(Prerequisite: CIS 505 or CIS 512)

COURSE DESCRIPTION

This course examines the technologies, structure and future direction of cloud computing applications. Topics include the technologies associated with cloud computing and the organizational, legal and regulatory issues encountered in cloud computing environments.

INSTRUCTIONAL MATERIALS

Required Resources

Jamsa, K. (2013). Cloud computing: SaaS, PaaS, IaaS, virtualization, business models, mobile, security, and more. Burlington, MA: Jones & Bartlett Learning.

Supplemental Resources

Amazon. (2012). Amazon AWS Products & Services. Retrieved from http://aws.amazon.com/products/

Armbrust, M., Fox, A., Griffith, R., Joseph, A. D., Katz, R., Lee, G., Patterson, D., Rabkin, A., Stoica, I., & Zaharia, M. (April 2010). A view of cloud computing. Communications of the ACM, 53(4), 50-58. Retrieved from http://dl.acm.org/citation.cfm?id=1721672.

Cloud Security Alliance. (2012) Available at: https://cloudsecurityalliance.org/

- Jamsa, K. Cloud computing: SaaS, PaaS, IaaS, virtualization, business models, mobile, security, and more. Cloud book content. Retrieved from www.Cloudbookcontent.com
- Furht, B., Escalante, A. (2010). Handbook of cloud computing. New York, NY: Springer Science+Business Media, LLC.
- Mell, P., & Grance, T. (2011). The NIST definition of cloud computing. Retrieved from http://csrc.nist.gov/publications/nistpubs/800-145/SP800-145.pdf
- Microsoft. (January 2011). Microsoft SQL Azure Customer Solution Case Study: Xerox Cloud Print Solution Connects Mobile Workers to Printers Around the World. Retrieved from http://www.docstoc.com/docs/97892424/SQL-Azure-Case-Study-Xerox
- Rittenghouse, J., & Ransome, J. (2009). Cloud computing: implementation, management, and security. Boca Raton, FL: Taylor and Francis Group, LLC.
- Ryan, M. D. (January 2011). Cloud computing privacy concerns on our doorstep. Communications of the ACM. 54(1). Retrieved from http://markryan.eu/research/projects/confichair/11-cacm.pdf
- SYSTIME Global Solutions Private LTD. (2012). Windows Azure cloud computing platform: technology partner selection guide. Retrieved from http://systime.net/knowledge_center/windows-azure-cloudcomputing.pdf

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Note: Association for Computing Machinery (ACM) articles, are accessible through ACM Digital Library in Strayer's online library.

COURSE LEARNING OUTCOMES

- 1. Compare and contrast the technologies that enable cloud computing.
- 2. Analyze the migration steps and challenges in migrating to cloud-based environments.
- 3. Describe virtual machines and provisioning in cloud-based environments.
- 4. Explain the security considerations in cloud-computing environments.
- 5. Summarize business applications that can migrate to the cloud.
- 6. Compare and contrast private with public clouds.
- 7. Describe best practices and methods for monitoring and managing cloud computing environments.
- 8. Analyze governance models, best practices and ethical issues in cloud computing.
- 9. Develop a cloud-based solution to address a proposed business problem.
- 10. Describe legal and ethical concerns that cloud computing raise in a global context.
- 11. Use technology and information resources to research issues in cloud computing environments.
- 12. Write clearly and concisely about cloud & virtual computing topics using proper writing mechanics and technical style conventions.

WEEKLY COURSE SCHEDULE

The standard requirement for a 4.5 credit hour course is for students to spend 13.5 hours in weekly work. This includes preparation, activities, and evaluation regardless of delivery mode.

Week	Preparation, Activities, and Evaluation	Points
1	Preparation	
	Reading(s)	
	 Chapter 1: Introducing the Cloud 	
	 Chapter 2: Software as a Service 	
	e-Activities	
	 Use the Internet or Strayer's online library to research grid computing projects and how they are being used to solve complex scientific problems. Use BOINC's Website, located at <u>http://boinc.berkeley.edu</u>, for further information on grid computing projects. Be prepared to discuss. 	
	 Go to IBM's Website and read "Inside the hybrid cloud, Part 1: Redefine services and delivery methods", located at <u>http://www.ibm.com/developerworks/cloud/library/cl-hybridcloud1/cl-hybridcloud1-pdf.pdf</u>. Be prepared to discuss. 	
	 Go to the ACM Digital Library's Website and read "A View of Cloud Computing", located at <u>http://dl.acm.org/citation.cfm?id=1721672</u>. Be prepared to discuss. 	



	Activities	00		
	Discussions	20		
	Evaluation			
	None			
2	Preparation			
	Reading(s)			
	 Chapter 3: Platform as a Service (PaaS) 			
	 Chapter 4: Infrastructure as a Service (laaS) 			
	e-Activity			
	 Go to the Brooking Institution's Website and read "Saving Money 			
	Through Cloud Computing", located at			
	computing-west. Be prepared to discuss.			
	Activities			
	Discussions	20		
	Evaluation			
	 Assignment 1: Social Media and Privacy Issues 	120		
3	Preparation			
	Reading(s)			
	 Chapter 5: Identity as a Service 			
	 Chapter 6: Data Storage in the Cloud 			
	e-Activities			
	 Go to the Security Assertion Markup Language's (SAML) Website 			
	located at <u>http://saml.xml.org/</u> . I ake note of the security risks or benefits of using SAML in the cloud. Be prenared to discuss			
	 Go to the Open Cloud Manifesto's Website and read their manifesto 			
	located at <u>www.opencloudmanifesto.org</u> . Be prepared to discuss.			
	 Go to the ACM Digital Library's Website and read "Cloud Computing 			
	and Electricity: Beyond the Utility Model", located at			
	nttp://delivery.acm.org/10.1145/1740000/1735234/p32- htypiolfsson.pdf2ip=199.107.67.96&acc=OPEN&CEID=113722695&			
	CFTOKEN=64753600& acm =1347301298 45e37156eadc700b			
	78609324912a8046. Be prepared to discuss.			
	Activities			
	Discussions	00		
	Evaluation	20		
	Case Study 1: Cloud Computing Models	120		
4	Preparation			
	• Reading(s)			
	 Chapter 7: Collaboration in the Cloud 			
	 Chapter 8: Virtualization 			



	e-Activities	
	 Use the Internet to research three companies that provide VoIP services, such as Skype, Viber, and MagicJack. Take note of each of the services' technical features and offerings. Be prepared to discuss their parallels to cloud computing. 	
	 Use the Internet to research hardware virtualization. Select two of the top vendors and be prepared to discuss the economic and environmental value of virtual machines to the enterprise. Be prepared to discuss. 	
	Activities	
	Discussions	20
	Evaluation	
	Assignment 2: The ROI of a Cloud Deployment, Part 1	10
5	Preparation	
	Reading(s)	
	 Chapter 9: Securing the Cloud 	
	 Chapter 10: Disaster Recovery and Business Continuity and the Cloud 	
	e-Activity	
	 Go to the Cloud Security Alliance's Website, located at <u>https://cloudsecurityalliance.org/</u>. Download the Security Guidance for Critical focus in Cloud Computing V 3.0, and explore their Website. Be prepared to discuss. 	
	Activities	
	Discussions	20
	Evaluation	
	Midterm Exam: Chapters 1 through 8	50
6	Preparation	
	Reading(s)	
	 Chapter 11: Service Oriented Architecture 	
	 Chapter 12: Managing the Cloud 	
	e-Activity	
	 Go to the MITRE Corporation's Website and read "Cloud Computing and SOA" located at 	
	http://www.mitre.org/work/tech_papers/tech_papers_09/09_0743/09	
	<u>_0743.pdf</u> . Be prepared to discuss.	
	Activities	
	Discussions	20
	Evaluation	4.40
	Assignment 3: Business Continuity and Disaster Recovery in Cloud Computing	140
7	Preparation	
	Reading(s)	



