I. Instructors Contact Information

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II. Course Pre-requisites, Co-requisites, and/or Other Restrictions

None

III. Course Description

In this course students will learn the basic theory underlying the creation and use of wargaming. We will start by discussing the origins and nature of modern wargames and what makes wargaming different from other tools more familiar to current practitioners of military operations research and analysis. We will then relate wargames to the broader theoretical underpinnings of games in general, including their connections to the theory of play and narrative theory as well as the implications of recent research into human interaction with games. We will discuss the epistemology of wargames and what we can learn from them. We will then outline some of the basic principles undergirding the creation of wargames and their use. We conclude with an extended discussion of several topics of interest, such as wargame pathologies, games and prediction, and the use of role playing.

IV. Student Learning Objectives/Outcomes

Upon completion of this course students will be able to:

- Appreciate the way in which modern wargames have risen from and are still influenced by past practice.
- Understand how the theory of games relates to the everyday practice of wargame design and play.
- Understand the differences between wargaming and other tools used in defense planning and operations.
- Learn a basic design process for creating a wargame, from the definition of objectives to implementation.
- Understand some of the important issues in the theory of games affecting wargaming today.
V. Textbooks and Materials

While there is no required textbook for the course, students may wish to purchase Peter Perla’s book on *The Art of Wargaming* for an overview of the history of wargaming and basic principles of design and use. There are two editions of this book:


Note: if the book is not available on Amazon, the reprint can be found here: [http://www.wargaming.co/professional/details/ppart.htm](http://www.wargaming.co/professional/details/ppart.htm).

Other useful material is listed below.

For more information on the use of wargaming in research and education:


For background in the general theory of games:


For a description and examples of the use of matrix-gaming techniques in a military context:


For a description of case studies in the use of wargaming in the military and business:


For a discussion of the use of simulations in learning to deal with complex situations:

For a discussion of why and how wargaming is effective:

For a discussion of the epistemological foundations of gaming:

For a discussion of the role of adjudication in deductive and inductive wargames:

For a discussion of the pathologies of wargames:

VI. Course Outline

The is a one-day course addressing the topics below.

- What are wargames and wargaming?
- What makes them different from other tools familiar to current practitioners of military OR?
- Theoretical foundations in games and play.
- Basic principles of wargaming
  - What are wargames useful for?
  - What can we learn from wargames?
  - How are they created?
  - How are they played most effectively?
  - How can we extract meaning from their use--analysis and synthesis?
- Topics for discussion
  - Matrix games: an example
  - Pathologies of wargaming
  - Thinking about wargame "validity"
  - To role play or not to role play
  - Predictive power of wargames

VII. Instructional Method

- Classroom lecture and discussion, one or more group game exercises.