



GLOBAL NETWORK FOR  
ADVANCED MANAGEMENT

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## FROM LOCAL CLASSROOMS TO GLOBAL CRUCIBLES

*A global collaborative learning pathway for complex leadership contexts*

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### A SMALL NETWORK ONLINE COURSE

*Urban resilience: Complexity, collaborative structures, and leadership challenges*

Fall 2016

#### Created and delivered by

Professor Murali Chandrashekar, Sauder School of Business, UBC (lead faculty & coordinator)  
Professor Brad Gentry, Yale School of Management  
Professor Sourav Mukherji, Indian Institute of Management-Bangalore  
Professor Gordon Abekah Nkrumah, Ghana Business School  
Professor Carlos Scheel, EGADE Business School

in collaboration with

100 Resilient Cities & The Rockefeller Foundation

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## Course background

The world continues to urbanize. In the 100 years starting 1913, the proportion of the world's population that lives in cities grew 5-fold from 10% to 50%, and estimates suggest that 75% of the world's population will live in cities in 2050.

Though history reveals that urbanization has always been an accelerator of growth and development, it also poses profound challenges for corporates, communities, cities, and countries. A recent McKinsey report succinctly notes: "Cities are essential to global economic growth and productivity. They are where most of the world's population live, work, and play, and they are important to everyone else, too. They are the world's economic engine, consuming the majority of global power and resources, while generating 80 percent of GDP and 70 percent of greenhouse-gas emissions. Making cities great is the critical infrastructure challenge of this century."

This course is a collaborative offering to the GNAM network. It brings together five schools in the GNAM network (Sauder School of Business, Yale SOM, IIM-B, Ghana Business School, and EGADE Business School), the 100 Resilient Cities network ([www.100resilientcities.org](http://www.100resilientcities.org)), the Rockefeller Foundation ([www.rockefellerfoundation.org](http://www.rockefellerfoundation.org)), and practitioners from business, government, and civil society to engage with the topic of urban resilience.

Following a pilot run of the course in Spring 2016, we are now offering the next version of the course in Fall 2016. The new course has benefitted immensely from feedback from students, faculty, and all stakeholders that were part of the pilot course.

### On the key non-academic partners in the course

The key non-academic partners in the course are the Rockefeller Foundation (RF) and the 100 Resilient Cities initiative (100RC). In 2013, RF pioneered the 100RC initiative to help cities around the world become more resilient to the physical, social and economic challenges that are a growing part of the 21st century.

In April 2013, GNAM became a platform partner of 100RC to help cities in the design and implementation of resilience strategies.

100RC supports the adoption and incorporation of a view of resilience that includes not just the shocks—earthquakes, fires, floods, etc.—but also the stresses that weaken the fabric of a city on a day to day or cyclical basis. Examples of these stresses include high unemployment; an overtaxed or inefficient public transportation system; endemic violence; or chronic food and water shortages. By addressing both the shocks and the stresses, a city becomes more able to respond to adverse events, and is overall better able to deliver basic functions in both good times and bad, to all populations.

Cities in the 100RC network are provided with the resources necessary to develop a roadmap to resilience along four main pathways:

- Financial and logistical guidance for establishing an innovative new position in city government, a Chief Resilience Officer (CRO), who will lead the city's resilience efforts
- Expert support for development of a robust resilience strategy
- Access to solutions, service providers, and partners from the private, public and NGO sectors who can help them develop and implement their resilience strategies
- Membership of a global network of member cities who can learn from and help each other.

Through these actions, 100RC aims not only to help individual cities become more resilient, but will facilitate the building of a global practice of resilience among governments, NGOs, the private sector, and individual citizens.

## Course purpose

Despite the global nature of the challenge, cities across the globe evidence great complexity and differences. Local, national, and regional context matters, and the resilience-building effort will require leaders who understand how markets and organizations work in diverse and complex contexts, and who can move supplely from a global perspective to specific local understanding. Leaders will also need to be able to call on expertise and resources from all parts of the globe and all sectors of society, and not assume that any one organization or perspective has the final answer.