	 Chapter 13: Migrating to the Cloud 	
	 Chapter 14: Mobile Cloud Computing 	
	e-Activity	1
	 Go to Microsoft's Website and read "Moving Applications to the Cloud, 2nd Edition", located at <u>http://msdn.microsoft.com/en-us/library/ff728592.aspx</u>. Be prepared to discuss. 	
	Activities	
	Discussions	20
	Evaluation	1
	Assignment 4: The Utility of Cloud Computing	120
8	Preparation	l
	Reading(s)	1
	 Chapter 15: Governing the Cloud 	1
	 Chapter 16: Evaluating the Cloud's Business Impact and Economics 	1
	e-Activities	1
	 Go to Information Week's Website and read "Governance Meets Cloud: Top Misconceptions", located at <u>http://www.informationweek.com/cloud-</u> <u>computing/infrastructure/governance-meets-cloud-top-</u> misconception/232901483, Be prepared to discuss. 	
	 Use the Internet or Strayer's online library to locate issues related to data privacy and security, U.S. federal Law compliance, and international data privacy compliance. Be prepared to discuss. 	
	Activities	l
	Discussions	20
	Evaluation	1
	None	<u> </u>
9	Preparation	l
	Reading(s)	1
	 Chapter 17: Designing Cloud-Based Solutions 	l
	 Chapter 18: Coding Cloud-Based Applications 	1
	e-Activities	1
	 Use the Internet to research an open source cloud-based solution. Investigate the approach that the company used to build and deploy their solution. Be sure to take note of the design elements included in the company's solution. Be prepared discuss. 	
	 Enterprise Resource Planning (ERP) vendors are seeking ways to optimize their systems for the cloud. Use the Internet to research the larger players in ERP, such as Oracle or SAP, and the applications they are developing and deploying to the cloud. Be prepared to discuss. 	
	Activities	20
	Discussions	-
	Evaluation	1



	None			
10	Preparation			
	Reading(s)			
	 Chapter 19: Application Scalability 			
	 Chapter 20: The Future of the Cloud 			
	e-Activities			
	 Go to Open Nebula's Website and explore the guides located at <u>http://opennebula.org/documentation:rel3.6#extending_and_integrati</u> <u>ng_your_cloud_infrastructure</u>. Be prepared to discuss. 			
	 Use the Internet to research two current major technical growth constraints of the cloud. Be prepared to discuss. 			
	Activities			
	Discussions			
	Evaluation			
	Term Paper: The ROI of a Cloud Deployment, Part 2	190		
11	Preparation			
	Reading(s): None			
	Activities			
	Discussions			
	Evaluation			
	Final Exam: Chapters 9 through 20	50		



GRADING SCALE – GRADUATE

Assignment	Total Points	% of Grade
Assignment 1: Social Media and Privacy Issues	120	12%
Assignment 2: The ROI of a Cloud Deployment, Part 1	10	1%
Faculty Note: Provide students with feedback on the chosen topic.		
Assignment 3: Business Continuity and Disaster Recovery in Cloud Computing	140	14%
Assignment 4: The Utility of Cloud Computing	120	12%
Case Study 1: Cloud Computing Models	120	12%
Term Paper: The ROI of a Cloud Deployment, Part 2	190	19%
Midterm Exam (Chapters 1-8)	50	5%
Final Exam (Chapters 9-20)	50	5%
Tests are open book with a 2-hour time limit and may contain multiple choic questions.	e, true / false, and	d essay
Participation (20 discussions worth 10 points apiece)	200	20%
Note: Week 11 discussions are not graded.		
Totals	1,000	100%

Points	Percentage	Grade
900 – 1,000	90% – 100%	А
800 – 899	80% – 89%	В
700 – 799	70% – 79%	С
Below 700	Below 70%	F

Writing Assignments

The objective of the School of Information Systems' writing assignments is to promote attitudes and skills that will improve a student's ability to communicate in writing, develop research skills and documentation techniques, and encourage critical analysis of data and conclusions specific to the course learning outcomes in the information systems and technology domain.

Assignment 1: Social Media and Privacy Issues

Due Week 2 and worth 120 points

Social networks afford individuals the venue and technology to connect with many "friends", both known and unknown. An individual's activities on social networks can have security implications, especially if they adversely affect the corporate reputations of their employers. This practice is more obvious on professional social network sites that identify the employee's employer, such as LinkedIn.

Imagine that you are a CIO of a company. As the CIO, the security and privacy of your organization is one of your primary concerns. It is your responsibility to review the risks and vulnerabilities of social media to your company and provide your employees with guidelines on how to interact with social networking sites, such as Twitter and Facebook, when representing your company.

Write a four to five (4-5) page guidelines for accessing Web 2.0 sites that:

- 1. Select and describe three (3) social networking sites you are presenting in the context of cloud computing.
- 2. Examine the risks and vulnerabilities to your employer associated with the social networking sites that you have selected.
- 3. Summarize the mitigating strategies you would recommend to your CEO that affirm the organization's privacy and security practice among social network sites.
- 4. Suggest three (3) ways that your social network policy can protect your employer against:
 - a. identity theft
 - b. cybercrimes
 - c. abusive marketing
- 5. Use at least three (3) quality resources in this assignment. At least one (1) must be from a professional journal in the IT field. Note: Wikipedia and similar Websites do not qualify as quality resources.

Your assignment must follow these formatting requirements:

- Be typed, double spaced, using Times New Roman font (size 12), with one-inch margins on all sides; citations and references must follow APA or school-specific format. Check with your professor for any additional instructions.
- Include a cover page containing the title of the assignment, the student's name, the professor's name, the course title, and the date. The cover page and the reference page are not included in the required assignment page length.

The specific course learning outcomes associated with this assignment are:

- Compare and contrast private with public clouds.
- Summarize business applications that can migrate to the cloud. •
- Use technology and information resources to research issues in cloud computing environments. •
- Write clearly and concisely about cloud & virtual computing topics using proper writing mechanics • and technical style conventions.

