

# FREC Online Summer Sessions

FREC 1004 | FREC 2004 | FREC 2554

## FREC 1004 DIGITAL PLANET

(Dr. J.P. Gannon) 3 credits, summer session 1 (May 26 - July 2), Pathways 5f - Foundational Quantitative and Computational Thinking/CLE Area 5 - Quantitative and Symbolic Reasoning.



## FREC 1004 Digital Planet

**Description:** Exploration of innovative geospatial technologies and their impact on the world around us, including how humans interact with the environment and each other. Roles of location-based services, global positioning systems, geographic information systems, remote sensing, virtual globes and web based mapping for environmental applications. Skills and techniques for spatial thinking and environmental decision-making. Ethical implications of the use of geospatial technologies, data, and computational approaches.

## FREC 2004 FOREST ECOSYSTEMS

(Dr. Brian Strahm), 3 credits, summer session 2 (July 8 - August 14), Pathways 4 - Reasoning in the Natural Sciences/CLE Area 4 - Scientific Reasoning and Discovery.



## FREC 2004 Forest Ecosystems

**Description:** Introduction to forest ecosystem ecology. Global forest cover, types, distribution, and change. Relationships among forest structure, function, and biodiversity. Interactions among rock, soil, water, air, and the organisms that define and inhabit forests around the world. Energy, water, carbon, and nutrient fluxes from leaf to global scales. Connections among forests, society, and global change. Capacity of forests to sustainably provide ecosystem services.

## FREC 2554 LEADING GLOBAL SUSTAINABILITY

(Dr. Bruce Hull), 3 credits, summer 2 (July 8 - August 14), covers Pathways 2 - Critical Thinking in the Humanities, Pathways 3 - Reasoning in the Social Sciences, CLE Area 2 - Ideas, Cultural, Traditions, and Values, CLE Area 3 - Society and Human Behavior.



## FREC 2554 Leading Global Sustainability

**Description:** Leadership principles and humanities perspectives that help examine and engage global sustainable development challenges such as climate change, food-water-energy nexus, rising middle class, circular economy, and environmental justice. Topics include collaboration, stories, conflict resolution, self-awareness, bias, equity, religion, hubris, globalism, and moral naturalism. Examine trade-offs among economic, environmental, and social dimensions of sustainable development. Integration and application of disciplinary topics including ethics, ecology, evolution, anthropology, economics, religion, aesthetics, and risk management.



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**FOREST RESOURCES AND  
ENVIRONMENTAL CONSERVATION**  
VIRGINIA TECH.

For questions please contact:  
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