

**Argosy University**  
**COURSE SYLLABUS**  
*PA6528*  
Economics of Emergencies

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**Faculty Information**

**Faculty Name:**

**Campus:**

**Contact Information:**

**Office Hours:**

**Short Faculty Bio:**

This course presents economic approaches to emergencies and develops the analytical skills to prevent, manage and respond to emergencies as well as their aftermath, from a financing and economic perspective. Students evaluate federal and/or state funding process for disasters, risks mitigations and reduction strategies, risk transfers and roles of insurance in disaster costs, and financing options. Students investigate who is paying the price of disasters, in the short and long term, and equips them with methodologies/tools and skill-sets for structuring, administering and evaluating the costs versus losses of emergency responses

**Course Pre-requisites:** PA6526 Planning and Preparing for Disaster

**Required Textbook/Readings:**

Anne van der Veen (Editor). 2004. *Disasters and economic damage*. Emerald Group Publishing Limited. ISBN: 9781845440176

National Research Council Staff. (1999). *Impacts of natural disasters: A framework for loss estimation*. National Academies Press. ISBN: 9780309063944

**Course length:** 7.5 Weeks

**Contact Hours:** 45 Hours

**Credit Value:** 3.0

## **Program Outcomes:**

1. ***Communication:***
  - a. Communicate the roles and limitations of government at any level (federal, state, local) in specific circumstances
  - b. Deliver oral, visual, or written presentations to educate or promote projects to diverse audiences.
2. ***Analytical problem solving:*** Gather information, discern gaps, develop, and evaluate possible solutions and alternatives regarding political, social, and financial costs and benefits of public sector initiatives.
3. ***Leadership and motivation:***
  - a. Generate shared goals and lead internal and external stakeholders toward those goals.
4. Motivate employees and other stakeholders to perform consistent with the mission of *the* relevant work unit.
5. ***Tactical Management:*** Execute duties and responsibilities *such as: evaluate and supervise* employees, reinforce organizational mission, and *manage unit budgets*.
6. ***Interpersonal Effectiveness:***
  - a. Establish, build, and sustain effective working relationships with relevant parties to achieve organizational goals.
  - b. Exemplify and teach ethical values and behavior

## **Course Objectives:**

1. Analyze economic approaches to managing emergencies, especially those caused by natural disasters (**Program Outcomes 2, 4**)
2. Illustrate functions and types of disaster mitigations, the approaches to disaster mitigations and their applications to specific types of emergencies (**Program Outcomes 2, 3, 5**)
3. Evaluate the approaches to risk management components of risks' identification, reduction, transfer and finance to recommend a viable resilient course of action (**Program Outcomes 2, 3, 4, 5**)
4. Compare the costs and losses of emergencies to government, individual, community and corporate entities and communicate better ways of managing the growing cost estimates and impacts (**Program Outcomes 1, 2, 4, 5**)
5. Evaluate the federal government Emergency Management Office compliance to the audit requirements for federal financial statements and accountability system (**Program Outcomes 1, 2, 4**)

## Assignment and Resource Table

Unit	Topics	Reading	Assignment
1	<p><b>Understanding the Economic Realities of Emergency Preparedness and Response</b></p> <ul style="list-style-type: none"> <li>• Who pays and how much to prevent disasters</li> <li>• Who pays and how much to recover from disasters</li> <li>• Managing the economics of essentially social situations</li> </ul>	<p><b>Articles:</b>  <i>Disasters and Economic Damage: macro, meso and micro approaches</i>; by Anne van der Veen (Editor) 2004. Emerald Group Publishing Limited, pp. 274-279</p> <p><i>Disasters and Economic Damage: Economic Loss: myth and measurement</i>; by H. Cochrane. 2004. Emerald Group Publishing Limited, pp. 290-296</p> <p>Federal Emergency Management Agency (FEMA) Report on costs and benefits of Natural Hazard Mitigation, 1997 (<i>Click on Web Link Below</i>)  <a href="http://www.fema.gov/MIT/cb_toc/htm">http://www.fema.gov/MIT/cb_toc/htm</a></p>	<p><b>Participation Assignment:</b>  Identify the most recent major disaster in your locality or region (e.g. flooding, tornado, forest fire) and, using press coverage and/or published reports, identify the primary approaches for assessing disaster damages and how the community addressed funding the recovery effort</p> <p><b>Lecturette:</b>  Funding of efforts to prevent natural or manmade disasters is clearly preferred to funding the response effort – so long as we believe that the threat of a disaster is real. In some respects, this is almost like an insurance policy. We spend money on car insurance hoping that we'll never need it. When we don't need it for several years, we decide to cut reduce our insurance coverage – and when we finally have the accident, we are under-insured.</p> <p>This becomes even more pronounced when the risks differ for parts of the population. For example, if part of a community is low-lying and subject to flooding but the remainder of the community is on relatively high ground, one group has a much greater incentive to encourage the use of tax dollars for prevention efforts than the other.</p> <p>Regional differences are also present. California has much greater incentive to build to tough earthquake standards than does West Michigan or Columbus, GA.</p> <p>How we fund recovery efforts may be up to private individuals, may be locally driven, or may fall under declarations of either state or federal disaster areas. But not all disasters</p>

