Coles Seminar Series
Fall 2025

KENNESAW STATE UNIVERSITY
COLES COLLEGE OF BUSINESS

SEPTEMBER 5, 2025

Nik Hassan

Professor, Faculty of Management Information Systems
University of Minnesota Duluth

Topic: *"What is Theory?" and "How do we know that we have one?"*

OCTOBER 3, 2025

Gil Sadka

Professor of Accounting
University of Texas at Dallas

Topic: *"From Text to Beta: Macroeconomic Disclosures and Firm-level Systematic Risk"*

NOVEMBER 7, 2025

Mathieu Dahan

Associate Professor, H. Milton Stewart School of Industrial
and Systems Engineering
Georgia Institute of Technology

Topic: *"From the Battlefield to the Border: Decision Analytics for Expeditionary Logistics and Security Operations"*

Nik Hassan
Professor, Faculty of Management Information Systems
University of Minnesota Duluth

"What is Theory?" and "How do we know that we have one?"

ABSTRACT

Building on foundational contributions from Aristotle to contemporary theorists, this seminar revisits and expands upon Bacharach's widely cited definition of theory as "a statement of relations among concepts within a set of boundary assumptions and constraints." While influential, this definition fails to adequately distinguish theories from other products of theorizing like models and propositions. It addresses longstanding confusion about what qualifies as theory; are topologies and classifications theories, or do models and frameworks qualify as theories. It reframes the relationship of theory with practice, distinguishes theorizing from building theories and clarifies the roles of theory in research. Ultimately the seminar highlights the poverty of relying on models and describes how truly engaging with theories opens the landscape of research to endless opportunities.

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"From Text to Beta: Macroeconomic Disclosures and Firm-level Systematic Risk:

ABSTRACT

This study uses a novel approach to identify priced systematic risk by developing a firm-year measure of earnings sensitivity to future aggregate shocks using macroeconomic disclosures in 10-Ks. These disclosures (i) provide an improved measure of forward-looking earnings sensitivity to aggregate shocks; (ii) reveal the economic drivers of such sensitivity; and (iii) capture priced systematic risk. Macroeconomic disclosures are dispersed throughout the 10-K, increase over time, vary with the business cycle, and exhibit significant within-firm variation highlighting the time-varying nature of risk exposure. Overall, corporate disclosures offer unique insights into the economic drivers of systematic risk and cost of capital.

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NOVEMBER 7, 2025

Mathieu Dahan

Associate Professor, H. Milton Stewart School of
Industrial and Systems Engineering
Georgia Institute of Technology

From the Battlefield to the Border: Decision Analytics for Expeditionary Logistics and Security Operations

ABSTRACT

Modern military and security operations must sustain mobility and protect critical assets amid uncertainty and threat. This seminar presents two complementary models that address these challenges through optimization and game theory.

The first study introduces a new formulation for operational-level logistics planning in expeditionary environments. In this model, a military logistics planner coordinates a multimodal fleet of vehicles to transport commodities across an expeditionary theater while maximizing demand fulfillment. We develop a dynamic discretization discovery algorithm that iteratively refines consolidation plans on partially time-expanded networks, accelerating convergence through a flow-based heuristic and vehicle-cycle elimination procedure. A case study with the U.S. Marine Corps shows that our method doubles demand fulfillment and reduces solve times by nearly 30% compared to benchmark approaches.

The second study examines an incomplete-information inspection game, in which an inspector deploys heterogeneous detection resources across capacitated location (e.g., seaports) to intercept illegal items smuggled by an adversary. Each player faces uncertainty about the other's available resources. We develop an approach to compute Nash equilibria in polynomial time by characterizing equilibrium detection probabilities and expected damages, and by designing combinatorial algorithms that efficiently coordinate the players' heterogeneous resources. A case study on drug interdiction at U.S. seaports shows that reducing uncertainty about illicit shipments can increase the value of interdicted goods by over $20 million annually, highlighting the value of intelligence.

Together, these studies demonstrate how optimization and game theory can inform resilient planning and security decisions in complex, adversarial environments.

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