SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1) In Orbit - Postgraduate Space Education (4)

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THE CREATION OF A UNIQUE INTERDISCIPLINARY GRADUATE COURSE IN AEROSPACE MEDICINE

Abstract

The changing nature of human space exploration includes the transition from an era where access to space was limited mainly to trained professionals to an exciting future where increased public access will be available through a variety of commercial entities. This fundamental shift will require a greater general knowledge of the effects of space travel on the human body, by both medical and non-medical professionals interested in this fledgling industry. As a result, a new graduate course was created at The George Washington University (GWU) in Washington, DC, U.S.A. entitled "Introduction to Human Health in Space". This unique course was designed with the assistance of the NASA Office of the Chief Health and Medical Officer, as well as professors at GWU in the Space Policy Institute and the Department of Mechanical and Aerospace Engineering. Its purpose is to introduce aerospace medicine concepts in an accessible and interdisciplinary fashion to any student who is interested in human spaceflight. Elements of physiology, medicine, law, policy, engineering, and history are incorporated into this course, in order to provide each student with a comprehensive understanding of the challenges of enabling humans to live and work in space. This paper will outline in depth the rationale for this course, the process and collaborations that lead to its creation, and a summary of the course design.