INR4774-19Summer BW60

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INR4774- Military Space Policy

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Course Home Page

Military Space Policy

INR 4774

Summer 2019

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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 mostly with regards to U.S. space policy. 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. A third course INR 4765 Emerging Space Powers looks at the broadening engagement of states across the globe in space activities. There the level of engagement may differ greatly across all states but all now at some level participate in space activities either as consumers or as fuller participants.

That time of birth, during the Cold War, 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 alone could not be said or written in public documents, a breach of national security.

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 very same rocket can carry either a satellite to orbit or a warhead to a target across the globe. Caution therefore characterized the American response to that technology's wider dissemination. This could be seen in the fact that not until 1986 did the Department of Defense (DOD) give up control over space launch which meant nothing could be sent to outer space from the United States whether commercial or civil without de facto military approval. The loss of the Space Shuttle *Challenger* in January 1986 ended that government monopoly or control over space launch in the United States. However, now, 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 new 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.

Catalog description:

Politics and policy-making involved in militaries globally, consideration of effects on globalization and international policies economic and military.

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 is no textbook required, students must access and read 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.

Charles D. Lutes and Peter L. Hays (eds) – *Toward a Theory of Spacepower: Selected Essays* (National Defense University Press) –go to this website address to download the book: http://ndupress.ndu.edu/Portals/68/Documents/Books/spacepower.pdf (Links to an external site.)Links to an external site.. 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 Canvas. All communications between student and instructor and between student and student should be respectful and professional. If you wish to contact the instructor, then email roger.handberg@ucf.edu. However, 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, two 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 syllabus/assignments section of the website. **Given the truncated length of Summer B term, the assignments and exams are increased, not enough time for more assignments or exams.** 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 – 25 %

Examination 2 – 25%

Assignments – 50% total (total of two assignments 25 % 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, 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 APA or MLA format – see UCF Library website for information as to format, go to http://infolit.ucf.edu/students/modules/#article158. One stipulation in this course is that

when you cite a website, you must provide both the URL and the date you accessed the site. Late assignments are graded down a letter grade a day until an F grade is reached.

Examinations can incorporate one or more essay format questions. 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 web annotation and demonstrating certain techniques related to successfully completing the course. I**t is the only extra credit assignment available during this course so do not ask for additional opportunities for extra credit.** 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. **One stipulation in this course is that when you cite a website, you must provide both the URL and the date you accessed the site.**

Other University Policies:

Academic Integrity

Students should familiarize themselves with UCF's Rules of Conduct. According to Section 1, "Academic Misconduct," students are prohibited from engaging in

1. Unauthorized assistance: Using or attempting to use unauthorized materials, information or study aids in any academic exercise unless specifically authorized by the instructor of record. The unauthorized possession of examination or course-related material also constitutes cheating.
2. Communication to another through written, visual, electronic, or oral means: The presentation of material which has not been studied or learned, but rather was obtained through someone else's efforts and used as part of an examination, course assignment, or project.
3. Commercial Use of Academic Material: Selling of course material to another person, student, and/or uploading course material to a third-party vendor without authorization or without the express written permission of the university and the instructor. Course materials include but are not limited to class notes, Instructor's PowerPoints, course syllabi, tests, quizzes, labs, instruction sheets, homework, study guides, handouts, etc.
4. Falsifying or misrepresenting the student's own academic work.
5. Plagiarism: Using or appropriating another's work without any indication of the source, thereby attempting to convey the impression that such work is the student's own.
6. Multiple Submissions: Submitting the same academic work for credit more than once without the express written permission of the instructor.
7. Helping another violate academic behavior standards.

For more information about Academic Integrity, students may consult The Center for Academic Integrity (Links to an external site.)Links to an external site..

For more information about plagiarism and misuse of sources, see "Defining and Avoiding Plagiarism: The WPA Statement on Best Practices (Links to an external site.)Links to an external site.."

Responses to Academic Dishonesty, Plagiarism, or Cheating

Students should also familiarize themselves with the procedures for academic misconduct in UCF's student handbook, *The Golden Rule*. UCF faculty members have a responsibility for students' education and the value of a UCF degree, and so seek to prevent unethical behavior and when necessary respond to academic misconduct. Penalties can include a failing grade in an assignment or in the course, suspension or expulsion from the university, and/or a "Z Designation" on a student's official transcript indicating academic dishonesty, where the final grade for this course will be preceded by the letter Z. For more information about the Z Designation, click here.

Course Accessibility Statement

The University of Central Florida is committed to providing access and inclusion for all persons with disabilities. Students with disabilities who need disability-related access in this course should contact the professor as soon as possible. Students should also connect with Student Accessibility Services (SAS) <http://sas.sdes.ucf.edu/> (Ferrell Commons 185, sas@ucf.edu, phone 407-823-2371). Through Student Accessibility Services, a Course Accessibility Letter may be created and sent to professors, which informs faculty of potential access and accommodations that might be reasonable. Determining reasonable access and accommodations requires consideration of the course design, course learning objectives and the individual academic and course barriers experienced by the student.

Campus Safety Statement

Emergencies on campus are rare, but if one should arise during class, everyone needs to work together. Students should be aware of their surroundings and familiar with some basic safety and security concepts.