			<p>are going to be treated equally. Consider this comparison – Tornado 1 rips through Chattanooga, Tennessee and takes out 40 homes over a 20-square mile area; Tornado 2 hops and skips from Birmingham, AL through La Fayette, GA, along the edge of Chattanooga, and on to Oak Ridge, Tennessee, knocking down 2 to 5 houses in each of the many communities it hits across a three-state area. Assuming the same total damage in dollar terms, should we expect the same total state and federal support committed to each tornado disaster? Will we see it?</p>
<p>2.</p>	<p><b>Economics of Prevention</b></p> <ul style="list-style-type: none"> <li>• Capital investments v ongoing preparation</li> <li>• Education as an economic investment</li> <li>• Presenting the economic case to concerned stakeholders</li> </ul>	<p><b>Articles:</b>  “Estimating the Losses of Natural disasters” in Impacts of Natural Disasters: A framework for loss estimation, by National Research Council Staff. National Academies Press, 1999. Pp1-14</p>	<p><b>Prepare for Major assignments following in Modules 3, 4, and 7 – read the assignments and conduct preliminary research to select the best disasters to study for your own career path.</b></p> <p><b>Participation Assignment:</b>  Given either a natural disaster (e.g. hurricane) or a man-made crisis (e.g. the W35 bridge collapse in Minnesota), how do we determine before-the-fact whether we should invest more capital dollars to avoid damage, maintenance dollars to inspect and repair, or training dollars (ensuring that citizens respond to avoid or minimize loss)?</p> <p><b>Lecturette:</b>  Expecting more dollars to be spent to prevent disasters from occurring, or more likely, preventing the occurrence from causing as much damage, is an easy argument in the abstract. Where the dollars come from is a harder decision. Should New Orleans reallocate public education dollars to flood prevention? Yet even if we agree that some</p>

			<p>more investment is required and can generate the money to invest, how should the investment decision be made? Should South Florida pass still tougher construction laws so more building withstand Category 4 hurricanes? Or is the money better spent on resources to evacuate citizens when the inevitable hurricane does hit? Or should “hurricane kits” be supplied at public expense to the elderly and/or the poor?</p> <p>Part of the answer to these questions is indeed political – and it should be. But part of the political answer is a much more sophisticated understanding of the economics of the options. Measurement of economic return on such options is difficult at best. But multiple methods to estimate the returns exist and employing and interpreting such estimates is the responsibility of the public sector manager.</p>
3	<p><b>Economics of Prevention</b></p> <ul style="list-style-type: none"> <li>• Risk Identification and Analysis</li> <li>• Risk Reduction and Mitigation</li> </ul>	<p><b>Articles:</b>  “Evaluating Models of Risks from Natural Hazards”, Craig Taylor, Erick Van Marcke, and Jim Davis; Appendix B, in <i>Paying the Price: The status and Role of Insurance against Natural disasters in the United States</i> by Howard Kunreuther and Richard J. Roth, Sr., eds, 1998. Joseph Henry Press, pp.234-250.</p>	<p><b>LASA #1:</b>  Identify three examples of comparable disasters (e.g. natural disasters such as three tornadoes, or man-made/man-contributed disasters such as mine collapses), either across locations or in the same general location across time. <b>[NOTE: consider the selection of the topic carefully as additional assignments will use the same base examples]</b>. Analyze how the primary government entity or agency differed in their economic planning and investment models <b>prior to</b> the occurrence of the disaster. Identify metrics and evaluate the relative value of each approach and/or investment category. Consider how perceptions of risk before-the-fact influenced the investment decisions.</p>

