# Amrita School of Business Amrita Vishwa Vidyapeetham

Coimbatore

Term VI (02 Jan 2019 – 31st March 2019)

Course Title: Disaster Operations Management

Course Code: OM624E

Credits: 3

Total Sessions: 24

Course Instructor: Dr. Santanu Mandal

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Course Link: <a href="https://drive.google.com/open?id=12ssCA5C5GMg-">https://drive.google.com/open?id=12ssCA5C5GMg-</a>

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Office: S-10

Office hours: Monday, Wednesday & Thursday 2:00 – 4:00 pm

Course contributes mostly to: Employability/ Entrepreneurship/ Skill Development/

Value-add.

#### **Course Description**

Natural and technological hazards affect the everyday life as well as long-term development plans. For many decades the prevailing approach in dealing with disasters was focus on response and recovery, however lately pre-disaster actions to minimize the disaster risks are encouraged. The course introduces Disaster Operations Management, focusing on different kinds of disasters. The problem is addressed in a holistic cross-sectoral and cross-disciplinary manner, including all stages of disaster management cycle: mitigation, preparation, response and recovery. Starting with theory, main definitions and concepts, the course considers other aspects of Disaster Management cycle, such as International Agreements, impact of climate change and urbanization on severity and extent of disasters, case studies of disaster management on national and local levels and research articles giving an overview/in-depth analysis of recent advances and developments across different modules. Furthermore this course introduces the importance of business contingency and continuity planning for ensuring sustainability of business operations.

# **Course Objectives**

This course introduces major concepts, definitions and frameworks used in disaster operations management. It introduces disaster management and its role in enhancing value creation through mitigation, response and recovery. Emphasis is given to familiarize the students with the basic foundations of disaster operations management introduction to disaster management, disaster management planning, disaster mitigation, disaster preparedness, disaster response, disaster recovery, challenges of disaster management and behavioural aspects of disaster management. Several cases have been suitably mapped for every module for class discussion. Furthermore, every module has suitably selected/mapped research articles to give the students an overview of developments across each module to enhance applications of theoretical concepts and frameworks to real life scenarios. On successful completion of the course students will able to apply disaster operations management principles to real world scenarios and help in crisis management and business continuity planning. The course therefore aims to:

- Identify the major types of disasters and appropriate mitigation strategies.
- Recognise the importance of effective disaster operations planning in disaster mitigation.
- Acknowledge the importance of effective disaster preparedness planning and operations in ensuring business continuity.
- Recognise the importance of disaster response planning in successful disaster operations management.
- Recognise the contribution of effective disaster recovery principles and strategies in successful disaster operations management.
- Understand the application of several disaster operations framework to real world scenarios.

# Alignment of course objectives (CO) with learning goals (LG) of Assurance of Learning

Derived from its mission, ASB has adopted five learning goals, (apart from the discipline competency) - the management-specific attributes, knowledge and skills that its graduates are expected to possess when they complete the programme. The six outcomes of this course are mapped to the 'Critical and Integrative Thinking' learning goal. The assignments, case discussion and research articles would reinforce the second learning goal, 'Effective written and oral communication'.

| LG<br>CO | Critical and integrative Thinking | Effective<br>written and<br>oral<br>communication | Societal and<br>Environmental<br>Awareness | Ethical<br>Reasoning | Leadership |
|----------|-----------------------------------|---|--|----------------------|------------|
| CO1      | 3                                 | 2   | 3  | 1                    | 2          |
| CO2      | 3                                 | 2   | 3  | 1                    | 2          |
| CO3      | 3                                 | 1   | 3  | 1                    | 2          |
| CO4      | 3                                 | 1   | 3  | 1                    | 2          |
| CO5      | 3                                 | 2   | 3  | 1                    | 2          |
| CO6      | 3                                 | 2   | 3  | 2                    | 3          |

Key: 3 – Highly relevant; 2 – Moderately relevant; 1 – Low relevance; 0- No relevance

## Unit-wise scope for outcomes and Bloom's taxonomy

Disaster Operations Management is designed focusing primarily on the Bloom's learning levels of applying, analysing and evaluating levels of learning.

| Bloom's Levels of Learning | CO 1 | CO 2 | CO 3 | CO 4 | CO 5 | CO 6 |
|----------------------------|------|------|------|------|------|------|
| Creating                   |      |      |      |      |      |      |
| Evaluating                 | Х    | Х    | Х    | Χ    | Х    | Х    |
| Analyzing                  | Х    | Х    | Х    | Х    | Х    | Х    |
| Applying                   | Х    | Х    | Х    | Χ    | Х    | Х    |
| Understanding              | Х    | Х    | Х    | Χ    | Х    | Х    |
| Remembering                |      |      |      |      |      |      |

## **Pedagogy**

The classes will use case readings, discussions and research articles primarily as required from time to time, complemented with video clippings and lectures. Though the course is focused on strategy, techniques will also be practised. Tutorials allow for problem solving practice. Every module will have assigned 'take home' exercises to practice critical thinking and applications.