Grading for this assignment will be based on answer quality, logic / organization of the paper, and language and writing skills, using the following rubric.



Points: 120	Assignment 1: Social Media and Privacy Issues			
Criteria	Unacceptable Below 70% F	Fair 70-79% C	Proficient 80-89% B	Exemplary 90-100% A
1. Select and describe three (3) social networking sites you are presenting in the context of cloud computing. Weight: 15%	Did not submit or incompletely selected and described three (3) social networking sites you are presenting in the context of cloud computing.	Partially selected and described three (3) social networking sites you are presenting in the context of cloud computing.	Satisfactorily selected and described three (3) social networking sites you are presenting in the context of cloud computing.	Thoroughly and described selected three (3) social networking sites you are presenting in the context of cloud computing.
2. Examine the risks and vulnerabilities to your employer associated with the social networking sites that you have selected. Weight: 20%	Did not submit or incompletely examined the risks and vulnerabilities to your employer associated with the social networking sites that you have selected.	Partially examined the risks and vulnerabilities to your employer associated with the social networking sites that you have selected.	Satisfactorily examined the risks and vulnerabilities to your employer associated with the social networking sites that you have selected.	Thoroughly examined the risks and vulnerabilities to your employer associated with the social networking sites that you have selected.
3. Summarize the mitigating strategies you would recommend to your CEO that affirm the organization's privacy and security practice among social network sites. Weight: 20%	Did not submit or incompletely summarized the mitigating strategies you would recommend to your CEO that affirm the organization's privacy and security practice among social network sites.	Partially summarized the mitigating strategies you would recommend to your CEO that affirm the organization's privacy and security practice among social network sites.	Satisfactorily summarized the mitigating strategies you would recommend to your CEO that affirm the organization's privacy and security practice among social network sites.	Thoroughly summarized the mitigating strategies you would recommend to your CEO that affirm the organization's privacy and security practice among social network sites.
4a. Suggest three (3) ways that your social network policy can protect your employer against identity theft. Weight: 10%	Did not submit or incompletely suggested three (3) ways that your social network policy can protect your employer against identity theft.	Partially suggested three (3) ways that your social network policy can protect your employer against identity theft.	Satisfactorily suggested three (3) ways that your social network policy can protect your employer against identity theft.	Thoroughly suggested three (3) ways that your social network policy can protect your employer against identity theft.
4b. Suggest three (3) ways that your social network policy can protect your employer against cybercrimes. Weight: 10%	Did not submit or incompletely suggested three (3) ways that your social network policy can protect your employer against cybercrimes.	Partially suggested three (3) ways that your social network policy can protect your employer against cybercrimes.	Satisfactorily suggested three (3) ways that your social network policy can protect your employer against cybercrimes.	Thoroughly suggested three (3) ways that your social network policy can protect your employer against cybercrimes.
4c. Suggest three (3) ways that your social network policy can protect your employer against abusive	Did not submit or incompletely suggested three (3) ways that your social network	Partially suggested three (3) ways that your social network policy can protect your employer	Satisfactorily suggested three (3) ways that your social network policy can protect	Thoroughly suggested three (3) ways that your social network policy can protect



marketing. Weight: 10%	policy can protect your employer against abusive marketing.	against abusive marketing.	your employer against abusive marketing.	your employer against abusive marketing.
5. 3 references Weight: 5%	No references provided	Does not meet the required number of references; some or all references poor quality choices.	Meets number of required references; all references high quality choices.	Exceeds number of required references; all references high quality choices.
6. Clarity, writing mechanics, and formatting requirements Weight: 10%	More than 6 errors present	5-6 errors present	3-4 errors present	0-2 errors present

Case Study 1: Cloud Computing Models

Due Week 3 and worth 120 points

Export controls place restrictions on the export of software and technology in the USA and they play a significant role in foreign policy and national security. Imagine that you are a CIO at a U.S.-based international shoe manufacturing company. You are ready to make the change to a geographically distributed cloud-based computing model, but have some reservations as they relate to security, policy, and redundancy. Your primary goal is to address these issues as you maintain redundant services with 99.999% availability to your international Web customers, retailers, and manufacturing operations. It has been recommended that you read "Addressing Export Control in the Age of Cloud Computing", located at http://www.brookings.edu/~/media/research/files/papers/2011/7/25%20cloud%20computing%20villasenor/0725_cloud_computing_villasenor.

Write a five to seven (5-7) page paper in which you:

- 1. Describe the policy questions and issues your company might face.
- 2. Describe the cloud-based services that you would likely select to afford the services noted above.
- 3. Specify and defend the:
 - a. security reasons for your selection.
 - b. policy reasons for your selection.
 - c. redundancy reasons for your selection.
- 4. Analyze the extent that export controls play in your cloud-based solution.
- 5. Create a graphic rendering of your proposed solution using Visio or an equivalent such as Open Project, Dia, or OpenOffice. **Note:** The graphically depicted solution is not included in the required page length.
- 6. Use at least three (3) quality resources in this assignment. **Note:** Wikipedia and similar Websites do not qualify as quality resources.

Your assignment must follow these formatting requirements:

- Be typed, double spaced, using Times New Roman font (size 12), with one-inch margins on all sides; citations and references must follow APA or school-specific format. Check with your professor for any additional instructions.
- Include a cover page containing the title of the assignment, the student's name, the professor's name, the course title, and the date. The cover page and the reference page are not included in the required assignment page length.
- Include charts or diagrams created in Excel, Visio, MS Project, or one of their equivalents such as Open Project, Dia, and OpenOffice. The completed diagrams / charts must be imported into the Word document before the paper is submitted.

The specific course learning outcomes associated with this assignment are:

- Summarize business applications that can migrate to the cloud.
- Compare and contrast the technologies that enable cloud computing.
- Analyze the migration steps and challenges in migrating to cloud-based environments.
- Develop a cloud-based solution to address a proposed business problem.
- Use technology and information resources to research issues in cloud computing environments.
- Write clearly and concisely about cloud & virtual computing topics using proper writing mechanics and technical style conventions.



Grading for this assignment will be based on answer quality, logic / organization of the paper, and language and writing skills, using the following rubric.

