POLI 422

Conflict Simulation

Developing Areas/Topics 2

INSTRUCTOR: Prof. Rex Brynen

phone: 514 398-4400 x00634 email: rex.brynen@mcgill.ca

CLASS HOURS: WF 14h35-15h55 (BIRKS 205)

OFFICE HOURS: W 12h00-13h00, F 13h00-14h00 (Leacock 510), or by appointment.

WEBPAGES: http://www.mcgill.ca/politicalscience/rex-j-brynen (political science)

http://www.paxsims.org (conflict simulation)

Course Description

This course will introduce students to conflict simulation design, and explore the use of wargaming and other serious games for military planning, policy analysis, training, and education.

Readings should be done in advance of each lecture. In addition to regular class lectures, conflict simulations will also be organized from time to time outside of regular class hours to demonstrate approaches, mechanisms, and techniques.

Prerequisites

Students are required to have taken at least one previous course in comparative politics or international relations.

Course Texts

The texts for this course are:

Philip Sabin, Simulating War: Studying Conflict Through Simulation Games (Continuum Books, 2012). Available from the McGill bookstore (or elsewhere).

UK Ministry of Defence, *Defence Wargaming Handbook* (Development, Concepts, and Doctrine Centre, 2017). Available at: https://www.gov.uk/government/publications/defence-wargaming-handbook

Course Requirements and Grading

Quiz 1 (February 20) Quiz 2 (March 22)	15% 15%
 Game design group project Status report (March 20) Finished game (April 12) Team specialization 	10% 35% 5%
Conflict simulation activities	20%

Quizzes 1 and 2: Forty minute in-class exams, consisting of multiple choice and short answer questions.

Game design group project. All students will take part in a serious game design project, generally in groups of six. The game should:

- examine a historical or current conflict in a way that balances accuracy and playability, while
 offering insight into conflict dynamics and the choices faced by conflict actors; or
- examine a potential future conflict, in a way that offers insight into capabilities, strategies, and choices; or
- address some other serious gaming topic approved by the instructor.

Students with a game idea will be invited to present these in a brief 2-minute game pitch in class on January 23. This will not be graded but will earn activity credits for those presenting.

The top 6 topics will then be selected, and groups formed. Each group will consist of the following specializations:

- 1. Team leader (project management and overall quality)
- 2. System designer (game mechanics and systems)
- 3. Graphic designer (game materials and graphics)
- 4. Rules editor (production of game rulebook)
- 5. Researcher (background research on conflict)
- 6. Rapporteur (documentation of game design activities)

Note that while each team member has a different specialization, the project is very much a team effort and will be graded as such.

Each group will make a 10-minute *status report* to the class on March 20, using PowerPoint. This should include details of the topic, and overview of key game mechanics, images of game components and artwork (in development), and a summary of playtests to date. This worth 10% of your course grade.

The *finished game* is due in class on April 12, at which time each group will make an ungraded 10 minute class presentation on their final product. Late submissions will generally NOT be accepted. This game should include:

- a physical copy of the playable game
- a copy of the rules
- background research on the conflict (1,000-1,500 words, plus bibliography of sources consulted)
- a development diary, documenting the rationale behind the game design, as well as an account of development, playtests, and revisions (1,000-2,000 words)

The rubric to be used in assessing each game will be posted to myCourses, as will additional information on the assignment. The finished game is worth 35% of your course grade. An additional 5% of your grade will be based on how well you performed your team specialization.

Throughout the term, students will be given an opportunity to earn *conflict simulation activity points* by taking part in approved games, attending events, organizing their own game sessions. Further details on this will be posted to myCourses. This will be worth 20% of the course grade.

Important Fine Print

Group work can be challenging, and games take far longer to design, playtest, and revise than you think—indeed, considerably more time than writing a conventional research paper. This is not something that can be left until late in the term, or you may fail. Good project management and teamwork skills are essential.

In accord with McGill University's Charter of Students' Rights, students in this course have the right to submit in English or in French any written work that is to be graded.

