, trypanophobia, immunocompromised), including explanation of efficacy, immunization process, and the associated potential risks, benefits, and side effects of receiving a vaccine. **MK-11, PB-5, PB-7, IPC-1, IPC-3, PBL-6**
9. Recognize ethical considerations including intended and unanticipated consequences, as well as moral injury, of vaccines in modern day and throughout history. **MK-9**
10. Discuss the role of technology, including the psychology of social media, on trust and authority in communicating evidence-based medicine, primary in the dissemination of information. **IPC-3, PBL-4, PB-1, IPC-1, PBL-4**
11. Synthesize strategies to combat misinformation and misguided theories about vaccinations, citing approaches which may increase empathy and communication and decrease mistrust of vulnerable populations **IPC-3, PB-2, PB-4, PB-5, IPC-1, PBL-6**
12. Discuss strategies to decrease physician burnout and fatigue surrounding vaccination/vaccine discussions, and the possible positive effects of training in communication in this domain. **PBL-1, PB-8,**
13. Describe various resources to obtain vaccines, including community resources available to underinsured or uninsured individuals. **SBP-1, MK-12, PBL-6**

METHODS OF TEACHING: Lecture, Group Discussion, Completion of online module (e.g. COVID-19 Vaccination for Healthcare Workers at learntovaccinate.org), Standardized Patient Case Study, Clinical Application (vaccine administration or community outreach), Informal

Research to complete a reflection as a final project (ideally using peer-reviewed publications).

METHODS OF EVALUATION AND STUDENT FEEDBACK: Upon completing required elective material, students will have the opportunity to act as vaccine ambassadors through required community engagement, consisting of patient education and/or vaccine administration and dissemination in clinical environments. At the end of the elective, students will write a **1-2 page essay** in which they **apply their knowledge of vaccines to critique and comment on one** of the following prompts:

1. The role vaccines/vaccinations play in a vaccine-related event (historical or current). Students are strongly recommended to focus on how medicine fits into the interdisciplinary world of vaccine/vaccinations. Disciplines may include (but are not limited to) science, medicine, public health, society, media and communications, policy, technology, and judicial/legislature.
For instance, apply knowledge of vaccine/vaccinations within policy/judiciary and public health to comment on an article written about a specific vaccine court case.
2. Comment/Critique recent publications on developing combination vaccines and explain debates in this literature. This essay may be persuasive.
3. Reflect on personal experience as vaccine ambassador. Commentary may include communication techniques employed successfully, insight from patient interactions, and any enduring questions the student may have.

PREREQUISITES: NONE. Completion of the Infectious Disease and Immunology Thread Courses will be helpful to technical understanding.