# **Assessment (Grading Policy: Relative)**

| Assessment (100%) |   |   |     |  |
|-------------------|---|---|-----|--|
| 1                 | Attendance  | Expected attendance, as per the rules   | 5%  |  |
| 2                 | Chapter/Module/Case/Research<br>Article Analysis & Presentation | Each student/group will have to read an assigned chapter/module/research article/case and present the same in the class. This presentation will be facilitated with required inputs from the instructor and all other students to make the discussion meaningful. | 15% |  |
| 3                 | Assignment  | Periodic Assignments will be given and need to be submitted within due dates for evaluation   | 20% |  |
| 4                 | Class Participation   | Students are expected to come prepared with the assigned readings to actively participate and contribute to the class discussion  | 10% |  |
| 5                 | End-term examination  | An open book comprehensive exam with emphasis on analysing, evaluating scenarios and applying learnt principles to problem solving and providing solutions  | 50% |  |

#### **Course Requirements**

Throughout this course, the students are expected to demonstrate highest levels of involvement and commitment, in terms of efforts, quality of work, and conduct both at individual level and as groups. The potential of making learning interesting and effective lies primarily in the hands of the students and are expected to use the same for this course throughout the term. The course demands study efforts of 9 hours/week outside classroom (3 hours for every 1 session of class). Preparation is mandatory for attending the classes. Students must go through the assigned chapters, cases and research articles thoroughly and prepare well before attending the respective sessions.

#### **Course Text**

Disaster Management, Mrinalini Pandey, Wiley india Pvt. Ltd

#### Reference Texts

- Disaster Science and Management, Tushar Bhattacharya, Tata Mc-Graw Hill India.
- Disaster Management, M.M. Sulphey, PHI Learning, India.
- Introduction to International Disaster Management, Coppola D.P., Elsevier Science (B/H).
- Disaster Management and Environmental Planning, Alfred Scott, Syrawood Publishing House.
- Disaster Management: Future Challenges And Opportunities, Editor- Jagbir Singh,
   I K International Pvt. Ltd-New Delhi.
- Disaster Mangement: Global Challenges, Editor:Rajib Shaw and R R Krishnamurthy, Orient BlackSwan.

| Session<br>No | Topics/Chapter Title                                | Text Cases /Assigned Research Articles  |
|---------------|---|---|
| 1-3           | Introduction to Disaster Management                 | <ul> <li>Text Cases/Assigned Case Readings</li> <li>Research Articles 1 and 2</li> </ul>  |
| 4-6           | Disaster Management and Planning                    | <ul> <li>Text Cases/ Assigned Case Readings</li> <li>Research Article 3 and 4</li> </ul>  |
| 7-9           | Disaster Mitigation                                 | <ul><li>Text Cases/ Assigned Case Readings</li><li>Research Article 5 and 6</li></ul>     |
| 10-12         | Disaster Preparedness                               | <ul> <li>Text Cases/ Assigned Case Readings</li> <li>Research Articles 7 and 8</li> </ul> |
| 13-15         | Disaster Response                                   | <ul><li>Text Cases/ Assigned Case Readings</li><li>Research Articles 9 and 10</li></ul>   |
| 16-18         | Disaster Recovery                                   | <ul><li>Text Cases/ Assigned Case Readings</li><li>Research Articles 11 and 12</li></ul>  |
| 19-20         | Ascertaining Roles and Responsibilities             | <ul> <li>Text Cases/ Assigned Case Readings</li> <li>Research Article 13</li> </ul>       |
| 21-22         | Insights on Challenges in<br>Management of Disaster | <ul> <li>Text Cases/ Assigned Case Readings</li> <li>Research Article 14</li> </ul>       |
| 23-24         | Behavioural Aspects of Disaster<br>Management       | <ul> <li>Text Cases/ Assigned Case Readings</li> <li>Research Article 15</li> </ul>       |

# **Contribution to Placements**

The knowledge, readings, exercises, research articles and case discussions for the course make explicit contributions to success during the placement process.

- Case Discussions: Group Discussion, Interview, and Leadership (for oral and written communication practice, as a structured and critical thinking tool and domain knowledge reference).
- Research Articles Discussion: Group Discussion, Interview, and Leadership (for oral and written communication practice, as a structured and critical thinking tool and domain knowledge reference).
- Glossary of technical terms: Interview, Group Discussion (for domain knowledge ready reference)
- Critical thinking Q & A:
   Group Discussion, Interview (as critical thinking practice)