		<p>“The National Flood Insurance Program” by Edward J. Pasterick, in <i>Paying the Price: The status and Role of Insurance against Natural disasters in the United States</i> by Howard Kunreuther and Richard J. Roth, Sr., eds, 1998. Joseph Henry Press, pp.125-154</p>	
4	<p><b>Economics of Response</b></p> <ul style="list-style-type: none"> <li>• Governmental roles and non-profit support</li> <li>• Overwhelming need v stealing from the future</li> <li>• Perceptions and realities</li> </ul>	<p><b>Article:</b> Becker, C. (2009). Disaster Recovery: A Local Government Responsibility. (cover story). <i>Public Management (00333611)</i>, 91(2), 6-12.</p>	<p><b>LASA #2:</b> Given the same three examples from the formative assessment assignment in Module 3, analyze how funding and spending occurred during and in the immediate aftermath of the emergencies. Evaluate any evidence that the prevention spending had any positive effect on the ability to respond to the emergencies. Consider both the general pattern of spending and the specific strategies or investments. Also, does the evidence suggest that any level of government, or the major non-profits, were more or less willing or able to provide financial support in response to the emergencies because of prior investments?</p>
5	<p><b>Economics of Recovery</b></p> <ul style="list-style-type: none"> <li>• Capital plans</li> <li>• Symbolic spending and building confidence</li> <li>• Federal or state/local v federal and state/local</li> </ul>	<p><b>Article:</b> (2008). Capital Budgets for IT Hit the Wall. <i>Industry Week/IW</i>, 257(11), 68.</p>	<p><b>Participation Assignment:</b> What should be the responsibility of groups like the Red Cross or United Way in responding to emergencies and crises? Should the public sector count on some level of financial commitment from these groups, and from donations from the public at large, in their financial planning models?</p>

	<ul style="list-style-type: none"> <li>projects</li> <li>Public/Private partnerships</li> </ul>		
6.	<b>Economics of Recovery</b> <ul style="list-style-type: none"> <li>Finding money v responsible spending and opportunity costs</li> <li>The ethics of my emergency over yours</li> </ul>	<b>Article:</b> Henderson Jr., L. (2009). Emergency Management: Social Justice and Pervasive Disaster. <i>PA Times</i> , 32(6), 5-14.	<b>Discussion/Participation Assignment:</b> Many economists would argue that New Orleans should not have be re-built in the same location – that the cost of ensuring against the next Katrina is far greater than simply moving the city to a new location. Is this a relevant argument economically? Ethically? Politically?
7	<b>The Economics of Emergencies</b> <ul style="list-style-type: none"> <li>Balancing the needs to plan, respond and recover</li> <li>Appropriate time horizons in specific situations</li> <li>Defining, sustaining, and communicating success</li> </ul>	<b>Articles:</b> “Conclusions and Recommendations ” in Impacts of Natural Disasters: A framework for loss estimation, by National Research Council Staff. National Academies Press, 1999. Pp. 45-48  Office of Management and Budget [OMB] Bulletin No. 98-08-Audit Requirements for Federal Financial Statements ( <i>Click on this web link</i> ): <a href="http://www.whitehouse.gov/omb/bulletins_98-08">www.whitehouse.gov/omb/bulletins_98-08</a>	<b>LASA #3:</b> Selecting one of the three disasters from the previous formative assessment assignments that you see as having had the most effective response, briefly summarize the effectiveness of the preventive efforts and the immediate responses efforts and then analyze the longer term recovery response use of funds from the perspectives of: (1) the state and local government; (2) the state and local citizenry; (3) the federal government; and (4) any other significant stakeholders. Evaluate what lessons from any and all phases of the emergency response process are likely to be transferable to a substantially different emergency (e.g. moving from hurricanes to a bird flu pandemic). Include in this an analysis of the effectiveness in communicating the financial impact to critical stakeholders as well as the actual economic cost.
8	<b>Wrap Up</b>		

