

Emerging Technology and International Relations

INSTRUCTOR	Ryan Powers
FORMAT	Face-to-face
MEETINGS	MW, 11:35 a.m.–12:55 p.m. CITS Conference Room
OFFICE	Rm. 614, 110 E. Clayton St. Athens, GA 30601
OFFICE HOURS	By appointment — ryanpowers.youcanbook.me
EMAIL	ryan.powers@uga.edu
WEB	spia.uga.edu/faculty-member/ryan-powers
PREREQUISITES	INTL 3200 or INTL 3300, or permission of department
CREDIT	3 hours. Not open to students with credit in POLS 4480.

Consistent with University of Georgia policy, this course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary.

Course Description

INTL 4770 — Special Topics in International Relations (UGA Bulletin): Theoretical, analytical, and empirical approaches to international relations.

This offering. This course is an undergraduate-level introduction to emerging technology and international politics. The course is designed to introduce students to a variety of emerging technologies (internet of things, artificial intelligence, virtual reality, 3D printing, autonomous weapons, etc.) and the effects that these technologies have had, are having, or will have on international politics. We will consider how these technologies affect war, diplomacy, commerce, and human rights. By the end of this course, students will have practice working with a variety of these technologies and a working knowledge of the laws governing their use by and sale to domestic and foreign actors.

Course Materials

There is no required text for this course. Assigned readings and videos will be posted on eLC.

Grading and Expectations

Grades

Your final grade will be calculated as follows:

- Participation (via TopHat) — 30% (*ongoing, weeks 1-16*)
- Response Papers — 25% (*five short papers across the semester*)
- Virtual Reality Workshop — 10% (*in-class deliverable*)
- 3D Printing Workshop — 10% (*in-class deliverable*)
- Vibe Coding for International Affairs — 25% (*semester group project*)
 - Project plan — 5% (*due Wed., Sep. 23, 2026*)
 - Progress memo — 5% (*due Wed., Oct. 28, 2026*)
 - Final product & Demo Day — 15% (*Mon., Nov. 30, 2026*)

Attendance

Attendance is vital to your success this semester. You should come to lecture having read the assigned work closely enough to actively participate in a detailed and critical discussion of the arguments and evidence presented by the authors. I also expect you to come to class already familiar with the major international news stories of the day. You get access to both *The New York Times* and *The Wall Street Journal* as part of your student activities fees. Other great international affairs coverage is available from *The Economist*, *The Financial Times*, and *BBC World News*.

Note that brown M&M's are strictly prohibited from all class meetings. Send me an email by August 24, 2026 explaining why both Van Halen and I have such particular tastes when it comes to M&M's and you will receive a 5 point bonus on your participation grade (Hint: <https://goo.gl/ThqEAm>).

All noise-making electronics should be silenced and, where possible, set to “Do Not Disturb” for the duration of our class meetings.

Assignments

Assignments should be submitted online to eLC. Late assignments will be penalized at a rate of one-half letter grade per day.

- **Participation.** We will have TopHat activities throughout the semester to record attendance and participation.
- **Response Papers.** Five short response papers (1–2 pages each) over the course of the semester. Each paper engages with the assigned readings and a relevant current event, and must be submitted on eLC before the start of the class meeting for which it is assigned. Specific due dates will be posted on eLC.
- **Virtual Reality Workshop.** An instructor-led, in-class session in which you will work through a ready-made diplomacy scenario in VR. You will submit a short artifact (briefing card, decision log, or scenario debrief) completed during the workshop itself. No out-of-class deliverable.
- **3D Printing Workshop.** An instructor-led, in-class session built around a ready-made scenario drawing on lessons from the use of 3D printing and drones in recent conflicts. You will submit a short artifact (scenario worksheet or design rationale) completed during the workshop itself. No out-of-class deliverable.
- **Vibe Coding for International Affairs** (*semester-long group project; checkpoints in weeks 3, 8, and 16*). You and a group of your colleagues will “vibe code” a tool that will help foreign policy practitioners or the public manage, understand, or solve an important problem in international affairs. This tool might collect and summarize foreign policy news, visualize events data, or teach the public about important foreign policy problems. You should use a generative AI program like Gemini, ChatGPT, or Claude. The tool does not need to be fully functional; our goal is to learn about the promise and perils of vibe coding in international affairs. The project is assessed through three checkpoints:
 - **Project Plan** (*due Wed., Sep. 23, 2026*). A 2–3 page plan identifying the problem, the intended user, the tool you propose to build, the generative AI tools you will use, and a rough timeline. Submitted as a group.
 - **Progress Memo** (*due Wed., Oct. 28, 2026*). A 2–3 page memo reporting what you have built so far, what is working, what is not, and what has changed from the plan. Include a link to the working artifact (repo, prototype, or deployment) and screenshots.
 - **Final Product & Demo Day** (*Mon., Nov. 30, 2026*). A live demo of the final tool on Demo Day, accompanied by a short written reflection on what worked, what did not, and what you learned about the promise and perils of vibe coding for international affairs.