By partnering with 100RC and RF, this collaborative GNAM Small Network Online Course (SNOC) represents the first step in a global collaborative learning pathway for students to help prepare them for complex leadership contexts. These are contexts that are characterized by messy and ‘wicked’ problems, the involvement of multiple stakeholders (across business, government and civil society), each with different motivations and constraints, low decision-making authority, and the potential for conflict across stakeholders in approach, strategic decision-making, and implementation.

It is envisioned that the SNOC would then lead into a Global Network Week that will be held in one or more of the 100RC cities, in which cross-institutional teams of students will work on specific projects articulated by the CROs or Mayors of the cities.

For the purposes of this course, we draw on the view of urban resilience articulated by 100RC as the ability of individuals, communities, businesses, institutions, and systems within a city to survive, adapt, and grow in response to acute shocks and chronic stresses they may experience. Shocks and stresses can bring opportunities for cities to evolve and in some circumstances transform.

The purposes of this course are to help students across the Global Network for Advanced Management:

- Articulate resilience challenges and opportunities facing global cities
- Describe the holistic and integrated nature of resiliency and key drivers
- Work in remote and borderless teams to design collaborative approaches involving business, government and civil society to address urban resilience challenges

## Course participants

This course is primarily geared towards graduate-level students in business with no prior background in urban resilience. Given the broad nature of the topic, however, and to facilitate the integration of business with concepts from environmental studies, urban design and architecture, land and food systems, and public policy, students from these related areas will also be welcome to take the course.

The course will be capped at 40 students – 20 to 25 spots for MBA students from the GNAM network and 15 to 20 spots for students from environmental studies, urban design and architecture, land and food systems, and public policy. It is anticipated that we will have 8 teams of students, with each team having students from diverse fields of study.

## Course timeframe

The SNOC will be offered in Fall 2016. It will run for 14 weeks, and meet for two one-hour sessions per week.

## Course structure

This course is built around four key dimensions of city resilience advanced by the 100RC initiative – health & wellbeing, economy & society, infrastructure & environment, and leadership & strategy. It provides a vehicle for students to explore the ways in which resilience is driven by the active consideration of each of these dimensions, in an integrative and holistic manner.

Within each dimension of city resilience, we will consider two drivers:

<i>Dimension of city resilience</i>	<i>Key drivers considered in this course</i>	<i>Indicators</i>
<b>Health &amp; well-being</b>	1. Meeting basic needs	Ability to access resources to ensure survival and wellbeing – housing, water and sanitation, food, and energy
	2. Ensuring public health services	Ability to access healthcare and emergency services
<b>Economy &amp; society</b>	3. Fostering economic prosperity	Availability of funding, business investment, and integration with regional and global economy
	4. Promoting engaged communities	Social support, local identity and culture, and community participation
<b>Infrastructure &amp; environment</b>	5. Reducing physical exposure	Environmental policy, safeguards for critical infrastructure
	6. Ensuring continuity of critical services	Emergency response and contingency plans, physical infrastructure design, and flood risk management
<b>Leadership &amp; strategy</b>	7. Fostering long-term and integrated planning	Access to data and monitoring, strategies and plans, and land-use planning
	8. Promoting leadership and effective management	Multi-stakeholder alignment, collaboration and empowerment, decision making and leadership

The eight drivers will constitute the main themes for the course, and will together serve as the organizing framework for the cases and projects in the course.

## **Class interactions**

Class interactions will take place virtually on the GNAM online course platform, and the language of instruction and interaction will be English. Class materials – text, reports, videos, etc. – will also be posted to Canvas (an online platform powered by Yale). MBA students are expected to have completed the equivalent of the traditional core curriculum at their business school, or to have taken prior coursework in finance, marketing, operations, business and society or other business-related subjects.

Each session will be 90 minutes long, and will be facilitated by mini-lectures from subject matter experts, conversations with practitioners, discussion forums triggered by cases from target cities in the 100RC network and other leading performance examples in the resilience area.

The course delivery will be facilitated by two Teaching Assistants from the Sauder School of Business.

Support from 100RC will be led by Scott Rosenstein and Marcus Hagberg. In addition, two TAs from 100RC will help student teams interact with the CROs of cities while working on the CRO challenges.