Points: 120	Case Study 1: Cloud Computing Models			S
Criteria	Unacceptable Below 70% F	Fair 70-79% C	Proficient 80-89% B	Exemplary 90-100% A
1. Describe the policy questions and issues your company might face. Weight: 10%	Did not submit or incompletely described the policy questions and issues your company might face.	Partially described the policy questions and issues your company might face.	Satisfactorily described the policy questions and issues your company might face.	Thoroughly described the policy questions and issues your company might face.
2. Describe the cloud- based services that you would likely select to afford the services noted above. Weight: 10%	Did not submit or incompletely described the cloud-based services that you would likely select to afford the services noted above.	Partially described the cloud-based services that you would likely select to afford the services noted above.	Satisfactorily described the cloud-based services that you would likely select to afford the services noted above.	Thoroughly described the cloud-based services that you would likely select to afford the services noted above.
3a. Specify and defend the security reasons for your selection. Weight: 10%	Did not submit or incompletely specified the security reasons for your selection. Did not submit or incompletely defended the security reasons for your selection.	Partially specified the security reasons for your selection. Partially defended the security reasons for your selection.	Satisfactorily specified the security reasons for your selection. Satisfactorily defended the security reasons for your selection.	Thoroughly specified the security reasons for your selection. Thoroughly defended the security reasons for your selection.
3b. Specify and defend the policy reasons for your selection. Weight: 10%	Did not submit or incompletely specified the policy reasons for your selection. Did not submit or incompletely defended the policy reasons for your selection.	Partially specified the policy reasons for your selection. Partially defended the policy reasons for your selection.	Satisfactorily specified the policy reasons for your selection. Satisfactorily defended the policy reasons for your selection.	Thoroughly specified the policy reasons for your selection. Thoroughly defended the policy reasons for your selection.
3c. Specify and defend the redundancy reasons for your selection. Weight: 10%	Did not submit or incompletely specified the redundancy reasons for your selection. Did not submit or incompletely defended the redundancy reasons for your selection.	Partially specified the redundancy reasons for your selection. Partially defended the redundancy reasons for your selection.	Satisfactorily specified the redundancy reasons for your selection. Satisfactorily defended the redundancy reasons for your selection.	Thoroughly specified the redundancy reasons for your selection. Thoroughly specified defended the redundancy reasons for your selection.
4. Analyze the extent that export controls play in	Did not submit or incompletely	Partially analyzed the extent that	Satisfactorily analyzed the extent	Thoroughly analyzed the extent



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your cloud-based solution. Weight: 15%	analyzed the extent that export controls play in your cloud- based solution.	export controls play in your cloud-based solution.	that export controls play in your cloud- based solution.	that export controls play in your cloud- based solution.
5. Create a graphic rendering of your proposed solution using Visio or an equivalent such as Open Project, Dia, or OpenOffice. Weight: 20%	Did not submit or incompletely created a graphic rendering of your proposed solution using Visio or an equivalent such as Open Project, Dia, or OpenOffice.	Partially created a graphic rendering of your proposed solution using Visio or an equivalent such as Open Project, Dia, or OpenOffice.	Satisfactorily created a graphic rendering of your proposed solution using Visio or an equivalent such as Open Project, Dia, or OpenOffice.	Thoroughly created a graphic rendering of your proposed solution using Visio or an equivalent such as Open Project, Dia, or OpenOffice.
6. 3 references Weight: 5%	No references provided	Does not meet the required number of references; some or all references poor quality choices.	Meets number of required references; all references high quality choices.	Exceeds number of required references; all references high quality choices.
7. Clarity, writing mechanics, and formatting requirements Weight: 10%	More than 6 errors present	5-6 errors present	3-4 errors present	0-2 errors present

Assignment 2: The ROI of a Cloud Deployment, Part 1

Due Week 4 and worth 10 points

Faculty Note: Provide students with feedback on the chosen topic.

The term paper will consist of a cloud-based solution of your own choosing. Imagine that you are the CIO of a company and you are moving your organization's locally hosted technology environment to cloud-based models.

Write one (1) paragraph in which you:

- 1. Select the cloud-based solution that will be used in your term paper.
- 2. Summarize why you selected the cloud-based solution that you did and how it can help your company.
- 3. List at least five (5) quality resources you plan to use in the term paper. **Note:** Wikipedia and similar Websites do not qualify as quality resources.

Your assignment must follow these formatting requirements:

- Be typed, double spaced, using Times New Roman font (size 12), with one-inch margins on all sides; citations and references must follow APA or school-specific format. Check with your professor for any additional instructions.
- Include a cover page containing the title of the assignment, the student's name, the professor's name, the course title, and the date. The cover page and the reference page are not included in the required assignment page length.

The specific course learning outcomes associated with this assignment are:

- Use technology and information resources to research issues in cloud computing environments.
- Write clearly and concisely about cloud & virtual computing topics using proper writing mechanics and technical style conventions.

Points: 10	Assignment 2: The ROI of a Cloud Deployment, Part 1			
Criteria	Unacceptable Below 70% F	Fair 70-79% C	Proficient 80-89% B	Exemplary 90-100% A
1. Select the cloud-based solution that will be used in your term paper. Weight: 20%	Did not submit or incompletely selected the cloud- based solution that will be used in your term paper.	Partially selected the cloud-based solution that will be used in your term paper.	Satisfactorily selected the cloud- based solution that will be used in your term paper.	Thoroughly selected the cloud- based solution that will be used in your term paper.
2. Summarize why you selected the cloud-based solution that you did and how it can help your company. Weight: 65%	Did not submit or incompletely summarized why you selected the cloud-based solution that you did and how it can help	Partially summarized why you selected the cloud-based solution that you did and how it can help your company.	Satisfactorily summarized why you selected the cloud-based solution that you did and how it can help your company.	Thoroughly summarized why you selected the cloud-based solution that you did and how it can help your company.

Grading for this assignment will be based on answer quality, logic / organization of the paper, and language and writing skills, using the following rubric.



	your company.			
3. List at least five (5) quality resources you plan to use in the term paper. Note: Wikipedia and similar Websites do not qualify as quality resources. Weight: 5%	Did not submit or incompletely listed at least five (5) quality resources you plan to use in the term paper.	Partially listed at least five (5) quality resources you plan to use in the term paper.	Satisfactorily listed at least five (5) quality resources you plan to use in the term paper.	Thoroughly listed at least five (5) quality resources you plan to use in the term paper.
4. Clarity, writing mechanics, and formatting requirements Weight: 10%	More than 6 errors present	5-6 errors present	3-4 errors present	0-2 errors present

Assignment 3: Business Continuity and Disaster Recovery in Cloud Computing

Due Week 6 and worth 140 points

In many organizations, the primary role of the IT staff is to ensure 99.999% availability of computing resource applications, power, files, networks, and phone systems to name a few.

In this assignment, imagine that you have been hired by the midsized, multinational, BIG-CLOUD company to create and graphically depict a cloud based business continuity plan (BCP) and disaster recovery plan (DRP). Your solution must include details on how the cloud solution of your choice will address three (3) or more high fault items such as user disk failure, server disk failure, network failure, database failure, phone system failure, server power failure, desktop power failure, fire, flood, and malware. (Use the template in Chapter 10 of the text as a reference for the BCP and DRP plan.) Fictitious assumptions and details may be assumed or created for the completion of this assignment.