Make-Up Policy

Missing a class-based activity (most importantly, the Virtual Reality Workshop, the 3D Printing Workshop, and Demo Day) requires special permission. Because the workshops are graded on an in-class deliverable, missing one without documentation of the absence validated by UGA Student Care & Outreach (sco.uga.edu) will result in a zero for that component. Students who anticipate a conflict should contact me in advance whenever possible so that alternative arrangements can be considered.

Grading Scale

Your final grade will be calculated on the following scale:

- 94–100: A
- 90–93: A-
- 87–89: B+
- 84–86: B
- 80–83: B-
- 77–79: C+
- 74–76: C
- 70–73: C-
- 67–69: D+
- 64–66: D
- 60–63: D-
- Less than 60: F

Course Policies

In the absence of written authorization from the UGA Disability Resource Center, students may not make a visual or audio recording of any aspect of this course. Students who have a recording accommodation agree in writing that they:

- Will use the records only for personal academic use during the specific course.
- Understand that faculty members have copyright interest in their class lectures and that they agree not to infringe on this right in any way.

- Understand that the faculty member and students in the class have privacy rights and agree not to violate those rights by using recordings for any reason other than their own personal study.
- Will not release, digitally upload, broadcast, transcribe, or otherwise share all or any part of the recordings. They also agree that they will not profit financially and will not allow others to benefit personally or financially from lecture recordings or other course materials.
- Will erase/delete all recordings at the end of the semester.
- Understand that violation of these terms may subject them to discipline under the Student Code of Conduct or subject them to liability under copyright laws.

The language above was drafted by SPIA Dean Matt Auer.

Course Outline

Required readings, if any, will be posted on eLC. **Reading should be completed prior to the class meeting for which it is assigned.** Assignment due dates are shown in the schedule below and in the *Assignments* section above.

Class meeting dates appear in the left column; topics and any assignment due dates on the right. A hairline rule between two dates indicates a topic that spans both meetings of the week.

Unit 1 — Technical Foundations

M · Aug 17	Course introduction, syllabus, and expectations
W · Aug 19	Leading-edge chips
M · Aug 24	Artificial Intelligence
W · Aug 26	Quantum computing
M · Aug 31	3D printing and additive manufacturing
W · Sep 02	Biotechnology
M · Sep 07	<i>No Class — Labor Day</i>

- W · Sep 09** Virtual Reality
- M · Sep 14** Drones and robotics
- W · Sep 16** Space and satellites
- M · Sep 21** Batteries and critical minerals
- W · Sep 23** Nuclear energy
DUE · Vibe Coding Project Plan

Unit 2 — Technology and Foreign Policy

- M · Sep 28** 3D Printing for War and Peace
- W · Sep 30** 3D Printing Workshop
- M · Oct 05** Virtual Reality, First-Person View, and Conflict
- W · Oct 07** **Virtual Reality Workshop**
- M · Oct 12** AI and Foreign Policy Decision Making
- W · Oct 14** Nuclear energy and the military
- M · Oct 19** Emerging tech and Weapons of Mass Destruction
- W · Oct 21** **Vibe Coding Workshop**

