

Overview of Cyberspace

MICROMODULE

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Description

Module I Week 1 Lesson 1. Cyber Operations Law and Policy with course overview and comprehensive learning outcomes (Lesson 1 Part 1) and understanding technology and cyberspace (Lesson 1 Part 2).

Outcomes

remember and understand

Students will be able to define What the law permits with respect to cyber operations involving Private Actors

remember and understand

Students will be able to define What the term “cyberspace” means by learning the functional and technical workings of cyber systems, i.e., modern communication (Internet, cellular, GPS), business, government, and security platforms

remember and understand

Students will be able to identify The structure and roles of pertinent U.S. federal and U.S. state agencies who investigate and defend against cyber threats, engage in cyber operations, and prosecute cyber actors engaged in actions that constitute cybercrimes as well as the relation between U.S. federal and state agencies

remember and understand

Students will be able to define The distinction between Private Actors and State Actors in Cyberspace

remember and understand

Students will be able to describe The international rules governing how state cyber operations against “organized armed groups” may be conducted

remember and understand

Students will be able to define What a “Cyber Threat Indicator” (CTI) is under the Cybersecurity Information Sharing Act of 2015 (CISA); what constitutes a Defensive Measure (DM) under CISA, and other CISA statutory definitions

remember and understand

Students will be able to describe The international law determining when a nation-state may conduct cyber operations against non-state actors who may be considered an “organized armed group”

remember and understand

Students will be able to explain How the Congress and President share responsibility for national security operations and how these responsibilities are embodied in the War Powers Resolution and covert action statutes o The international law determining when a nation-state may conduct cyber operations against another nation-state

remember and understand

Students will be able to explain How data and information is created, collected, aggregated, bought, sold, manipulated, and hacked (Cyber Actions) by private and state actors across cyber platforms

remember and understand

Students will be able to describe The international law rules governing

how state-to-state cyber operations may be conducted

remember and understand

Students will be able to describe How cyber systems and operations function by reviewing internet technology, and electronic device and data advances, such as Internet of Things, Sensor Technologies (environmental, biometric, wearable, smart devices), GPS Tracking, Biometrics, Thermal Imaging, Big Data concepts, Predictive Analytics, and the proliferation of Unmanned Aerial Vehicles (UAVs)

remember and understand

Students will be able to define The current threat-response framework for cyber operations, including investigation of CTIs and the Cyber Action, use of DMs to counteract CTIs, identification of the Cyber Actor, and permissible offensive operations

remember and understand

Students will be able to describe Legal distinctions in the threat-response framework as applied to Cyber Actions conducted by Private Actors and State Actors

remember and understand

Students will be able to describe How Automated Indicator Sharing (AIS) functions and other means of sharing Classified and Non-Classified CTIs and DMs across all levels of government and between government and private sector

remember and understand

Students will be able to explain The international law determining when a nation-state may conduct cyber operations against another nation-

state

remember and understand

Students will be able to describe The roles of the Congress, President, U.S. Courts, and U.S. State governments in formulating cyber policy and cyberlaw, and executing cyber operations that address the conduct of Private and State Actors engaging in Cyber Actions

remember and understand

Students will be able to describe The framework of existing constitutional, statutory, regulatory, and common law sources that have melded into the framework of domestic U.S. state and federal laws called Cyberlaw

remember and understand

Students will be able to describe The nature of international law and its role in cyber operations