Roger Handberg
INR4774- Military Space Policy
32608
handberg@mail.ucf.edu

Course Home Page
Military Space Policy
INR 4774
Fall 2011

Instructor Contact:

Instructor	Roger Handberg
Office	Phillips Hall 302
Office Hours	MTW 10-1130
Phone	407-823-2608
Course-mail	Roger.Handberg@ucf.edu

Overview

Military space policy remains a field that is both futuristic and historic in its scope. That means the quest to reach and explore outer space began many years ago as futuristic dreams and visions and now is being pursued as an everyday reality, especially potential military applications. This course deals explicitly with military space policy – a field of burgeoning interest to a multitude of states. Another course, PUP 4510, focuses explicitly upon the development of human activity across its other manifestations: scientific, space exploration and commercial. Primary focus there is upon the civil, scientific and commercial aspects. Space policy as a whole arose from the dreams of visionaries but came to its first fruition as part of the now defunct Cold War competition between the United States and the former Soviet Union.

That time of birth continues to drive the entire field in a bifurcated way. One driver has been the commercial and scientific benefits including space exploration that are derived while the other drive emphasizes national security concerns. The balance

between the two impulses has shifted over time with the civil and scientific dominating public perceptions and policy while the military and national security aspects of space policy labored in the "black" as it were, that is secretly. This separation occurred during the Kennedy administration in 1961 and persists today although much more is known than previously. For example, the National Reconnaissance Office, the NRO, was classified to such a level that its name could not be said or written in public documents.

Conceptually, the entire field began as an extension of the Cold War political-military competition. Thus, the field's general content and structure reflects those military origins while its history illustrates the difficult process of disengaging the nonmilitary sector from those roots. That separation process remained a slow and difficult one given that space technologies are clearly dual use in nature; meaning the same rocket can carry either a satellite to orbit or a warhead to a target across the globe. Caution therefore characterizes the American response to that technology's wider dissemination. However, regardless of U.S. concerns, other states both friends and more hostile states are demonstrating the capability to develop space technologies equivalent to U.S. technologies or even better in some cases. These developments include military space applications.

Remember space activities by their very nature are the essence of international activity. From Earth orbit or the Moon's surface during the Apollo flights, there are no national boundaries visible on Earth even though the individuals who enter outer space have all come as representatives of both humanity and their particular nation. By the end of the 21st century, many hope that individuals will go forth only as representatives of humanity. Saying that outer space is international however does not make it so in reality. States remain very concerned about possible military benefits derived from using outer space as an area of operations. The United States especially considers outer space both as a growing economic asset and a potential future field for military conflict. How American concerns play out in the larger international political system remains an issue because the United States has been the most willing to provide the budgetary

resources to exploit outer space militarily which makes its concerns important enough for other states to address.

Course Objectives:

Students will acquire a general understanding of the historical foundations, present context and future development of outer space as an arena for human activities especially military. As part of that process, students will

1. Develop understanding of the field's historical development.
2. Understand the influence of technology and politics upon the development of military space activities. Military space activities are deeply immersed in politics often to the technologists' dismay but a reality that must be addressed.
3. Develop an understanding of the international implications of military space activities and proposed activities or policies.
4. Become aware of the organizational forums and processes (public, private and international sectors) through which outer space is accessed and exploited for human benefit and military uses simultaneously.
5. Analyze the changing parameters of military space policy as we move through the 21st century especially the rapidly changing nature of military space activity.
6. Demonstrate the ability to access information regarding ongoing military space activities and proposed expansion of such activities.

Textbooks and other materials:

There are three textbooks required along with materials identified in the modules and the modules themselves. Reading assignments are also specified in the various modules which must be read by the student.

Walter A. McDougall - *…The Heavens and the Earth: A Political History of the Space Age* (Johns Hopkins)

James Clay Moltz – *The Politics of Space Security: Strategic Restraint and the Pursuit of National Interests* (Stanford)

Charles D. Lutes and Peter L. Hays (eds) – *Toward a Theory of Spacepower: Selected Essays* (National Defense University Press) – students can come by the office to pick up this book, if out of area, must provide mailing address for the book to be mailed to. Contact Nicholas at the department (407-823-2608) or go to this website address to download the book: http://www.ndu.edu/press/spacepower.html. If this specific link is bad then go to the National Defense University Press website for the updated link.

Communicating within the Course

In this class our official modes of communication are through the course email located inside Webcourses, through the Course Announcements Discussion site, and through Knights email. All communications between student and instructor and between student and student should be respectful and professional. It is the student's responsibility to check the "course mail" tool or “course announcements” discussion site frequently. If you have not already done so, you must create a Knight's Email account at www.knightsemail.ucf.edu for receiving and sending separate official communications from the university or the instructor. The instructor cannot answer emails regarding course grades or other student specific academic questions except through Knight’s Email. This is a university policy and cannot be waived to answer emails through Yahoo, Gmail, Hotmail or others due to federal privacy rules.