## Grading Criteria

### *Grading Scale*

<b>A</b>	100 – 93 %
<b>A-</b>	92 – 90 %
<b>B+</b>	89 – 88 %
<b>B</b>	87 – 83 %
<b>B-</b>	82 – 80 %
<b>C+</b>	79 – 78 %
<b>C</b>	77 – 73 %
<b>C-</b>	72 – 70 %
<b>F</b>	69 and below

### *Grading requirements*

<i>Attendance/participation</i>	25%
<i>Formative Assessment 1</i>	20%
<i>Formative Assessment 2</i>	20%
<i>Formative Assessment 3</i>	35%
	100%

## Library

*All resources in Argosy University's online collection are available through the Internet. The campus librarian will provide students with links, user IDs, and passwords.*

Library Resources: Argosy University's core online collection features nearly 21,000 full-text journals and 23,000 electronic books and other content covering all academic subject areas including Business & Economics, Career & General Education, Computers, Engineering & Applied Science, Humanities, Science, Medicine & Allied Health, and Social & Behavior Sciences. Many titles are directly accessible through the Online Public Access Catalog at <http://library.argosy.edu>. Detailed descriptions of online resources are located at <http://library.argosy.edu/libweb/resources/>

In addition to online resources, Argosy University's onsite collections contain a wealth of subject-specific research materials searchable in the Online Public Access Catalog. Catalog searching is easily limited to individual campus collections. Alternatively, students can search combined collections of all Argosy University Libraries. Students are encouraged to seek research and reference assistance from campus librarians.

Information Literacy: Argosy University's Information Literacy Tutorial was developed to teach students fundamental and transferable research skills. The tutorial consists of five modules where students learn to select sources appropriate for academic-level research, search periodical indexes and search engines, and evaluate and cite information. In the tutorial, students study concepts and practice them through interactions. At the conclusion of each module, they can test their comprehension and receive immediate feedback. Each module takes less than 20 minutes to complete. Please view the tutorial at <http://library.argosy.edu/infolit/>

## Academic Policies

Academic Dishonesty/Plagiarism: In an effort to foster a spirit of honesty and integrity during the learning process, Argosy University requires that the submission of all course

assignments represent the original work produced by that student. All sources must be documented through normal scholarly references/citations and all work must be submitted using the *Publication Manual of the American Psychological Association, 5<sup>th</sup> Edition (2001)*. Washington DC: American Psychological Association (APA) format. Please refer to Appendix A in the *Publication Manual of the American Psychological Association, 5<sup>th</sup> Edition* for thesis and paper format. Students are encouraged to purchase this manual (required in some courses) and become familiar with its content as well as consult the Argosy University catalog for further information regarding academic dishonesty and plagiarism.

**Scholarly writing:** The faculty at Argosy University is dedicated to providing a learning environment that supports scholarly and ethical writing, free from academic dishonesty and plagiarism. This includes the proper and appropriate referencing of all sources. You may be asked to submit your course assignments through “Turnitin,” ([www.turnitin.com](http://www.turnitin.com)), an online resource established to help educators develop writing/research skills and detect potential cases of academic dishonesty. Turnitin compares submitted papers to billions of pages of content and provides a comparison report to your instructor. This comparison detects papers that share common information and duplicative language.

### **Americans with Disabilities Act Policy**

It is the policy of Argosy University to make reasonable accommodations for qualified students with disabilities, in accordance with the Americans with Disabilities Act (ADA). If a student with disabilities needs accommodations, the student must notify the Director of Student Services. Procedures for documenting student disability and the development of reasonable accommodations will be provided to the student upon request.

Students will be notified by the Director of Student Services when each request for accommodation is approved or denied in writing via a designated form. To receive accommodation in class, it is the student’s responsibility to present the form (at his or her discretion) to the instructor. In an effort to protect student privacy, the Department of Student Services will not discuss the accommodation needs of any student with instructors. Faculty may not make accommodations for individuals who have not been approved in this manner.

### **The Argosy University Statement Regarding Diversity**

Argosy University prepares students to serve populations with diverse social, ethnic, economic, and educational experiences. Both the academic and training curricula are designed to provide an environment in which students can develop the skills and attitudes essential to working with people from a wide range of backgrounds.

