

**Course Number: MGT 490**

**Course Title: Green Economy, Innovation & Entrepreneurship**

**Semester: Fall 2015**

**Classroom:**

**Meeting Time:**

**Instructor & Office: Raul Gouvea, ASM 2106**

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**Office Hours: W/TH 15:00-17:00**

### **I - Course Description**

The development of a green economy is gathering global attention as nations undertake new economic development strategies that take into account social, environmental and economic dimensions. The implementation of an economy that is environmentally sound and sustainable is becoming a socio-economic and political necessity and an imperative. The state of New Mexico is taking firm steps to consolidate and expand its share of green companies, green technologies and green services. The green economy holds the promises to generate additional jobs and income for the state of New Mexico

This course will address the various dimensions, challenges, and opportunities permeating the global green economy and New Mexico's green economy, paying heed to the key drivers of the global and state of New Mexico's green economy.

### **II – Course Objectives**

Students will learn about the different dimensions and concepts driving the global green economy. Students will be exposed to global and national opportunities and challenges permeating the adoption of a low carbon and inclusive green economy. Additionally, the student will learn how to develop and apply basic knowledge and skills related to the green economy. In addition, the student will also understand the sustainable challenges and opportunities permeating the global business environment.

The course will also showcase New Mexico's expanding Green Economy.

### **III – Grading:**

- a) **Group Project:** a group of no more than 5 students will assess the “green status” of a New Mexican Company and propose green strategies to upgrade its sustainability status. (60% of final grade)
- b) **Exam I (20%), Exam II (20%).**

#### V – Academic Integrity:

Anderson School of Management faculty, staff and students commit to values of trust, honesty, integrity, and accountability. We will not tolerate academic dishonesty. By enrolling in any course at ASM, the student accepts the ASM Academic Honesty Code and affirms the following pledge: “I will not lie, cheat, fabricate, plagiarize or use any other dishonest means to gain unfair academic advantage.” For full text of ASM’s academic honesty code, please visit <http://www.mgt.unm.edu/honesty>

#### VI - ADA Statement

Reasonable accommodations will be given to any individual with a disability. Frequently, we will need to coordinate accommodating activities with other offices on campus. Course materials can be made available in alternative formats.

#### VII – Course Content

##### 1. The Green Economy: An Introduction

- a) IPCC (2015). Climate Change 2014 Synthesis Report – Summary for Policymakers. [www.ipcc.ch](http://www.ipcc.ch)
- b) The Global Commission on the Economy and Climate (2014). The New Climate Economy. [www.newclimateeconomy.report](http://www.newclimateeconomy.report)
- c) Dual Citizen (2014). The 2014 Global Green Economy Index, [www.dualcitizeninc.com](http://www.dualcitizeninc.com).
- d) Nora Hawkins (2013). The Global Green Economy Index. <http://epi.yale.edu>

##### 2. Business & Sustainability – Triple Bottom Line

- a) **GreenBiz (2015). State of Green Business Report.** [www.greenbiz.com](http://www.greenbiz.com)
- b) UNEP (2012). The Business Case for the Green Economy: Sustainable Return on Investment. [www.unep.org](http://www.unep.org).
- c) Robert Engelman (2013). “Beyond Sustainability.” The WorldWatch Institute – Is Sustainability Still Possible? [www.Worldwatch.org](http://www.Worldwatch.org) .
- d) Alessandro Galli et al. (2012). “Integrating Ecological Carbon and Water Footprint into a “Footprint Family” of Indicators.

##### 3. Leading Corporate Sustainability Issues

- a) RobecoSAM AG (2014). The Sustainability Yearbook 2014. [www.sustainability-indices.com](http://www.sustainability-indices.com)
- b) KPMG (2013). The Sustainability Yearbook 2013. [www.kpmg.com](http://www.kpmg.com)
- c) Ernst & Young (2013). 2013 Six Growing Trends in Corporate Sustainability. [www.ey.com](http://www.ey.com)
- d) Jennifer Blackhurst., Dave Cantor., and Mike O’Donnel (2012). Sustainable Supply Chains. [www.ciras.iastate.edu](http://www.ciras.iastate.edu)

e) Jacquelyn Ottman (2011). The New Rules of Green Marketing: Strategies, Tools, and Inspiration for Sustainable Branding.