Grade Structure:

Grades are determined through a variety of student activities including two examinations taken on line through the course quiz function, three assignments completed on the web, a web link search for extra credit. The overall weight assigned to each section is shown below with a brief description provided for each facet. Due dates are provided in the assignments section of the website. A total of 1000 plus 50 extra credit points will be assigned across the semester with each graded segment assigned a point value. Final grades will be recorded as A, B, C., etc rather than incorporating

pluses and minuses. Grades are posted through the course website and accessible as soon as the materials are graded.

Plagiarism and Cheating of any kind on an examination, quiz, or assignment will result at least in an "F" for that assignment (and may, depending on the severity of the case, lead to an "F" for the entire course) and may be subject to appropriate referral to the Office of Student Conduct for further action. See the UCF Golden Rule for further information, http://goldenrule.sdes.ucf.edu/. I will assume for this course that you will adhere to the academic creed of this University and will maintain the highest standards of academic integrity. In other words, don't cheat by giving answers to others or taking them from anyone else. I will also adhere to the highest standards of academic integrity, so please do not ask me to change (or expect me to change) your grade illegitimately or to bend or break rules for one person that will not apply to everyone.

Examination 1 – 20 %

Examination 2 – 20%

Assignments – 60% total (total of three assignments 20 % each across the term)

Introductory Assignment – 5% - extra credit –this is the only opportunity for extra credit provided during the term, once closed, no more extra credit opportunities. Exams are obviously open book but the exams are structured so that if you have not read the materials you will lack sufficient time to complete the exam. Despite being open book, students who are found to assist other students in completing the exams will incur an “F” for the course.

NOTE: Assignments are to be a minimum of 1,500 words, 10 references (not including the textbooks), only half can be solely web only although library journal articles accessed through the Library website are not considered web only. Wikipedia is not an acceptable reference; points will be deducted for its use, a second attempt will mean a failed grade for the assignment. Remember assignments must be in Word format. For assignment formatting, use American Psychological Association (APA) format – see UCF Library website for information as to format, go to http://infolit.ucf.edu/students/modules/#article158. Late assignments are graded

down a letter grade a day until an F grade is reached. After two weeks, missed assignments revert to zero as a grade.

Examinations can incorporate both essay and short answer formats. Students will be queried as to their understanding of the processes engaged in developing and implementing military space policy. The Assignments will test student understanding of different information and concepts discussed in the modules and in the readings.

The Introductory Assignment involves students completing a course-related biography and demonstrating certain techniques related to successfully completing the course. It is the only extra credit assignment available during this course so do not ask for additional. The Web Link Annotation component of the Extra Credit involves students locating Internet websites not already identified in the course. This portion of the assignment becomes annotating (describing and evaluating) in general terms the particular site's content, usability and then make some assessment as to its validity, usefulness and reliability as a possible source of information. Simply put, is the specific link worth accessing or not? Much of the material on the Web is of dubious reliability, becoming a critical content evaluator and consumer of information is an important part of the course.

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Assignments – Fall 2011

Module #	Module name	Date Open	Date Close	Assignment
Module 0	Getting Started	22 August	14 September at 2300 hours	Complete extra credit in Module 0 including posting web annotation to the drop box
Module 1	Introduction - Historical, the Space Age Begins, Military Aspects	22 August	September 11 at 2300 hours	Read Materials and respond to Discussion Group: "What does weaponization mean in reality?"
Module 2	Historical – International Norms and Military Space Activities	September 12	September 21at 2300 hours	Work on Assignment 1
Module 3	Organizing Space: Military Organizational Change	22 September	6 October at 2300 hours	Complete Assignment 1
Assignment 1	Assignment	August 22	6 October by 2300 hours	Submit Assignment 1
Module 4	Limits of Technology and Military Space Applications	7 October	15 October at 2300 hours	Read materials and respond to Discussion Group: Science Fiction and Military Space, Reality vs. Conjecture
First Examination	Test	16 October	20 October at 2300 hours	Complete examination on line
Module 5	Fixing Military Space Lift/Rapid	21 October	28 October at 2300 hours	Complete readings

	Response Replenishment			
Module 6	Ballistic Missile Defense, reality or developmental?	29 October	5 November at 2300 hours	Complete readings & Respond to Discussion Group: How realistic is BMD?
Assignment 2	Assignment 2	21 October	5 November by 2300 hours	Submit Assignment 2
Module 7	Crewed Military Spaceflight and the Mission Question	6 November	13 November at 2300 hours	Complete readings
Module 8	Rise of Other Military Space Competitors	14 November	23 November at 2300 hours	Complete Assignment 2
Assignment 3	Assignment 3	5 November	23 November by 2300 hours	Submit Assignment 3
Module 9	The Future: Space Power, Theory and Reality	23 November	5 December at 2300 hours	Complete readings & Respond to "Would Weaponization Worsen International Security?"
Second Examination	Test	3 December	7 December at 2300 hours	Complete exam on line