Unit 3 — Technology and the Home Front

- M · Oct 26** Deepfakes and foreign election interference
- W · Oct 28** Platform governance and content moderation
DUE · Vibe Coding Progress Memo
- M · Nov 02** Critical infrastructure
- W · Nov 04** Human rights and emerging technology

M · Nov 09 Smart cities, IoT, and public-private data

Unit 4 — Regulating Technology

W · Nov 11 The use and sale of emerging technology

M · Nov 16 Global technology standards

W · Nov 18 AI Governance

M · Nov 23
W · Nov 25 *No Class — Thanksgiving Break*

M · Nov 30 **Demo Day — Vibe Coding project showcase**
DUE · Vibe Coding Final Product & Reflection

University Policies

Academic Integrity and Professional Conduct

I expect you to do your own work and to abide by all university policies on academic integrity and professional conduct. The UGA Student Honor Code states: “I will be academically honest in all of my academic work and will not tolerate academic dishonesty of others.” A Culture of Honesty, the University’s policy and procedures for handling cases of suspected dishonesty, can be found at honesty.uga.edu.

In this course specifically, academic dishonesty includes (but is not limited to) submitting another student’s work as your own, fabricating workshop artifacts or results, misrepresenting the provenance of code or 3D-printed parts, and failing to disclose the use of generative AI tools where disclosure is required (see below).

Generative AI

This course is about emerging technology, and generative AI is one of the technologies we are studying. The policy varies by assignment, so the rule of thumb is simple: **the closer an assignment is to a live, in-person activity, the less AI you should be using in the moment.** Specifically:

- **Participation (TopHat):** No AI during class. Contributions should reflect your own thinking in real time.
- **Virtual Reality Workshop:** The in-class artifact must be your own work produced during the session. AI is fine for reflection or follow-up writing, subject to the disclosure rule below.
- **3D Printing Workshop:** The in-class artifact must be your own work produced during the session. AI is fine for brainstorming use cases or debugging print files outside of class, subject to the disclosure rule below.
- **Vibe Coding for International Affairs:** AI use is **required** across all three checkpoints (plan, progress memo, final product). This assignment exists to give you hands-on experience with the promise and perils of vibe coding; use Gemini, ChatGPT, Claude, or similar.

Whenever you use generative AI on graded work, you must (1) disclose which tool(s) you used and, briefly, how you used them, and (2) verify any factual claims against authoritative sources. You are responsible for the accuracy and originality of everything you submit with your name on it. Using AI where it is not permitted, or using it without disclosure where disclosure is required, will be treated as academic dishonesty.

Accommodations

In accordance with UGA policy, “[s]tudents with disabilities who require reasonable accommodations in order to participate in course activities or meet course requirements should contact the instructor or designate during regular office hours or by appointment.” More information about accommodations that are available to students with disabilities is available from the [Disability Resource Center](#).

UGA Well-being Resources

UGA Well-being Resources promote student success by cultivating a culture that supports a more active, healthy, and engaged student community.

Anyone needing assistance is encouraged to contact Student Care & Outreach (SCO) in the Division of Student Affairs at 706-542-8479 or visit sco.uga.edu. Student Care & Outreach helps students navigate difficult circumstances by connecting them with the most appropriate resources or services. They also administer the Embark@UGA program which supports

students experiencing, or who have experienced, homelessness, foster care, or housing insecurity.

UGA provides both clinical and non-clinical options to support student well-being and mental health, any time, any place. Whether on campus, or studying from home or abroad, UGA Well-being Resources are here to help.

- Well-being Resources: well-being.uga.edu
- Student Care and Outreach: sco.uga.edu
- University Health Center: healthcenter.uga.edu
- Counseling and Psychiatric Services: caps.uga.edu or CAPS 24/7 crisis support at 706-542-2273
- Health Promotion / Fontaine Center: healthpromotion.uga.edu
- Accessibility and Testing: accessibility.uga.edu

Additional information, including free digital well-being resources, can be accessed through the UGA app or by visiting well-being.uga.edu.