Write a five to eight (5-8) page paper in which you:

- 1. Provide a brief background on the company that has hired you and describe its backup and recovery challenges.
- 2. Describe the threats to its IT data center infrastructure.
- 3. Create a BCP plan for the high fault items that are being addressed.
- 4. Create a DRP plan for the high fault items that are being addressed.
- 5. Create a section in your BCP that addresses the mitigation strategy of your cloud solution in regard to the high fault items listed in the scenario.
- 6. Create a section in your DRP that addresses the mitigation strategy of your cloud solution in regard to the high fault items listed in the scenario.
- 7. Discuss the amount of control your organization wants to retain over its data, in relation to moving information to a third party, and data leaving the country or region boundaries. Assume both situations are such that allows for a cloud-based backup solution.
- 8. Evaluate the pros and cons of your cloud-based backup solution with regards to your organization's requirements (i.e., flexibilities you gain versus absolute control you lose). Determine whether the pros outweigh the cons.
- 9. Use at least three (3) quality resources in this assignment. **Note:** Wikipedia and similar Websites do not qualify as quality resources.

Your assignment must follow these formatting requirements:

- Be typed, double spaced, using Times New Roman font (size 12), with one-inch margins on all sides; citations and references must follow APA or school-specific format. Check with your professor for any additional instructions.
- Include a cover page containing the title of the assignment, the student's name, the professor's name, the course title, and the date. The cover page and the reference page are not included in the required assignment page length.

The specific course learning outcomes associated with this assignment are:

- Explain the security considerations in cloud-computing environments.
- Compare and contrast private with public clouds.
- Summarize business applications that can migrate to the cloud.
- Use technology and information resources to research issues in cloud computing environments.
- Write clearly and concisely about cloud & virtual computing topics using proper writing mechanics and technical style conventions.

Grading for this assignment will be based on answer quality, logic / organization of the paper, and language and writing skills, using the following rubric.

Points: 140	Assignment 3: Business Continuity and Disaster Recovery in Cloud Computing			
Criteria	Unacceptable Below 70% F	Fair 70-79% C	Proficient 80-89% B	Exemplary 90-100% A
1. Provide a brief background on the company that has hired you and describe its backup and recovery challenges. Weight: 5%	Did not submit or incompletely provided a brief background on the company that has hired you and describe its backup and recovery challenges.	Partially provided a brief background on the company that has hired you and describe its backup and recovery challenges.	Satisfactorily provided a brief background on the company that has hired you and describe its backup and recovery challenges.	Thoroughly provided a brief background on the company that has hired you and describe its backup and recovery challenges.
2. Describe the threats to its IT data center infrastructure. Weight: 5%	Did not submit or incompletely described the threats to its IT data center infrastructure.	Partially described the threats to its IT data center infrastructure.	Satisfactorily described the threats to its IT data center infrastructure.	Thoroughly described the threats to its IT data center infrastructure.
3. Create a BCP plan for the high fault items that are being addressed. Weight: 10%	Did not submit or incompletely created a BCP plan for the high fault items that are being addressed.	Partially created a BCP plan for the high fault items that are being addressed.	Satisfactorily created a BCP plan for the high fault items that are being addressed.	Thoroughly created a BCP plan for the high fault items that are being addressed.
4. Create a DRP plan for the high fault items that are being addressed. Weight: 10%	Did not submit or incompletely created a DRP plan for the high fault items that are being addressed.	Partially created a DRP plan for the high fault items that are being addressed.	Satisfactorily created a DRP plan for the high fault items that are being addressed.	Thoroughly created a DRP plan for the high fault items that are being addressed.
5. Create a section in your BCP that addresses the mitigation strategy of your cloud solution in regard to the high fault items listed in the scenario. Weight: 10%	Did not submit or incompletely created a section in your BCP that addresses the mitigation strategy of your cloud solution in regard to the high fault items listed in the scenario.	Partially created a section in your BCP that addresses the mitigation strategy of your cloud solution in regard to the high fault items listed in the scenario.	Satisfactorily created a section in your BCP that addresses the mitigation strategy of your cloud solution in regard to the high fault items listed in the scenario.	Thoroughly created a section in your BCP that addresses the mitigation strategy of your cloud solution in regard to the high fault items listed in the scenario.
6. Create a section in your DRP that addresses the mitigation strategy of your cloud solution in regard to the high fault items listed in the scenario. Weight: 10%	Did not submit or incompletely created a section in your DRP that addresses the mitigation strategy of your cloud solution in regard to the high fault items	Partially created a section in your DRP that addresses the mitigation strategy of your cloud solution in regard to the high fault items listed in the scenario.	Satisfactorily created a section in your DRP that addresses the mitigation strategy of your cloud solution in regard to the high fault items listed in the	Thoroughly created a section in your DRP that addresses the mitigation strategy of your cloud solution in regard to the high fault items listed in the scenario.



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	listed in the scenario.		scenario.	
7. Discuss the amount of control your organization wants to retain over its data, in relation to moving information to a third party, and data leaving the country or region boundaries. Assume both situations are such that allows for a cloud based backup solution. Weight: 15%	Did not submit or incompletely discussed the amount of control your organization wants to retain over its data, in relation to moving information to a third party, and data leaving the country or region boundaries. Did not submit or incompletely assumed both situations are such that allows for a cloud based backup solution.	Partially discussed the amount of control your organization wants to retain over its data, in relation to moving information to a third party, and data leaving the country or region boundaries. Partially assumed both situations are such that allows for a cloud based backup solution.	Satisfactorily discussed the amount of control your organization wants to retain over its data, in relation to moving information to a third party, and data leaving the country or region boundaries. Satisfactorily assumed both situations are such that allows for a cloud based backup solution.	Thoroughly discussed the amount of control your organization wants to retain over its data, in relation to moving information to a third party, and data leaving the country or region boundaries. Thoroughly assumed both situations are such that allows for a cloud based backup solution.
8. Evaluate the pros and cons of your cloud-based backup solution with regards to your organization's requirements (i.e., flexibilities you gain versus absolute control you lose). Determine whether the pros outweigh the cons. Weight: 20%	Did not submit or incompletely evaluated the pros and cons of your cloud-based backup solution with regards to your organization's requirements (i.e., flexibilities you gain versus absolute control you lose). Did not submit or incompletely determined whether the pros outweigh the cons.	Partially evaluated the pros and cons of your cloud-based backup solution with regards to your organization's requirements (i.e., flexibilities you gain versus absolute control you lose). Partially determined whether the pros outweigh the cons.	Satisfactorily evaluated the pros and cons of your cloud-based backup solution with regards to your organization's requirements (i.e., flexibilities you gain versus absolute control you lose). Satisfactorily determined whether the pros outweigh the cons.	Thoroughly evaluated the pros and cons of your cloud-based backup solution with regards to your organization's requirements (i.e., flexibilities you gain versus absolute control you lose). Thoroughly determined whether the pros outweigh the cons.
9. 3 references Weight: 5%	No references provided	Does not meet the required number of references; some or all references poor quality choices.	Meets number of required references; all references high quality choices.	Exceeds number of required references; all references high quality choices.
10. Clarity, writing mechanics, and formatting requirements Weight: 10%	More than 6 errors present	5-6 errors present	3-4 errors present	0-2 errors present

Assignment 4: The Utility of Cloud Computing

Due Week 7 and worth 120 points

This assignment will focus on the utility of cloud computing. Much like a traditional utility company (phone, gas, electric), cloud computing providers are large and operate at a significant scale, pay-per-use model, are always available, and are designed to serve small as well as large organizations. In this assignment, you are to use the Internet and research a company that has migrated services to the cloud.

