

IP 651
Fall Semester 2006
Wed., 2-3:50 PM, B209

Professor Clay Moltz
Office Phone: 647-6575
Office hours: 4-5 PM Wed. and 11-
noon Thurs., 215 McGowan

International Space Policy

This course seeks to provide students with the tools to analyze future challenges in international space policy. Topics will include: space security, commerce, exploration, and environmental management. The seminar will be divided into two parts: 1) an overview covering the history of the Cold War in space, including U.S.-Soviet space competition, military developments, and space treaties and other cooperative agreements; and 2) an analysis of contemporary space policy issues, including such topics as space traffic control, debris management, orbital defenses/weapons, and future questions of international conflict prevention. Grading will be based on a mid-term paper (8-10 pgs.) on an assigned topic covering the first half of the class (35%) and a research design and completed research paper (12-16 pgs.) on a current topic (50%), developed in consultation with the professor. Class participation—to include active involvement in discussions, a short in-class presentation on an assigned topic, and an oral presentation of the student's research paper—will count 15%. Depending on the research paper topic selected, the course may count toward the Certificate in Nonproliferation Studies, but students must have the prior approval of the professor. Students should meet with the professor within the first three weeks of class to discuss the topic of their research papers.

Books for Purchase (required)

William E. Burrows, *This New Ocean: The Story of the First Space Age* (New York: Random House, 1998)(available in paperback).

David Wright, Laura Grego, and Lisbeth Gronlund, *The Physics of Space Security: A Reference Manual* (Cambridge, MA: American Academy of Arts and Sciences, 2005)(may be purchased directly from the AAAS).

Books to Be Distributed by Professor (no charge)

John M. Logsdon and Audrey M. Schaffer, eds., *Perspectives on Space Security* (Washington, DC: Space Policy Institute, George Washington University, December 2005).

Spacesecurity.org, *Space Security 2006* (Waterloo, Canada: University of Waterloo, 2006).

SCHEDULE OF MEETINGS AND READING ASSIGNMENTS

Part I: The History of the Space Age

Week 1 (Sept. 6) *Introduction to the Seminar*

Readings: Burrows, *This New Ocean*, Chapters 1-2.

Moltz, *The Politics of Space Security: Strategic Restraint and the Pursuit of National Interests, 1957-2007* (draft manuscript), Introduction (**on reserve**).

Week 2 (Sept. 13) *From Missiles to Spaceflight*

Readings: Burrows, *This New Ocean*, Chapters 3-4.

Moltz, *The Politics of Space Security*, Chapter 1 (**on reserve**).

Week 3 (Sept. 20) *Sputnik and the Start of the Space Race*

Readings: Walter McDougall, *...the Heavens and the Earth: A Political History of the Space Age*, Introduction and Chapter 10 (plus section conclusion) (**on reserve**).

Burrows, *This New Ocean*, Chapters 5-6.

John F. Kennedy, speech on space activity, May 25, 1961, audio online at: <http://www.archive.org/details/jfks19610525>.

Week 4 (Sept. 27) *Early Military Activities in Space*

Readings: Burrows, Chapter 7.

Lt. Col. Clayton K.S. Chun, "Shooting Down a 'Star,' Program 437, the US Nuclear ASAT System and Present-Day Copycat Killers," Cadre Paper No. 6, Maxwell Air Force Base, Alabama, April 2000, online at: http://aupress.au.af.mil/CADRE_Papers/PDF_Bin/chun.pdf, pp. 1-32 only.

[In-class film—"Nukes in Space"]

Week 5 (Oct. 4) *From the Space Race to Space Detente*

Readings: Moltz, *The Politics of Space Security*, Chapter 3 (second half), pp. 27-66 (**on reserve**) and Chapter 4 (**on reserve**).

Burrows, Chapters 9-11.

Week 6 (Oct. 11) *Space Stations and Deep Space Exploration*

[Research designs due at the beginning of class—be prepared to discuss.]

Readings: Burrows, Chapters 12-13.

Week 7 (Oct. 18) *The Strategic Defense Initiative and the 1980s*

Readings: Burrows, Chapter 14.

