Metropolitan State University of Denver
Regular Course Syllabus

CSS - 2752 - Information Assurance   Fall 2016

Status	completed
Tracking:	LAS1617-31
Department	Mathematical and Computer Sciences, Department of
Prefix:	CSS
Course Number:	2752
Course Type:	Computer Science Studies
Course Title:	Information Assurance
Transcript Course Title:	Information Assurance
Equivalent/ Crosslisted?	
List all equivalent courses:	
List all crosslisted courses:	
Check All That Apply:	Elective
Credit Hours:	3
Schedule Type:	Lecture
Grade Mode:	Letter
Lecture:	45
Lab:	
Internship:	
Practicum:	
Other:	
Additional Student Work Hours per course:	90
Variable topics umbrella course:	No
If yes, number of credits/ repeats allowed	
Specified repeatable course:	No
If yes, number of credits/ repeats allowed	
Prerequisite(s):	CIS/CSS 1010 with a grade of "C" or better; or appropriate score on the computer literacy screening test.
Corequisite(s):	
Prerequisite(s) and/or Corequisite(s):	
Banner Prerequisite(s):	CIS/CSS 1010 with a grade of "C" or better; or appropriate score on the computer literacy screening test.
Banner Corequisite(s):	
Banner Prerequisite(s)	

and/or Corequisite(s):	
Level	
Class	
Program/Major	
Student attribute	
Catalog Course Description:	This course takes a broad, practical view of security - including people, policies and procedures, and technology. While Information Assurance (IA) encompasses the various technologies, it puts them in the context of an organization's overall strategy. It applies risk management techniques to cybersecurity risks. It includes addressing data both at rest and in transit. IA looks at many aspects of an organzation's functioning including its legal, regulatory, and national security aspects.
Required Reading and Other Materials will be equivalent to:	John R. Vacca (2013), Computer and Information Security Handbook, Second Edition, ISBN-13: 978-0123943972
Specific, Measurable Student Behavioral Learning Objectives:	1. Assemble an organzation's IA plan based on their specific business and environment. 2. Assess an organization's controls. 3. Audit the physical security of an installation. 4. Compose guidelines for gathering forensic evidence. 5. Evaluate national security policies and directives for applicability. 6. Organize a Public Key Infrastruture that mirrors an organization's structure.

Detailed Outline of Course Content (Major Topics and Subtopics) or Outline of Field Experience/ Internship	I. Regulatory and standards compliance.
	    A. Auditing.
	II. Mission continuity.
	    A. Physical controls.
	    B. Redundancy.
	    C. Disaster recovery.
	    D. Response.
	    E. Recovery.
	III. Technical controls.
	    A. Host.
	    B. Network.
	IV. Administrative controls.
	    A. Policies.
	    B. Procedures.
	V. Introduction to computer forensics.
	    A. Types of devices.
	    B. Gathering of evidence.
	    C. Chain of control.
	VI. Enterprise security.
	    A. On-site resources.
	    B. Mobile resources.
	    C. Remote work.
	VII. Clandestine channels and emissions security.
	    A. Storage tracking.
	    B. Network monitoring.
	VIII. Security analysis.
	    A. Use of related standards.
	IX. Security models and formal techniques.
	X. National policies for information assurance.
	    A. FIPS.
	    B. FISMA.
	    C. HIPPA.
	XI. Public Key Infrastructure.
	    A. Digital certificates.
	        1. Creation.
	        2. Distribution.

	3. Validation. 4. Revocation. XII. Best practices.		
Evaluation of Student Performance	Required: a midterm and final exam and four papers. Optional: quizzes. participation, classwork, homework, projects.		
Learning Objectives			
Distribution of Credit Hours	3 (3+0)		

Steps	Decision	Date	
Originator			
Steve Beaty	approve	09/12/2016 10:07AM	
Department Curriculum Committee Chair			
Clark Dollard	approve	09/12/2016 02:57PM	
Department Chair			
Lindsay Packer	approve	09/15/2016 01:21PM	
Dean's Office Tracking Assignment			
Cynthia Philbrook	approve	09/16/2016 09:36AM	
Substantive College Level			
Linda Lang-Peralta	approve	12/19/2016 05:02PM	
Mona Mocanasu	approve	12/14/2016 10:50AM	
Steve Beaty	approve	12/11/2016 04:05PM	
Faculty Senate President			
Matthew Makley	None		
Erica Buckland	force-approve	01/05/2017 10:57AM	
AVP Academic and Student Affairs			
Bernice Harris	approve	01/05/2017 11:11AM	