Resources on Cloud Computing:

http://www.infoworld.com/d/cloud-computing/what-cloud-computing-really-means-031 http://www.microsoft.com/enterprise/viewpoints/cloud-services/default.aspx#fbid=gzSVGeJXvXE

Write a four to five (4-5) page paper in which you:

- 1. Examine the deployment methods of cloud computing for this organization. Determine which method you prefer and explain why.
- 2. Compare and contrast the selected cloud computing model(s) of your selected company to a traditional utility company.
- 3. Examine the technologies that this organization migrated to the cloud. Predict three (3) challenges that you foresee the selected company facing while migrating to a cloud-based environment.
- 4. Determine three (3) major security considerations this company faced or likely faced in its migration to cloud computing.
- 5. Use at least three (3) quality resources in this assignment. Note: Wikipedia and similar Websites do not qualify as quality resources.

Your assignment must follow these formatting requirements:

- Be typed, double spaced, using Times New Roman font (size 12), with one-inch margins on all sides; citations and references must follow APA or school-specific format. Check with your professor for any additional instructions.
- Include a cover page containing the title of the assignment, the student's name, the professor's name, the course title, and the date. The cover page and the reference page are not included in the required assignment page length.

The specific course learning outcomes associated with this assignment are:

- Summarize business applications that can migrate to the cloud.
- Compare and contrast the technologies that enable cloud computing. •
- Analyze the migration steps and challenges in migrating to cloud-based environments.
- Explain the security considerations in cloud-computing environments. .
- Use technology and information resources to research issues in cloud computing environments •
- Write clearly and concisely about cloud & virtual computing topics using proper writing mechanics • and technical style conventions.

Grading for this assignment will be based on answer guality, logic / organization of the paper, and language and writing skills, using the following rubric.



Points: 120	Assignment 4: The Utility of Cloud Computing			
Criteria	Unacceptable Below 70% F	Fair 70-79% C	Proficient 80-89% B	Exemplary 90-100% A
1. Examine the deployment methods of cloud computing for this organization. Determine which method you prefer and explain why. Weight: 20%	Did not submit or incompletely examined the deployment methods of cloud computing for this organization. Did not submit or incompletely determined which method you prefer and explained why.	Partially examined the deployment methods of cloud computing for this organization. Partially determined which method you prefer and explained why.	Satisfactorily examined the deployment methods of cloud computing for this organization. Satisfactorily determined which method you prefer and explained why.	Thoroughly examined the deployment methods of cloud computing for this organization. Thoroughly determined which method you prefer and explained why.
2. Compare and contrast the selected cloud computing model(s) of your selected company to a traditional utility company. Weight: 20%	Did not submit or incompletely compared and contrasted the selected cloud computing model(s) of your selected company to a traditional utility company.	Partially compared and contrasted the selected cloud computing model(s) of your selected company to a traditional utility company.	Satisfactorily compared and contrasted the selected cloud computing model(s) of your selected company to a traditional utility company.	Thoroughly compared and contrasted the selected cloud computing model(s) of your selected company to a traditional utility company.
3. Examine the technologies that this organization migrated to the cloud. Predict three (3) challenges that you foresee the selected company facing while migrating to a cloud- based environment. Weight: 25%	Did not submit or incompletely examined the technologies that this organization migrated to the cloud. Did not submit or incompletely predicted three (3) challenges that you foresee the selected company facing while migrating to a cloud-based environment.	Partially examined the technologies that this organization migrated to the cloud. Partially predicted three (3) challenges that you foresee the selected company facing while migrating to a cloud-based environment.	Satisfactorily examined the technologies that this organization migrated to the cloud. Satisfactorily predicted three (3) challenges that you foresee the selected company facing while migrating to a cloud-based environment.	Thoroughly examined the technologies that this organization migrated to the cloud. Thoroughly predicted three (3) challenges that you foresee the selected company facing while migrating to a cloud-based environment.
4. Determine three (3) major security considerations this company faced or likely faced in its migration to cloud computing. Weight: 20%	Did not submit or incompletely determined three (3) major security considerations this company faced or likely faced in its migration to cloud computing.	Partially determined three (3) major security considerations this company faced or likely faced in its migration to cloud computing.	Satisfactorily determined three (3) major security considerations this company faced or likely faced in its migration to cloud computing.	Thoroughly determined three (3) major security considerations this company faced or likely faced in its migration to cloud computing.
5. 3 references Weight: 5%	No references provided	Does not meet the required number of references; some or all references poor	Meets number of required references; all references high quality choices.	Exceeds number of required references; all references high quality choices.



		quality choices.		
6. Clarity, writing mechanics, and formatting requirements Weight: 10%	More than 6 errors present	5-6 errors present	3-4 errors present	0-2 errors present

Term Paper: The ROI of a Cloud Deployment, Part 2

Due Week 10 and worth 190 points

This assignment consists of three (3) sections: a narrative, a ROI Spreadsheet, and a project outline. You **must submit all three (3) sections for the completion of this assignment.** Label each file name according to the section of the assignment it is written for. Additionally, you may create and / or assume all necessary assumptions needed for the completion of this assignment.

The term paper will consist of a cloud-based solution of your own choosing. Imagine that you are the CIO of a company and you are moving your organization's locally hosted technology environment to cloud-based models.

Section 1: Narrative

- 1. Write a ten to fifteen (10-15) page paper in which you:
 - a. Create a brief (one (1) paragraph) narrative that includes:
 - i. a problem statement.
 - ii. a proposed solution to the problem.
 - iii. the type of solution (private, public, or hybrid cloud and / or all three (3).)
 - b. Determine which cloud environment you are seeking to utilize (laas, PaaS, and / or SaaS) and explain why.
 - c. Describe the cloud-based solution you have selected.
 - d. Evaluate why the cloud-based solution you have selected is the best solution for your problem.
 - e. Determine the resources that are required for your cloud deployment.
 - f. Determine the key performance indicators that are being addressed by the cloud-based solution.
 - g. Create a diagram that depicts a visual relationship that supports the narrative using Visio or an equivalent such as Open Project, Dia, or OpenOffice. **Note:** The graphically depicted solution is not included in the required page length.
 - h. Use at least five (5) quality resources in this assignment. **Note:** Wikipedia and similar Websites do not qualify as quality resources.

Section 1 of your assignment must follow these formatting requirements:

- Be typed, double spaced, using Times New Roman font (size 12), with one-inch margins on all sides; citations and references must follow APA or school-specific format. Check with your professor for any additional instructions.
- Include a cover page containing the title of the assignment, the student's name, the professor's name, the course title, and the date. The cover page and the reference page are not included in the required assignment page length.
- Include charts or diagrams created in Excel, Visio, MS Project, or one of their equivalents such as Open Project, Dia, and OpenOffice. The completed diagrams / charts must be imported into the Word document before the paper is submitted.