Moltz, *The Politics of Space Security*, Chapter 5 (**on reserve**).

[First paper topic to be distributed at end of class]

Week 8 (Oct. 25) *The End of the Cold War in Space and Its Implications*

Readings: Burrows, Chapter 15-16.

Moltz, *The Politics of Space Security*, Chapters 6-7 (**on reserve**).

October 27 **[First paper due to professor by 5 PM]**

Part II: Issues in Contemporary Space Policy

Week 9 (Nov. 1) *U.S. Space Politics and NASA's Uncertain Direction*

Readings: Burrows, Chapter 17.

Linda T. Krug, "Presidents and Space Policy," and Joan Johnson-Freese, "Congress and Space Policy," in Eligar Sadeh, ed., *Space Politics and Space Policy: An Evolutionary Perspective* (Norwell, MA: Kluwer Academic Publishers, 2002)(**on reserve**).

Speech by President George W. Bush, January 14, 2004, online at: <http://www.whitehouse.gov/news/releases/2004/01/20040114-3.html>.

Week 10 (Nov. 8) *The Coming Revolution in Space Commerce*

Readings: Wright, Grego, and Gronlund, *The Physics of Space Security*, Sections 4, 5, and 6.

Molly K. Macauley, "Economics of Space," and Stephen B. Johnson, "Space Business," in Sadeh, ed., *Space Politics and Space Policy: An Evolutionary Perspective* (Norwell, MA: Kluwer Academic Publishers, 2002)(**on reserve**).

Space Security 2006, Chapter 4.

Andrew Brearley, "Mining the Moon: Owning the Night Sky?" *Astropolitics*, Vol. 4, No. 1 (Spring 2006)(**on reserve**).

OECD Space report, available online at:
<http://213.253.134.29/oecd/pdfs/browseit/0305011E.PDF>.

Week 11 (Nov. 15) **No class**

Work on individual research papers

Week 12 (Nov. 22) ***Emerging Military Space Issues--Part I***

Readings: Lt. Col. Peter L. Hays, "Current and Future Military Uses of Space," from the conference Outer Space and Global Security, November 26-27, 2002, Geneva, Switzerland, available online at:
<http://www.ploughshares.ca/libraries/Abolish/OuterSpaceConfGeneva02/HaysConf2002.htm>.

Lt. Col. Bruce DeBlois, "Space Sanctuary: A Viable National Strategy," *Aerospace Power Journal* (Winter 1998), online at:
<http://www.airpower.maxwell.af.mil/airchronicles/apj/apj98/win98/deblois.pdf>.

Independent Working Group, "Missile Defense, the Space Relationship, & the Twenty-First Century," on the Independent Working Group website at: <http://ifpa.org/pdf/IWGreport.pdf>.

Selected readings (to be announced) from James Clay Moltz, ed., *Future Security in Space: Commercial, Military, and Arms Control Trade-Offs*, CNS Occasional Paper No. 10 (July 2002), online at:
<http://www.cns.miis.edu/pubs/opapers/op10/index.htm>.

[Status report due on research paper to professor]

Week 13 (Nov. 29) ***Emerging Military Space Issues--Part II***

Readings: All chapters in John M. Logsdon and Audrey M. Schaffer, eds., *Perspectives on Space Security* (Washington, DC: Space Policy Institute, George Washington University, December 2005).

Selected readings (to be announced) from James Clay Moltz, ed., *New Challenges in Missile Proliferation, Missile Defense, and Space Security*, CNS Occasional Paper No. 12 (July 2003), online at: <http://www.cns.miis.edu/pubs/opapers/op12/index.htm>.

The rest of *The Physics of Space Security*

Week 14 (Dec. 6) ***Managing the Space Environment***

Readings: *Space Security 2006*, Chapter One

Joel Primack in *Future Security in Space: Commercial, Military, and Arms Control Trade-Offs*, CNS Occasional Paper No. 10 (July 2002), online at:

<http://www.cns.miis.edu/pubs/opapers/op10/index.htm>.

Week 15 (Dec. 13) Student Presentations

Friday, Dec. 15 Final papers due to the professor by 5 PM