#### **4. Green Economy: Workforce Implications**

- a) UNEP (2015). Green and Decent Jobs for Poverty Eradication. [www.unep.org](http://www.unep.org)
- b) Ahmed, Saleh (2015). Green Jobs in the Era of Changing Climate. Brief for GSDR 2015.
- c) Jordan, Philip (2012). Green Jobs: Where are They? [www.jff.org](http://www.jff.org)
- d) Cristina Martinez-Fernandez, Carlos Hinojosa, and Gabriela Miranda (2010). Green Jobs and Skills: The Local Labour Market Implications of Addressing Climate Change. OECD LEED Programme. [www.oecd.org](http://www.oecd.org).
- e) OECD (2012). Enabling Local Green Growth: Addressing Change Effects on Employment and Local Development. [www.oecd.org](http://www.oecd.org)

#### **5. Business Engagement with Climate Change**

- a) CDP (2015). Road to Paris: Commit to Business Leadership on Climate. [www.cdp.net](http://www.cdp.net)
- b) Winston, Andrew (2014). "Resilience in a Hotter World." Harvard Business Review, April Issue. [www.hbr.org](http://www.hbr.org)
- c) Lowitt, Eric (2014). "How to Survive Climate Change and Still Run a Thriving Business: Checklists for Smart Leaders." [www.hbr.org](http://www.hbr.org)
- d) UNEP (2013). Guide for Responsible Corporate Engagement in Climate Policy. [www.unep.org](http://www.unep.org)
- e) SEI (2013). Broadening Horizons: Business Engagement with Climate Change. Stockholm Environment Institute. [www.sei-international.org](http://www.sei-international.org).
- f) CDP (2013). Sector Insights: What is Driving Climate Change Action in the World's Largest Companies? [www.cdp.net](http://www.cdp.net)

#### **6. Building an Inclusive Green Economy**

- a) **Niazi, Zeenat., and Thakur, Singh (2015). Equity Issues in a Green Economy: Draft for Discussion.** [www.irf2015.org](http://www.irf2015.org).
- b) PEP (2013). Building an Inclusive Green Economy for All. [www.povertyenvironment.net](http://www.povertyenvironment.net).
- c) UNEP (2013). Building Inclusive Green Economies: Success Stories from South-South Cooperation. [www.unep.org](http://www.unep.org)
- d) Nidhi Tandon (2012). "Empowerment of women in a Green Economy in the context of Sustainable Development and Poverty Eradication.

#### **7. Ethics, Governance, and Sustainability**

- a) Bristol-Myers Squibb – Sustainability 2015 Goals. [www.bms.com](http://www.bms.com)
- a) Cima (2013). Incorporating Ethics into Strategy: Developing Sustainable Business Models. [www.cimaglobal.com](http://www.cimaglobal.com).
- b) IFC (2013). Better Companies, Better Societies: Good Governance Key to Sustainability. [www.ifc.org](http://www.ifc.org).
- c) SHRM Foundation (2012). HRM's Role in Corporate Social and Environmental Sustainability. [www.shrmfoundation.org](http://www.shrmfoundation.org)
- d) Brandlogic (2012). 2012 Sustainability Leadership Report. <http://sustainabilityleadershipreport.com>
- e) Peter Dauvergne., and Jane Lister (2011). "Big Brand Sustainability: Governance Prospects and Environmental Limits." Global Environmental Change, [www3.telus.net](http://www3.telus.net).

f) Pardee Center Task Force Report (2012). Beyond Rio + 20: Governance for a Green Economy.

## **8. Trade & Sustainable Development**

- a) ICTSD (2015). International Trade and Sustainable Development. [www.ictsd.ch](http://www.ictsd.ch)
- b) Rangel, Ernesto., and Licona, Angel (2015). "Pacific Alliance and the Challenge of the Green Economy." Modern Economy, Vol.6, p. 90-95.
- c) UNEP (2013). The Green Economy and Trade: Trends, Challenges and Opportunities. [www.unep.org](http://www.unep.org)
- d) Unctad (2013). Are There Downsides to a Green Economy? The Trade, Investment and Competitiveness Implications of Unilateral Green Economic Pursuit. [www.unctad.org](http://www.unctad.org)

