Syllabus for ENE 595 – Globalization and Engineering
Thursdays, 10:30 AM - 11:45 AM in Stewart Center 52G
Instructor: Dale Harris
harris@purdue.edu
(765) 494-0212
Potter Building 364

Assigned Book: The World is Flat, Thomas Friedman (any version).

August 27
Introduction
- Introduction to the course
- Introduction to globalization

September 3
19th Century Globalization
- Why important
- Cause
- Dynamics - Economics, migration of people, flow of capital
- Impact on labor (industrial and farming)
- Impact on the engineering profession
- Political response leading to deglobalization and isolationism

September 10 Guest Speaker: Gopichand Katragadda
General Manager, Engineering Operations
GE Energy - India
Bangalore, India
Subject of talk: Global Innovation in the Flat World

September 17 20th and 21st Century Globalization
- Global Governance
  - Sovereign Nation-States
  - Intergovernmental Organizations (IGOs)
  - Non-Governmental Organizations (NGOs)
  - Multinational Corporations
- Discussion of previously recorded Talk by Hari Harikumar
  Vice President, Ingersoll Rand Engineering Center, Bangalore, India

September 24 20th and 21st Century Globalization
- Globalization of R&D Investment
  - Importance and Impact
  - Drivers and Dynamics
  - Statistical Snapshot
- Discussion of previously recorded talk by Professor Kaili Kan
  Previous Dean of the School of Business Management
  Beijing University of Posts and Telecommunications, China

October 1 20th and 21st Century Globalization
- Global Dispersion of Engineering Jobs and Migration of Highly Skilled People
  - Statistical Snapshot
  - Importance and Impact
- Discussion of previously recorded talk by Professor Rabi Mohtar
  Director of Global Engineering Programs, Purdue University

October 8 Guest Speaker: Bjorn Pehrson
Professor and Previous Chair, Department of Teleinformation
The Royal Institute of Technology
Stockholm, Sweden
Subject of talk: Globalization and Engineering Education - The Swedish Perspective

October 15 20th and 21st Century Globalization
- Impact of Globalization on Organizations and Multinational Corporations
  - Scientization, Rationalization, and Standardization of Organization Management
  - Innovation in the Flat World by Multinational Corporations
- Discussion of previously recorded talk by Professor Vedhathiri Thanikachalam
  National Institute of Technical Teachers Training and Research, Chennai, India

Syllabus Continued on Back
October 22  **Guest Speaker: Emily Ligget**  
CEO, NovaTorque  
Sunnyvale, California  
Subject of talk: Global Engineering Leadership in Companies Large and Small

October 29  **Guest Speaker: Gene Spafford**  
Professor of Computer Science  
Executive Director, Center for Education and Research in Information Assurance and Security  
Purdue University  
Subject of talk: Globalization and Intellectual Property

November 5  **Guest Speaker: Shyamal Majumdar**  
Director General and CEO  
Columbo Plan Staff College for Technical Education  
Manila, Philippines  
Subject of talk: Engineering and Engineering Education in the Asia Pacific Region

November 12  **Short Quiz on The World is Flat**

November 19  **20th and 21st Century Globalization**
- Globalization of Technology, Innovation, and Intellectual Property Law
  - Technology Transfer and Technology Leak
  - Distributed Research, Development, and Design
  - Standardization of Intellectual Property Law and Trends in Enforcement
- Discussion of previously recorded talk by Sergio Nacach  
  Vice President of Andean Region Operations, Kimberly-Clark, Lima, Peru

November 26  **Holiday (Thanksgiving)**

December 3  **20th and 21st Century Globalization**
- The Future of Globalization
- Review of Main Points of the Course

December 10  **Course Conclusion**

*In the event of a major campus emergency, course requirements, deadlines and grading percentages are subject to changes that may be necessitated by a revised semester calendar or other circumstances. Should this happen, I will provide information on class changes on blackboard and via a message to your e-mail address of record.*