

Questionnaire (version of October 2023)

Natural-Science Disarmament Courses

Course Description

Time when course was/is given (years)	Winter term 2024 - today
Lecturer(s)	Malte Göttsche
Institution (department, university)	Physics, TU Darmstadt
Course Title	Science for Nuclear Arms Control
Type (lecture, seminar ...)	Lecture with exercises
Language(s)	English
Time (number of hours (45 or 60 minutes?) per week, no. of weeks, no. of days if block, how often per year)	3 hours (45min) lecture 1 hour (45min) exercises 14 weeks once per year (winter term)
Audience (students of which disciplines, interdisciplinarity)	Physics
Credits given	5 ECTS
- for what (oral/written exam ...)	tbd
Status in department/university/ field of study, obligatory or voluntary	Voluntary
Connection with other course(s)/ integration in field of study	Module in the M.Sc. Physics curriculum
Additional activities/material (Model UN, visits, invited speakers, videos, ...)	Invited speakers (internal from working group and external)
Presentations/papers available, to whom	
Internet site of course	
Curriculum/list of units (add below or attach)	
Filled in by	Malte Göttsche
Date	08.10.2024
Agreement to publish this	Yes

Units

1. Introduction
2. Decay and nuclear reactions
3. Reactors and weapons
4. Uranium enrichment
5. Plutonium production
6. Verification in declared facilities
7. Detecting undeclared facilities

8. Verifying nuclear weapon tests

9. Disarmament and its verification