

Syllabus  
Law 705: Emerging Issues in National Security Law – Emerging Technology

Antonin Scalia Law School – Summer 2022  
Prof. W. Renn Gade, Dr. Crane Lopes,  
Prof. Hampton Tignor and Prof Todd E. McDowell

**Course Description:** Emerging technologies such as hypersonics, artificial intelligence, directed energy weapons, and quantum computing are critical to U.S. national security. This course first examines the federal institutional framework governing emerging technologies. Second, it introduces the major legal practice areas that national security attorneys must understand to advise defense sector clients on emerging technologies matters. Third, it teaches students effective client briefing and presentation techniques. Students will complete written and oral exercises on course topics and receive instructor feedback to improve their briefing and presentation skills.

**Student Learning Outcomes:** Upon completing this course, students will be able to:

1. Evaluate the federal institutional framework governing emerging technologies to advise defense sector clients on emerging technology matters.
2. Apply knowledge of legal practice areas governing emerging technologies to advise defense sector clients on emerging technology matters.
3. Use effective written and oral briefing techniques to advise defense sector clients on emerging technology matters.

**Class Format:** Hybrid format, with in-person lectures. It is a two-credit course meeting twice per week, for two hours. This course is practitioner-oriented. It has four instructors to cover the legal practice areas in sufficient depth. Different instructors will teach various classes. The course features guest speakers who are experts in specific legal practice areas. The instructors will treat students as fellow attorneys and will seek collaboration and feedback from them throughout the course. Students should participate in class by completing any assigned reading ahead of time, contributing to class discussion, and engaging in dialogue with their fellow students, the instructors, and the guest speakers.

**Student Biographies:** Students will post their biography on TWEN before Class 1 (May 16). The biography must be in Times New Roman, 12-point font, ≤ 250 words, and must inform the instructors and fellow students of the student's background and career plans. The biography is ungraded. But it will be considered in determining class participation grading.

**Grading:** Final grades for the course will be based on the four reaction papers (60%), an oral presentation (20%), and class participation (20%) consistent with GMU policy. Students are expected to come to class having done the assigned readings and be prepared to discuss topical issues related to the course material.

**Reaction Papers:** Students will prepare four reactions papers (each no more than 750 words). See the Course Schedule section below for reaction paper due dates. The topic area of each of the reaction papers will draw from the class material presented the week before the due date and graded by the instructor responsible for that week's assignment. The

reaction papers will summarize an issue based on readings and class discussions for a hypothetical senior defense sector client (e.g., a senior Pentagon official). Students will submit reaction papers on TWEN. Each reaction paper will be weighted as 15% of the final course grade, 60% together. The grading instructor will provide the students with constructive feedback on the assignment. Instructions for the reaction papers will be posted on TWEN and discussed in Class 1.

**Oral Presentation:** Students will prepare and present an oral presentation, no more than 15 minutes in length, to the class concerning an issue chosen by the student and coordinated with the instructors no later than Class 7 (June 8). Scheduling of oral presentations through TWEN will be completed no later than Class 9 (June 15). Oral presentations will be made in Classes 12-13, (June 27 and 29). The oral presentation will be weighted as 20% of the final course grade. The instructors will provide the students with constructive feedback on their presentations.

**Class Preparation/Participation:** 20% of the final course grade.

**Final Exam:** No final exam in this offering of the course.

**Class Details:** Mondays and Wednesdays: 6 pm – 7:50 pm.

**Faculty Contact Information:**

Prof. Gade Email: [w.r.gade@gmail.com](mailto:w.r.gade@gmail.com)

Dr. Lopes Email: [clopes@gmu.edu](mailto:clopes@gmu.edu)

Prof. Tignor Email: [Hampton.tignor@gmail.com](mailto:Hampton.tignor@gmail.com)

Course Administrative Manager: Prof. McDowell Email: [tmcdowe@gmu.edu](mailto:tmcdowe@gmu.edu)

**Office Hours:** Students are welcome to contact and collaborate with the instructors.

**Course Materials:** Students do not need to purchase a casebook or other reading assignments. The instructors and guest speakers will post assigned readings on TWEN before class. Please check TWEN regularly—at least twice a week—for assigned readings and other course materials.