In case of an emergency, dial 911 for assistance.

Every UCF classroom contains an emergency procedure guide posted on a wall near the door. Students should make a note of the guide's physical location and review the online version at http://emergency.ucf.edu/emergency_guide.html.

Students should know the evacuation routes from each of their classrooms and have a plan for finding safety in case of an emergency.

If there is a medical emergency during class, students may need to access a first-aid kit or AED (Automated External Defibrillator). To learn where those are located, see http://www.ehs.ucf.edu/workplacesafety.html (click on link from menu on left).

To stay informed about emergency situations, students can sign up to receive UCF text alerts by going to ucf.edu and logging in. Click on "Student Self Service" located on the left side of the screen in the toolbar, scroll down to the blue "Personal Information" heading on the Student Center screen, click on "UCF Alert", fill out the information, including e-mail address, cell phone number, and cell phone provider, click "Apply" to save the changes, and then click "OK."

Students with special needs related to emergency situations should speak with their instructors outside of class.

To learn about how to manage an active-shooter situation on campus or elsewhere, consider

viewing this video (Links to an external site.)Links to an external site.

.**Campus Safety Statement for Students in Online-Only Courses**

Though most emergency situations are primarily relevant to courses that meet in person, such incidents can also impact online students, either when they are on or near campus to participate in other courses or activities or when their course work is affected by off-campus emergencies. The following policies apply to courses in online modalities.

To stay informed about emergency situations, students can sign up to receive UCF text alerts by going to ucf.edu and logging in. Click on "Student Self Service" located on the left side of the screen in the toolbar, scroll down to the blue "Personal Information" heading on the Student Center screen, click on "UCF Alert", fill out the information, including e-mail address, cell phone number, and cell phone provider, click "Apply" to save the changes, and then click "OK."

Students with special needs related to emergency situations should speak with their instructors outside of class.

Make-Up Assignments for Authorized University Events or Co-curricular Activities

Students who represent the university in an authorized event or activity (for example, student-athletes) and who are unable to meet a course deadline due to a conflict with that event must provide the instructor with documentation in advance to arrange a make-up. No penalty will be applied. For more information, see the UCF policy.

Religious Observances

Students must notify their instructor in advance if they intend to miss class for a religious observance. For more information, see the UCF policy.

Deployed Active Duty Military Students

Students who are deployed active duty military and/or National Guard personnel and require accommodation should contact their instructors as soon as possible after the semester begins and/or after they receive notification of deployment to make related arrangements.

For those classes where you want to selectively use Turnitin.com, here is a sample syllabus statement:

In this course we may utilize turnitin.com, an automated system which instructors can use to quickly and easily compare each student's assignment with billions of web sites, as well as an enormous database of student papers that grows with each submission. Accordingly, you may be expected to submit assignments in electronic format. After the assignment is processed, as an instructor I receive a report from turnitin.com that states if and how another author's work was used in the assignment. For a more detailed look at this process, visit http://www.turnitin.com. (Links to an external site.)Links to an external site.

Course Syllabus

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Assignments – Summer B 2019

Module #	Module name	Date Open	Date Close	Assignment
Module 0	Getting Started	June 24th	June 30th at 11pm	Complete extra credit in Module 0 including posting web annotation to the drop box; also complete Financial Aid Verification by August 24th
Module 1	Introduction - Historical, the Space Age Begins, Military Aspects	June 24th	June 30th at 11 pm	Read Materials and respond to Discussion Group: "What does militarization mean in reality?" Assignment directions will appear in Module 2.
Financial Verification	Financial Aid Verification	June 14th	June 28th at 11pm	Completion of the Financial Aid Verification assignment required by Financial Aid, UCF requirement mandated by US Department of Education
Module 2	Historical – International Norms and Military Space Activities	July 1st	July 5th at 11 pm	Work on Assignment 1
Module 3	Organizing Space: Military	July 6th	July 9th at 11pm	Complete Assignment 1

	Organizational Change			
Assignment 1	Assignment	June 24th	July 5th at 11 pm	Submit Assignment 1
Module 4	Limits of Technology and Military Space Applications	July 6th	July 9th at 11 pm	Read materials and respond to Discussion Group: Science Fiction and Military Space, Reality vs. Conjecture
First Examination	Test	July 10th	July 12th at 11 pm	Complete examination on line
Module 5	Fixing Military Space Lift/Rapid Response Replenishment	July 12th	July 14th at 11 pm	Complete readings
Module 6	Ballistic Missile Defense, reality or developmental?	July 15th	July 18th at 11 pm	Complete readings & Respond to Discussion Group: How realistic is BMD?
Assignment 2	Assignment 2	July 8th	July 15th at 11 pm	Submit Assignment 2
Module 7	Crewed Military Spaceflight and the Mission Question	July 15th	July 18th at 11pm	Complete readings
Module 8	Rise of Other Military Space Competitors	July 18th	July 20th at 11 pm	Complete Assignment 2
Module 9	**Other Missions, Future and Hypothetical**	July 20th	July 21st at 11pm	Complete readings & Respond to “Would Weaponization Worsen International Security?”

Second Examination	Test	July 21st	July 23rd at 11 pm	Complete exam on line