

**INTA 6742: Modeling, Simulation, and Military Gaming (OCY/O01)**

**Schedule – Spring 2021 (Online)**

<b>Week</b>	<b>Module</b>	<b>Release Date</b>	<b>Module</b>	<b>Lectures</b>	<b>Readings/Assignments Due</b>
1	1	<b>Jan. 14 at 8 am (EST)</b>	Introduction to Modeling and Simulation	Introduction to Modeling and Simulation Using Models for Research <i>Guest Speaker: Final Presentation Examples</i>	Readings (Optional): Wilensky and Rand, Ch. 7  Discussion: Introductions Discussion: Evaluating Models – Paper Plate Solar System  Discussion: Evaluating Models – Ultimatum Game  Assignment: Team Formation Questionnaire  <b><i>DUE Jan. 25<sup>th</sup> at 11:59 pm (EST)</i></b>
2	2	<b>Jan. 25 at 8 am (EST)</b>	Introduction to Agent Based Modeling	Heroes and Cowards Introduction to Agent Based Modeling and Netlogo	Readings (Optional): Wilensky Ch. 0 and 1 Assignment: Heroes and Cowards Assignment: NetLogo Tutorials Assignment: Evaluating a NetLogo Model  <b><i>DUE Feb. 1 at 11:59 pm (EST)</i></b>
3	3	<b>Feb. 1 at 8 am (EST)</b>	Military History,	<i>Guest Speaker: Mike Salomone</i>	Assignment: Military Battle Summary

			Strategy, and Tactics		<b><i>DUE Feb. 8 at 11:59 pm (EST)</i></b>
4	4	<b>Feb. 8 at 8 am (EST)</b>	Developing a Research Question	Developing at Research Question	<p>*Groups Assigned (Feb. 9th)</p> <p>Readings: Chapter 5 from “Military Power: Explaining Victory and Defeat in Modern Battle” By Stephen Biddle</p> <p>Assignment: Independent and Dependent Variables in “Military Power” by Stephen Biddle</p> <p>Discussion: Evaluating “Military Power” by Stephen Biddle</p> <p>Group Assignment: Battle Background and Research Question</p> <p><b><i>DUE Feb. 15 at 11:59 pm (EST)</i></b></p>
5	4	<b>Feb. 15 at 8 am (EST)</b>	Developing a Research Question (Continued)		<p><b><i>Group Assignment: Interim Presentation: Battle Background and Research Question</i></b></p> <p>Assignment: Peer Review on Interim Presentations</p> <p><b><i>DUE March 1 at 11:59 pm (EST)</i></b></p>

6	5	<b>Feb. 22 at 8 am (EST)</b>	Critiquing Military Simulation Research	Critiquing Military Simulation Research	<p>Reading: Gowlett, P. "Assessing the Military Impact of Capability Enhancement with Netlogo using the Falklands War as a Case-Study."</p> <p>Reading: Wheeler, Scott and Justin Kelly, "Biotechnology on the Battlefield: An Application of Agent-based Modeling for Emerging Technology Assessment."</p> <p>Reading: Millikan, J. 2013, "Suppression of Dismounted Soldiers: Towards Improving Dynamic Threat Assessment in Closed Loop Combat Simulations."</p> <p>Discussion: Evaluation of Gowlett  Discussion: Evaluation of Wheeler  Discussion: Evaluation of Millikan</p> <p><b><i>DUE March 1 at 11:59 pm (EST)</i></b></p>
7	6	<b>March 1 at 8 am (EST)</b>	Conceptual Model	Conceptual Model in NetLogo	<p>Readings: Chapter 4 from "Face of Battle" by John Keegan</p> <p>Discussion: Chapter 4 from "Face of Battle" by John Keegan</p> <p><b><i>Group Assignment: Interim Presentation: Conceptual Model</i></b></p> <p>Assignment: Peer Review on Interim Presentations</p>

					<b><i>DUE March 15 at 11:59 pm (EST)</i></b>
8	7	<b>March 8 at 8 am (EST)</b>	History of Modeling and Simulation	History of Modeling and Simulation	
9	8	<b>March 15 at 8 am (EST)</b>	Combat Modeling	Combat Modeling	Readings (Optional): Tolk, Ch. 6-10 <b><i>Group Assignment: Interim Presentation: NetLogo Model</i></b> Assignment: Peer Review on NetLogo Model  <b><i>DUE March 29 at 11:59 pm (EST)</i></b>
10	9	<b>March 22 at 8 am (EST)</b>	Ethics of Modeling and Simulation	Ethics of Modeling and Simulation	
11	10	<b>March 29 at 8 am (EST)</b>	Model Analysis	Approaches to Model Analysis <i>Guest Lecture: DILAC – Data Visualization – Kevin Tain</i>	Readings (Optional): Wilensky and Rand, Ch. 4 and 6 <b><i>Group Assignment: Interim Presentation: Analysis and Conclusions</i></b> Assignment: Peer Review on Analysis and Conclusions  <b><i>DUE April 12 at 11:59 pm (EST)</i></b>
12	11	<b>April 5 at 8 am (EST)</b>	Updates and Extensions	<i>Guest Speaker: Gen. Winnefeld</i>	
13	12	<b>April 12 at 8 am (EST)</b>	Final Presentation Development	<i>Guest Lecture: Communication Center: Slide Design and Public Speaking</i>	Group Assignment: Final Presentation Assignment: Peer Review on Final Presentation Assignment: Peer Review of Teammates

					<b><i>DUE April 26 at 11:59 pm (EST)</i></b>
14	13	<b>April 19 at 8 am (EST)</b>	Final Presentation Development Continued		
15		<b>April 26</b>		NA	
16		<b>May 3</b>		NA	