



Literature for VMFB44, Biotechnology in Defence and Security: Medical Opportunities and Legal Challenges applies from the spring semester 2026

Literature established by The Master's Programmes Board on 2025-10-02 to apply from 2025-10-02

The most important literature for the course are the lecture notes from invited speakers. Notes will be uploaded on Canvas as the course proceeds. This literature list is meant as a complement to those notes. Its primary purpose is to support you with some key references for the written assignment of the course.

Reading the sources marked with an asterisk (*) could also be valuable as a preparation for the course. They are not mandatory for following the course but should be looked on as a resource for those who want to be especially well prepared.

Strategic technologies

*Summary of NATO's Biotechnology and Human Enhancement Technologies Strategy, 2024

https://www.nato.int/cps/en/natohq/official_texts_224669.htm

*DNA as a universal chemical substrate for computing and data storage, Yang S et al. 2024 (access through LU subscription)

<https://ludwig.lub.lu.se/login?url=https://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,uid&live&scope=site>

Science & Technology Trends 2020-2040, NATO STO, 2020

https://www.nato.int/nato_static_fl2014/assets/pdf/2020/4/pdf/190422-ST_Tech_Trends_Report_2020-2040.pdf

Biometrics recognition using deep learning: a survey, Minaee S et al. 2023 (access through LU subscription)

<https://ludwig.lub.lu.se/login?url=https://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,uid&live&scope=site>

Cyberbiosecurity

*Cyberbiosecurity: From Naive Trust to Risk Awareness, Peccoud J et al. 2017 (access through LU subscription)

<https://ludwig.lub.lu.se/login?url=https://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,uid&live&scope=site>

Data sharing practices and data availability upon request differ across scientific disciplines, Tedersoo L et al. 2021 (open access paper)

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8381906/>

Biosecurity and international policy

*The Biosecurity Threat Environment, Walsh PF 2018

<https://ludwig.lub.lu.se/login?url=https://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,uid&live&scope=site>

*The Need for Modernization of Biosecurity in the Post-COVID World, DeEulis D & Giordano J 2022 (open access)

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9044947/>

Intelligence and counterespionage

*The psychology of espionage, Wilder UM 2017 (open access)

<https://www.cia.gov/resources/csi/static/psychology-of-espionage.pdf>

*An alternative framework for agent recruitment, Burkett R 2013 (open access)

<https://www.cia.gov/resources/csi/static/9ccc45dc156271d11769e5205ec49c29/Alt-Framework-Agent-Recruitment-1.pdf>

Espionage by Europeans, Jonsson M & Gustafsson J 2022 (open access)

<https://www.foi.se/rest-api/report/FOI-R--5312--SE>

Health related disinformation

*Virtual Manipulation Brief 2025: From War and Fear to Confusion and Uncertainty

<https://stratcomcoe.org/publications/virtual-manipulation-brief-2025-from-war-and-fear-to-confusion-and-uncertainty/320/>

*Russian and US news media coverage of Ukrainian biological laboratories, Sundelson AE et al. 2023 (open access)

<https://digitalcommons.usf.edu/cgi/viewcontent.cgi?article=2148&context=jss>

*RESIST 2 Counter Disinformation Toolkit, 2022, UK Government (open access)

<https://gcs.civilservice.gov.uk/publications/resist-2-counter-disinformation-toolkit/>

Systematic Literature Review on the Spread of Health-related Misinformation on Social Media, Wang Y et al. 2019 (open access)

<https://www.sciencedirect.com/science/article/pii/S0277953619305465>

The Smallpox Chiefs: Bioterrorism and the Exercise of Power in the Pacific Northwest, Lutz JS and Carlson KT, 2024 (open access)

<https://academic.oup.com/whq/article/55/2/87/7624135>

Cases of misuse of medical research

*A Short History of Biological Warfare: From Pre-History to the 21st Century, Carus WS, 2017 (open access)

https://ndupress.ndu.edu/Portals/68/Documents/occasional/cswmd/CSWMD_OccasionalPaper-12.pdf

The history of biological warfare, Frischknecht F, 2003 (open access)

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1326439/>

Risk assessment of biotechnology and mitigation of misuse

*Weaponized genomics: potential threats to international and human security, Chattopadhyay S et al, 2023 (access through LU subscription)

<https://ludwig.lub.lu.se/login?url=https://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,uid&live&scope=site>

*Safely balancing a double-edged blade: identifying and mitigating emerging biosecurity risks in precision medicine, DeEulis D & Giordano J 2024 (open access)

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10987748/>

Health and Human Rights

Health and Human Rights in a Changing World, Grodin M et al. (eds.) 2013 (e-textbook accessible through LU license)

<https://ludwig.lub.lu.se/login?url=https://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,uid&live&scope=site>