## **Cases**

We will be exploring four cases in this course. Each student will work with 4-5 others in a virtual team structure to analyze the case and offer recommendations. Each team will submit case memos (2 pages) outlining recommendations and analysis for one of the four cases, and each team will present, in the online class, their recommendations for one of the four cases (different than the one for which the team submitted the written memo). Though each case will have a root cause in one dimension, during the case study exploration, students will be asked to explore connections with other dimensions.

- Case 1: Public health systems – Accra (Ghana)
- Case 2: Engaged communities – Bristol (UK)
- Case 3: Continuity of critical services – New Haven (US)
- Case 4: Leadership and effective management – Wellington (NZ)

## **CRO challenge – ‘Raw’ case**

Working in virtual teams, students will also engage with a key challenge that may be facing CROs in the 100RC network. The challenge, presented as a ‘raw’ case, will cover several dimensions of resilience that will be covered in the SNOG, and will require students to adopt a holistic and integrated perspective while addressing the dilemma.

The situations presented in the cases and in the CRO challenge have yet to be solved. Students will be asked to draw on the fundamental business tools to which they have been exposed in their studies – finance, strategy, marketing, operations and others – to develop new and innovative approaches to addressing these situations. In the spirit of continuous improvement, students are expected to offer constructive feedback, giving students in this next cohort the opportunity to continue to shape the course and related efforts for the future.

## **Case study responses and CRO challenge solutions**

In developing case study responses, students will interact with materials from the Rockefeller Foundation’s Resilience Academy’s created for the RF/US HUD program (US Housing and Urban Development).

- As part of the health & wellbeing dimension, students will work through exercises that will help them evaluate a city's current state and the cross cutting drivers of the problem. Doing this upstream work prevents 'jumping' to solutions and encourages meaningful dialogue around challenges.
- As part of the economy & society dimension, students will work through project design exercises that will help define resilience value, opportunities, design factors and success factors.
- As part of the infrastructure & environment dimension, students will work through exercises that will help them define the path to resilient solutions, including cost benefit analyses and a financing strategy.
- Finally, as part of the leadership & strategy dimension and the CRO challenge, students will be responsible to articulate asset management strategies in the implementation of resilient solutions.

## Course flow

The course is delivered over 28 class sessions, and is divided into three modules:

### Module 1: Introduction and agenda setting

- What is urban resilience, why is it important?
- How does resilience thinking help to define more meaningful responses to urban challenges?
- An introduction to resilient project planning

### Module 2: City resilience indices

- Health & well-being
- Business & Economy
- Infrastructure & environment
- Leadership & strategy

### Module 3: Integration & student presentations on CRO dilemmas

- Bringing it all together
- Student teams present solutions to CRO dilemmas

Each session will be facilitated by mini-lectures from subject matter experts, conversations with practitioners, discussion forums triggered by cases from target cities in the 100RC network, and other leading performance examples in the resilience area.

## Course deliverables and grading

The final grades for the course will be based on the following deliverables:

- Your individual reflections on four selected drivers of resilience (5% each; 20% total)
- Your team's written case memo outlining recommendations to one case (10%)
- Your team's presentation outlining recommendations to one case (10%)
- Your group's recommended solutions to the CRO dilemma (15%)
- Your teammates' evaluations of your contributions to the cases and CRO dilemma – peer evaluation (15%)
- Your reflections on how the learning from this course might apply to your career (10%)
- Your overall level of participation as evidenced by synchronous class participation, discussion board participation and quality of contributions (20%)

## Course schedule

In order to accommodate time zones across the GNAM schools, the course will be offered Tuesdays and Thursdays from 8:30am to 10:00am, Eastern Standard Time, starting on Tuesday, 6 September 2016 and ending on Tuesday, 20 December. Actual on-line interactions will consist of:

- Same-time video discussions with faculty, TAs and guests
- Moderated on-line discussion threads; group sessions – both video and on-line – and
- Other methods as fit the class best.

PLEASE NOTE THE TIME CHANGE STARTING NOVEMBER 6  
WHEN CLOCKS GO BACK IN N.AMERICA BY ONE HOUR

The current schedule is as follows:

- Synchronous sessions for the entire class will be held on Tuesday and Thursday mornings from 8:30am-10:00am New York time.
- Dedicated time for synchronous interaction of group members in global teams will be available immediately after the full class sessions from 10 to 11am New York time.

The detailed course schedule will be available shortly.