**Course Schedule:**

WEEK 1

**Class 1 – Monday, May 16 – (Gade/Lopes/Tignor/McDowell)**

**Course Introduction**

Hour 1 - Course Introduction/Course Requirements & Grading/Instructor Overviews of their assigned class sessions

Hour 2 –Introduction to the Innovation Ecosystem and National Security Legal Framework

**Class 2 – Wednesday, May 18 – (Lopes)**  
**Privacy Law and Emerging Technology**

Hour 1 – Privacy Overview

Hour 2 – Fourth Amendment Exercise

Admin Support: McDowell

WEEK 2

**Class 3 – Monday, May 23 – (Lopes)**  
**Intellectual Property Law and Emerging Technology**

Hour 1 – Intellectual Property Overview

Hour 2 - Technology Licensing Exercise

Admin Support: McDowell

**Class 4 – Wednesday, May 25 (Gade) Guest Speaker: Jonathan Fischbach**  
**Intelligence Law and Emerging Technology**

Hour 1 - Foundations of Intelligence Law

Hour 2 - Emerging Technology Issues in Intelligence Law

Admin Support: McDowell

- ❖ Assignment Due on May 25: Reaction Paper #1 – Due to Dr. Lopes.

WEEK 3

[May 30 – No Class – Memorial Day Observance – Law School Closed]

**Class 5 – Wednesday, June 1 (McDowell) Guest Speaker: John McHugh**  
**Procurement Law and Emerging Technology**

Hour 1 – Traditional/Non-traditional Procurement

Hour 2 – Defense Acquisitions

- ❖ Assignment Due on June 1: Reaction Paper #2 – Due to Prof. Gade.

WEEK 4

**Class 6** – Monday, **June 6** (Tignor) Guest Speaker: Robert Schafer, Defense Security Cooperation Agency  
**Security Cooperation**

Admin Support: McDowell

**Class 7** – Wednesday, **June 8** (Tignor) Guest Speaker: Mariam Osmun, Defense Technology Security Administration  
**Export Control Law**

Admin Support: McDowell

- ❖ Assignment Due on June 8: Oral Presentation Topic – To Dr. Lopes/Prof Tignor before the beginning of Class 7
- ❖ Assignment Due on June 8 : Reaction Paper #3 – Due to Prof. Tignor.

WEEK 5

**Class 8** – Monday, **June 13** – (Gade) Guest Speaker: Col Todd Pennington, USAF  
**Space Law and Emerging Technology**

Hour 1: Foundations of National Security Space Law

Hour 2: Emerging Technology Issues in Space Law

Admin Support: McDowell

**Class 9** – Wednesday, **June 15** – (McDowell) Guest Speaker: Matthew Gagelin, Marine Corps Installations Command  
**Fiscal Law and Emerging Technology**

Hour 1: Environmental Issues in National Security

Hour 2: Fiscal Law in National Security Research and Development

Admin Support: McDowell

- ❖ Assignment Due on June 15: Reaction Paper #4 – Due to Prof. McDowell.

WEEK 6

[June 20 – No Class – Juneteenth Observance – Law School Closed]

**Class 10 – \*Tuesday Class\*, June 21 (Gade) Guest Speaker: Col Paul Dawson, USAF  
Cyber Law and Emerging Technology**

Hour 1: Foundation of Cyber Security Law

Hour 2: Operational Cyber Law in the National Security Enterprise

Admin Support: Lopes/Tignor

- ❖ Assignment Due on June 21: Schedule Oral Presentation – Schedule presentation time slot for Week 7 on TWEN before Class 10

**Class 11 – Wednesday, June 22 (McDowell)  
Law of War and Emerging Technology**

Hour 1 – Fundamentals of the Law of War

Hour 2 – Application of the Law of War to Emerging Technologies

WEEK 7

**Class 12 – Monday, June 27 (Tignor/Lopes)  
Student Oral Presentations**

**Class 13 – Wednesday, June 29 (Tignor/Lopes)  
Student Oral Presentations**

WEEK 8

[July 4 – No Class – Fourth of July Observance – Law School Closed]

**Class 14 – Wednesday, July 6 – (Lopes)**

**Legislation and Congress**

Guest Speaker: Dr. Arun Seraphin, NDIA

Admin Support: McDowell