Also, it is important to note that incidents of plagiarism will be dealt with severely. If you are unsure of what plagiarism is or how to identify your sources, ask your teaching assistant. McGILL UNIVERSITY VALUES ACADEMIC INTEGRITY. THEREFORE, ALL STUDENTS MUST UNDERSTAND THE MEANING AND CONSEQUENCES OF CHEATING, PLAGIARISM AND OTHER ACADEMIC OFFENCES UNDER THE CODE OF STUDENT CONDUCT AND DISCIPLINARY PROCEDURES (see www.mcgill.ca/integrity for more information).

Lectures (all dates approximate)

- 1. **Introduction** (January 9)
- **2. History of wargaming** (January 11)

Paul Strong, "Wargaming the Atlantic War: Captain Gilbert Roberts and the Wrens of the Western Approaches Tactical Unit," paper presented to the MORS wargaming special meeting, October 2017, accessed via PAXsims at https://paxsims.wordpress.com/2017/12/20/wargaming-the-atlantic-war-captain-gilbert-

roberts-and-the-wrens-of-the-western-approaches-tactical-unit/

Optional reading: Matt Caffrey, "Toward a History-Based Doctrine for Wargaming," *Aerospace Power Journal* (Fall 2000), at https://apps.dtic.mil/dtic/tr/fulltext/u2/a521381.pdf

3. Principles of Serious Game Design (January 16, 18)

UK Ministry of Defence, *Defence Wargaming Handbook* (Development, Concepts, and Doctrine Centre, 2017), Chapters 1-3, Annex A

ED McGrady and Peter Perla, "Why Wargaming Works," *Naval War College Review* 64, 3 (2011), at https://digital-commons.usnwc.edu/nwc-review/vol64/iss3/8/

Philip Sabin, Simulating War: Studying Conflict Through Simulation Games (Continuum Books, 2012), chapters 1-4.

- 4. Game Design Proposals (January 23)
- **5. Modelling Conflict I** (January 25 February 6)

Philip Sabin, Simulating War: Studying Conflict Through Simulation Games (Continuum Books, 2012), chapters 5-8.

- 6. **Game Design Group Meetings** (February 8)
- 7. Modelling Conflict II (February 13, 15, 27)

Rex Brynen, "Gaming the Nonkinetic," and Brian Train and Volko Ruhnke, "Chess, Go, and Vietnam: Gaming Modern Insurgency," in Pat Harrigan and Matthew Kirschenbaum, eds., *Zones of Control: Perspectives on Wargaming* (Cambridge MA: The MIT Press, 2016). Optional reading: other chapters from *Zones of Control*.

- **8. Quiz 1** (February 20)
- 9. Game Design Group Meetings (February 22—no class)
- **10. Negotiation Simulations** (February 29)

Natasha Gill, Inside the Box: Using Integrative Simulations to Teach Conflict, Negotiation, and Mediation, (Zurich: Centre for Security Studies, ETH Zurich, 2015), at http://www.css.ethz.ch/content/dam/ethz/special-interest/gess/cis/center-for-securities-studies/pdfs/Inside the Box-Gill.pdf, read Chapter 1 and skim rest.

Reading Break (March 4-8)

11. Seminar and Matrix Games (March 13)

Rex Brynen, Tom Fisher, and Tom Mouat, *Matrix Game Construction Kit User Guide* (The Game Crafter, 2016), via myCourses.

12. Best and Worst Practices (March 15)

UK Ministry of Defence, *Defence Wargaming Handbook* (Development, Concepts, and Doctrine Centre, 2017), Chapter 4.

Optional reading: Christopher Weuve et al, *Wargame Pathologies* (CNA, 2004), at https://www.cna.org/CNA_files/PDF/D0010866.A1.pdf

- 13. Game design status reports (March 20)
- **14. Quiz 2** (March 22)
- **15.** *Game Design Group Meetings* (March 27, March 29, April 3—no classes)
- **16. Topics in Gaming** (April 5, 10)
- 17. Game Design Final Reports (April 12)