Section 2: ROI Spreadsheet

2. Create an Excel spreadsheet that depicts Return on Investment (ROI) calculations that support your plan.

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Section 3: Project Outline

- 3. Create a Gantt chart that outlines the:
 - a. proposed start and stop events (in days) of your planned deployment. **Note:** The project duration may not exceed 120 days.
 - b. milestone activities in your planned migration.
 - c. milestone events involved in your planned deployment.

The specific course learning outcomes associated with this assignment are:

- Summarize business applications that can migrate to the cloud.
- Compare and contrast the technologies that enable cloud computing.
- Analyze the migration steps and challenges in migrating to cloud-based environments.
- Develop a cloud-based solution to address a proposed business problem.
- Use technology and information resources to research issues in cloud computing environments
- Write clearly and concisely about cloud & virtual computing topics using proper writing mechanics and technical style conventions.

Grading for this assignment will be based on answer quality, logic / organization of the paper, and language and writing skills, using the following rubric.

Points: 190	Term Paper: The ROI of a Cloud Deployment, Part 2			
Criteria	Unacceptable Below 70% F	Fair 70-79% C	Proficient 80-89% B	Exemplary 90-100% A
Section 1: Narrative				
1ai. Create a brief (one (1) paragraph) narrative that includes a problem statement. Weight: 1%	Did not submit or incompletely created a brief (one (1) paragraph) narrative that includes a problem statement.	Partially created a brief (one (1) paragraph) narrative that includes a problem statement.	Satisfactorily created a brief (one (1) paragraph) narrative that includes a problem statement.	Thoroughly created a brief (one (1) paragraph) narrative that includes a problem statement.
1aii. Create a brief (one (1) paragraph) narrative that includes a proposed solution to the problem. Weight: 2%	Did not submit or incompletely created a brief (one (1) paragraph) narrative that includes a proposed solution to the problem.	Partially created a brief (one (1) paragraph) narrative that includes a proposed solution to the problem.	Satisfactorily created a brief (one (1) paragraph) narrative that includes a proposed solution to the problem.	Thoroughly created a brief (one (1) paragraph) narrative that includes a proposed solution to the problem.
1aiii. Create a brief (one (1) paragraph) narrative that includes the type of solution (private, public, or hybrid cloud and / or all three (3).) Weight: 2%	Did not submit or incompletely created a brief (one (1) paragraph) narrative that includes the type of solution (private, public, or hybrid cloud and / or all three (3).)	Partially created a brief (one (1) paragraph) narrative that includes the type of solution (private, public, or hybrid cloud and / or all three (3).)	Satisfactorily created a brief (one (1) paragraph) narrative that includes the type of solution (private, public, or hybrid cloud and / or all three (3).)	Thoroughly created a brief (one (1) paragraph) narrative that includes the type of solution (private, public, or hybrid cloud and / or all three (3).)
1b. Determine which	Did not submit or	Partially determined	Satisfactorily	Thoroughly



cloud environment you are seeking to utilize (laas, PaaS, and / or SaaS) and explain why. Weight: 5%	incompletely determined which cloud environment you are seeking to utilize (laas, PaaS, and / or SaaS) and did not submit or incompletely explained why.	which cloud environment you are seeking to utilize (laas, PaaS, and / or SaaS) and partially explained why.	determined which cloud environment you are seeking to utilize (laas, PaaS, and / or SaaS) and satisfactorily explained why.	determined which cloud environment you are seeking to utilize (laas, PaaS, and / or SaaS) and thoroughly explained why.	
1c. Describe the cloud- based solution you have selected. Weight: 5%	Did not submit or incompletely described the cloud-based solution you have selected.	Partially described the cloud-based solution you have selected.	Satisfactorily described the cloud-based solution you have selected.	Thoroughly described the cloud-based solution you have selected.	
1d. Evaluate why the cloud-based solution you have selected is the best solution for your problem. Weight: 10%	Did not submit or incompletely evaluated why the cloud-based solution you have selected is the best solution for your problem.	Partially evaluated why the cloud- based solution you have selected is the best solution for your problem.	Satisfactorily evaluated why the cloud-based solution you have selected is the best solution for your problem.	Thoroughly evaluated why the cloud-based solution you have selected is the best solution for your problem.	
1e. Determine the resources that are required for your cloud deployment. Weight: 5%	Did not submit or incompletely determined the resources that are required for your cloud deployment.	Partially determined the resources that are required for your cloud deployment.	Satisfactorily determined the resources that are required for your cloud deployment.	Thoroughly determined the resources that are required for your cloud deployment.	
1f. Determine the key performance indicators that are being addressed by the cloud-based solution. Weight: 5%	Did not submit or incompletely determined the key performance indicators that are being addressed by the cloud-based solution.	Partially determined the key performance indicators that are being addressed by the cloud-based solution.	Satisfactorily determined the key performance indicators that are being addressed by the cloud-based solution.	Thoroughly determined the key performance indicators that are being addressed by the cloud-based solution.	
1g. Create a diagram that depicts a visual relationship that supports the narrative using Visio or an equivalent such as Open Project, Dia, or OpenOffice. Weight: 20%	Did not submit or incompletely created a diagram that depicts a visual relationship that supports the narrative using Visio or an equivalent such as Open Project, Dia, or OpenOffice.	Partially created a diagram that depicts a visual relationship that supports the narrative using Visio or an equivalent such as Open Project, Dia, or OpenOffice.	Satisfactorily created a diagram that depicts a visual relationship that supports the narrative using Visio or an equivalent such as Open Project, Dia, or OpenOffice.	Thoroughly created a diagram that depicts a visual relationship that supports the narrative using Visio or an equivalent such as Open Project, Dia, or OpenOffice.	
1h. 3 references Weight: 5%	No references provided	Does not meet the required number of references; some references poor quality choices.	Meets number of required references; all references high quality choices.	Exceeds number of required references; all references high quality choices.	
Section 2: ROI Spreadsheet					
2. Create an Excel	Did not submit or	Partially created an	Satisfactorily	Thoroughly created	