## **9. Green Cities**

- a) **City of Vancouver (2015). Greenest City 2020 Action Plan.** <http://vancouver.ca>
- b) **LSECities (2013). Going Green: How Cities are Leading the Next Economy.** [www.globalurban.org](http://www.globalurban.org)
- c) Sustainable Cities (2012). Sustainable Cities: Building Cities for the Future. [www.sustainablecities2012.com](http://www.sustainablecities2012.com)
- d) UN Habitat (2012). Urban Patterns for a Green Economy: Clustering for Competitiveness.
- e) U.S. Department of Energy (2012). Green Building Certification System Review.
- f) Pater k. Dahl (2013). MN LEED Building Case Study. [www.buildingchicagoexpo.com](http://www.buildingchicagoexpo.com)

## **10. Green Procurement Policies**

- a) Timothy Simcoe and Michael W. Toffel (2013). "Government Green Procurement Spillovers: Evidence from Municipal Building Policies in California." Harvard Business School. Working Paper 13-030.
- b) International Institute for Sustainable Development (2012). Procurement, Innovation and Green Growth. [www.iisd.org](http://www.iisd.org)

## **11. Eco-Innovation**

- a) Colombelli, Alessandra., Kraft, Jackie, and Quatraro, Francesco (2015). "Eco-Innovation and Firm Growth: Do Green Gazelles Run Faster? Microeconomic Evidence from A Sample of European Firms." [www.gredeg.cnrs.fr](http://www.gredeg.cnrs.fr)
- b) Doranova, Asel., Van Der Veen, Geert., and Roman, Laura (2015). Eco\_innovation: What Approaches can Make Regions both Smart and Sustainable?" [www.interrewg4c.edu](http://www.interrewg4c.edu)
- c) ASEIC (2013). ASEM Eco-Innovation Index (ASEI) 2013: Measuring Sustainable Future for Asia and Europe. [www.aseic.org](http://www.aseic.org).
- d) Bronwyn Hall., Christian Helmers (2011). Innovation and Diffusion of Clean/Green Technology: Can Patent Commons Help? <http://elasa.berkeley.edu>
- e) Eric Lane (2012). Building the Global Green Patent Highway: A Proposal for International Harmonization of Green Technology Fast Track Programs. <http://papers.ssrn.com>
- f) Mark Dutz and Siddhart Sharma (2012). Green Growth, Technology and Innovation. The World Bank. [www-wds.worldbank.org](http://www-wds.worldbank.org).
- g) Antoine Dechezleprete (2013). Fast-Tracking Green Patent Applications. ICTSD. [www.ictsd.org](http://www.ictsd.org)

## **12. Nanotechnology & the Green Economy**

- a) **OECD (2013). Nanotechnology for Green Innovation.** [www.oecd.org](http://www.oecd.org)

- b) Philip Shapira and Jan Youtie (2012). The Economic Contributions of Nanotechnology to Green and Sustainable Growth. [www.oecd.org](http://www.oecd.org).
- c) ICTSD (2012). Intellectual Property Rights and Green Technologies from Rio to Rio: An Impossible Dialogue. [www.ictsd.org](http://www.ictsd.org).
- d) ACS Green Chemistry Institute (2011). Green Nanotechnology Challenges and Opportunities. [www.onami.us](http://www.onami.us).

### **13. Water, Energy & The Green Economy**

- a) UNESCO (2015). The United Nations World Water Development Report Water for a Sustainable World. [www.unesco.org](http://www.unesco.org)
- b) Frankfurt School (2013). Global Trends in Renewable Energy Investment 2013. [www.unep.org](http://www.unep.org)
- c) European Commission (2013). Report from the Commission to the European Parliament, The Council, The European Economic and Social Committee and the Committee of the Regions. <http://ec.europa.eu>
- d) UNEP (2012). Measuring Water Use in a Green Economy.
- e) UNESCO (2012). Green Accounting and Data Improvement for Water Resources.
- f) Un (2013). **Water in a Green Economy.** [www.un.org](http://www.un.org)

### **14. New Mexico's Green Economy**

- a) State of New Mexico (2009). New Mexico's Green Economy: Capitalizing on Assets and Opportunities.
- b) Metropolitan Policy Program at Brookings (2011). "Sizing the Clean Economy in the State of New Mexico."
- c) Headwaters Economics (2010). "New Mexico Leads Rocky Mountain States in Growth of Green Energy Jobs."
- d) Center for American Progress (2013). Green Economic Recovery Program. Impact on New Mexico. [www.peri.umass.edu](http://www.peri.umass.edu)
- e) Brendan Miller (2012). "New Mexico Clean Energy and Green Business Incentives." <http://brendanmiller.com>