 2. Create an Excel
 Did not submit or
 Partially created an
 Satisfactorily
 Thoroughly created

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spreadsheet that depicts Return on Investment (ROI) calculations that support your plan. Weight: 15%	incompletely created an Excel spreadsheet that depicts Return on Investment (ROI) calculations that support your plan.	Excel spreadsheet that depicts Return on Investment (ROI) calculations that support your plan.	created an Excel spreadsheet that depicts Return on Investment (ROI) calculations that support your plan.	an Excel spreadsheet that depicts Return on Investment (ROI) calculations that support your plan.
Section 3: Project Out	line			
3a. Create a Gantt chart that outlines the proposed start and stop events (in days) of your planned deployment. Weight: 5%	Did not submit or incompletely created a Gantt chart that outlines the proposed start and stop events (in days) of your planned deployment.	Partially created a Gantt chart that outlines the proposed start and stop events (in days) of your planned deployment.	Satisfactorily created a Gantt chart that outlines the proposed start and stop events (in days) of your planned deployment.	Thoroughly created a Gantt chart that outlines the proposed start and stop events (in days) of your planned deployment.
3b. Create a Gantt chart that outlines the milestone activities in your planned migration. Weight: 5%	Did not submit or incompletely created a Gantt chart that outlines the milestone activities in your planned migration.	Partially created a Gantt chart that outlines the milestone activities in your planned migration.	Satisfactorily created a Gantt chart that outlines the milestone activities in your planned migration.	Thoroughly created a Gantt chart that outlines the milestone activities in your planned migration.
3c. Create a Gantt chart that outlines the milestone events involved in your planned deployment. Weight: 5%	Did not submit or incompletely created a Gantt chart that outlines the milestone events involved in your planned deployment.	Partially created a Gantt chart that outlines the milestone events involved in your planned deployment.	Satisfactorily created a Gantt chart that outlines the milestone events involved in your planned deployment.	Thoroughly created a Gantt chart that outlines the milestone events involved in your planned deployment.
4. Clarity, writing mechanics, and formatting requirements Weight: 10%	More than 6 errors present	5-6 errors present	3-4 errors present	0-2 errors present

Weekly Course Schedule

The purpose of the course schedule is to give you, at a glance, the required preparation, activities, and evaluation components of your course. For more information about your course, whether on-ground or online, access your online course shell.

The expectations for a 4.5 credit hour course are for students to spend 13.5 hours in weekly work. This time estimate includes preparation, activities, and evaluation regardless of the delivery mode.

Instructional Materials

In order to be fully prepared, obtain a copy of the required textbooks and other instructional materials prior to the first day of class. When available, Strayer University provides a link to the first three (3) chapters of your textbook(s) in eBook format. Check your online course shell for availability.

Review the online course shell or check with your professor to determine whether Internet-based assignments and activities are used in this course.

Strayer students are encouraged to purchase their course materials through our designated bookstore MBS Direct. <u>http://bookstore.mbsdirect.net/strayer.htm</u> If a lab is required for the course, MBS Direct is the only vendor that sells the correct registration code so that Strayer students may access labs successfully.

Kaltura Video Sessions

Instructors will record video or screen capture sessions using **Kaltura** in Weeks 2 and 4. Your instructor may also provide these sessions on a weekly basis to act as student tutorials on the following applicable procedures:

- Running and navigating the software or labs that will be used in this course
- Demonstrating the use of relevant programming languages and tools through screen capture and live navigation.
- Logging into the lab environments and running a sample lab required in this course (if labs are required)
- Demonstrating the downloading and installing of software to a student's computer (if necessary) or using the software already installed in the Strayer University campus labs
- Locating or finding files and other student materials that may be required to use in assignments
- Submitting assignments in Blackboard

You are strongly advised to use the material provided by faculty in these sessions. Online and Ground instructors will post the Kaltura video recorded sessions to the Instructor Insights folder within the weekly tabs of the online course shell (Blackboard).

Study Buddy Wiki

The School of Information Systems and Technology provides Study Buddy Wikis for nine (9) course categories which include: Homeland Security, Computer Security, Programming, Database Management, Web Design, Software Engineering, Networking, Capstone, and Infrastructure. You will be provided a direct link to the courses aligned within your program to post questions, search for answers, add helpful tips, and to assist other students. You should post to the Study Buddy Wiki board that corresponds to the course(s) you are currently taking. Assigned faculty will be monitoring to assist as needed.

Discussions

To earn full credit in an online threaded discussion, students must have one original post and a minimum of one other post per discussion thread.

Please note: Material in the online class will be made available on the previous Thursday. As it is always possible that students could lose their work due to unforeseen circumstances, it is a best practice to routinely save a working draft in a separate file before posting in the course discussion area.

Professors hold discussions during class time for on-ground students. Check with your professor if any additional discussion participation is required in the online course shell outside of class hours.

Tests

Tests (quizzes, midterm and final exams, essay exams, lab tests, etc.) are available for student access and completion through the online course shell. Check the online course shell to determine how you are expected to take the tests.

- Online students are to complete the test by Monday 9:00 a.m. Details regarding due dates are posted in the Blackboard Calendar tool.
- On-ground students are to complete the tests after the material is covered and before the next class session.

Assignments

A standardized performance grading rubric is a tool your professor will use to evaluate your written assignments. Review the rubric before submitting assignments that have grading rubrics associated with them to ensure you have met the performance criteria stated on the rubric.

Grades are based on individual effort. There is no group grading; however, working in groups in the online or on-ground classroom is acceptable.

Assignments for online students are always submitted through the online course shell. On-ground professors will inform students on how to submit assignments, whether in paper format or through the online course shell.

Association for Computing Machinery (ACM) Digital Library

The ACM Digital Library is a complete collection of all of ACM's publications, including ACM journals, conference proceedings, magazines, newsletters, and multimedia titles. The ACM Digital Library contains the largest and most complete full-text archive of articles on computing available today, consisting of: 2.0+ Million Pages of full-text articles, 20,000 New full-text articles added each year, 40+ High Impact Journals, 270+ Conference Proceedings Titles, 9 Magazines (including the flagship Communications of the ACM), 43 Special Interest Groups contributing content.

You are encouraged to search the ACM Digital Library for full-text articles for your writing assignments and Term Papers refereed referenced material. For more information on the ACM Digital Library please watch the video located in the Student Center tab of the online course shell (Blackboard).

To access the ACM Digital Library:

Students:

- 1. Login to iCampus: http://icampus.strayer.edu
- 2. Click on Student Services
- 3. Click on Learning Resource Center
- 4. Click on Databases

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- 5. Scroll down to Information Systems/Computing
- 6. Click on ACM Digital Library

Resources

The Resource Center navigation button in the online course shell contains helpful links. Strayer University Library Resources are available here as well as other important information. You should review this area to find resources and answers to common questions.

Technical support is available for the following:

- For **technical questions**, please contact Strayer Online Technical Support by logging in to your iCampus account at https://icampus.strayer.edu/login and submitting a case under "Student Center," then "Submit Help Ticket." If you are unable to log in to your iCampus account, please contact Technical Support via phone at (877) 642-2999.
- For concerns with your class, please access the Solution Center by logging in to your iCampus account at https://icampus.strayer.edu/login and submitting a case under "Student Center," then "Submit Help Ticket." If you are unable to log in to your iCampus account, please contact the IT Help Desk at (866) 610-8123 or at <a href="mailto:mai

TurnItIn.com is an optional online tool to assess the originality of student written work. Check with your professor for access and use instructions.

The **Strayer Policies** link on the navigation bar in the online course shell contains academic policies. It is important that students be aware of these policies.