

INSTRUCTIONAL PACKAGE

IST 261

ADVANCED NETWORK ADMINISTRATION

Effective Term SPRING 2019

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Part I: Course Information

Effective Term: SPRING 2019

COURSE PREFIX: IST 261 COURSE TITLE: ADVANCED NETWORK ADMINISTRATION

CONTACT HOURS: 5 CREDIT HOURS: 3

RATIONALE FOR THE COURSE:

This course is a study of how computer architecture relates to the interconnecting of the various network components, the environment in which the applications processes execute and the overall plan defining services to be provided in a distributed environment.

This course is a study of the internal operations of VMware as cloud network and its implementation, as well as the virtualization of operating systems and storage systems. Students will install, configure, and manage a virtual network.

COURSE DESCRIPTION:

This course is an advanced study of the networking operating system. Topics include installation upgrades, IP services, internet infrastructure, advanced server management and security, NDS management, and server optimization.

PREREQUISITES/CO-REQUISITES:

IST 165 – Implementation & Administration Windows Directory Service

REQUIRED MATERIALS:

Textbook will be an eBook through VMware academic partnership. Please visit the Bookstore online site for most current textbook information. Use the direct link below to find textbooks. BOOKSTORE.

Enter the semester, course prefix, number and section when prompted and you will be linked to the correct textbook.

ADDITIONAL REQUIREMENTS:

This class will require considerable time and effort outside of the regular class hours in order to successfully complete the project, labs, and exams.

USB Jump Drive

All assignments are due by the due date and time, no exceptions. Student must schedule time on campus in a computer lab to complete assignments until the student home computer is working properly.

TECHNICAL REQUIREMENTS:

Access to Desire2Learn (D2L), HGTC's student portal for course materials. WaveNet and D2L email access.

Web browser, Comodo Ice Dragon, Mozilla Firefox or Google Chrome are preferred

CLASSROOM ETIQUETTE:

As a matter of courtesy to other students and your professor, please turn off cell phones and other communication/entertainment devices before class begins. If you are monitoring for an emergency, please notify your professor prior to class and switch cell phone ringers to vibrate.

NETIQUETTE: is the term commonly used to refer to conventions adopted by Internet users on the web, mailing lists, public forums, and in live chat focused on online communications etiquette. For more information regarding Netiquette expectations for distance learning courses, please visit Online Netiquette.

Part II: Student Learning Outcomes

COURSE LEARNING OUTCOMES and ASSESSMENTS*:

- Describe the software-defined data center
- Describe how to deploy an ESXi host and create virtual machines
- Describe the vCenter Server architecture
- Describe how to deploy a vCenter Server instance or VMware vCenter Server Appliance
- Demonstrate the use of vCenter Server to manage an ESXi host
- Describe how to configure and manage vSphere infrastructure with VMware vSphere®
 Client and VMware vSphere® Web Client
- Describe how to configure virtual networks with vSphere standard switches
- Describe how to use vSphere distributed switches to improve network scalability
- Describe how to use vCenter Server to manage various types of storage
- Demonstrate how to manage virtual machines, templates, clones, and snapshots
- Demonstrate how to create a vApp
- Describe and use the content library

*Students – please refer to the Instructor's Course Information sheet for specific information on assessments and due dates.

General Education Outcomes

Please delete the section if this course is not part of the Gen Ed PLO assessment artifact process.

This course fulfills the following General Education Outcomes through the (list the appropriate assessment).

Upon completion of this course, students will be able to: (Check all
that apply.)
Communicate effectively;
Think critically;
$\overline{igwedge}$ Self and professional development.

Part III: Grading and Assessment

EVALUATION OF REQUIRED COURSE MEASURES/ARTIFACTS

Students' performance will be assessed and the weight associated with the various measures/artifacts are listed below.

EVALUATION

Lab Assignments	40%
Midterm Lab Exam	20%
Final Project Documentation	20%
Final Project	
•	Total Points100%

NOTE: The final exam cannot be exempted. If you do not take the final exam, you will receive a zero (0). You must also take the final at the pre-set time for your course as outlined by the HGTC Administration. There are no make-up exams for the final.

GRADING SYSTEM:

Grades earned in courses impact academic progression and financial aid status. Before withdrawing from a course, be sure to talk with your instructor and financial aid counselor about the implications of that course of action. Ds, Fs, Ws, WFs and Is also negatively impact academic progression and financial aid status.

The Add/Drop Period is the first 5 days of the semester for **full term** classes. Add/Drop periods are shorter for accelerated format courses. Please refer to the academic calendar for deadlines for add/drop (<u>ACADEMIC CALENDAR</u>). You must attend at least one meeting of all of your classes during that period. If you do not, you will be dropped from the course(s) and your Financial Aid will be reduced accordingly.

^{*}Students, for the specific number and type of evaluations, please refer to the Instructor's Course Information Sheet.

Part IV: Attendance

Horry-Georgetown Technical College maintains a general attendance policy requiring students to be present for a minimum of eighty percent (80%) of his or her classes in order to be eligible to receive credit for any course. However, due to the varied nature of courses taught at the College, a more rigid attendance policy may be required by individual instructors. At a minimum, a student may be withdrawn from a course(s) after he or she has been absent in excess of ten percent (10%) of the total contact hours for a course. Instructors define absentee limits for their class at the beginning of each term; please refer to the Instructor Course Information Sheet.

For online and hybrid courses, check your Instructor's Course Information Sheet for any required on-site meeting times. Please note, instructors may require tests to be taken at approved testing sites, if you use a testing center other than those provided by HGTC, the center may charge a fee for its services.

Part V: Student Resources



The Student Success and Tutoring Center (SSTC)

The SSTC offers to all students the following **free** resources:

- Academic coaches for most subject areas, Writing Center Support, and college success skills.
- 2. On-line student success and academic support resources.

Visit the SSTC website: <u>Student Success & Tutoring Center</u> and visit the student services tab in your WaveNet account to schedule appointments using TutorTrac. For more information, call: SSTC Conway, 349-7872; SSTC Grand Strand, 477-2113; and SSTC Georgetown, 520-1455. Room locations and Live Chat is available on the SSTC website.



Student Information Center: WaveNet Central (WNC)

WNC offers to all students the following **free** resources:

- 1. **Getting around HGTC**: General information and guidance for enrollment!
- 2. Use the Online Resource Center (ORC) for COMPASS support, technology education, and online tools.
- 3. **Drop-in technology support or scheduled training** in the Center or in class.
- 4. In-person workshops, online tutorials and more services are available.

Visit the WNC website: <u>Wavenet Central</u>. Live Chat and Center locations are posted on the website. Or please call one of the following locations: WNC Conway, 349-5182; WNC Grand Strand, 477-2076; and WNC Georgetown, 520-1473.

Disability Services:

HGTC is committed to providing an accessible environment for students with disabilities. Inquiries may be directed to Beth Havens, Director of Student Development on the Conway Campus Jaime Davis, Counselor/Advisor on the Georgetown Campus or Kristin Griffin, Counselor on the Grand Strand Campus. These individuals will review documentation of the student's disability and, in a confidential setting with the student, develop an educational accommodation plan.

Note: It is the student's responsibility to self-identify as needing accommodations and to provide acceptable documentation. After a student has self-identified and submitted documentation of a disability, accommodations may be determined, accepted, and provided.

Statement of Equal Opportunity/Non-Discrimination Statement

Horry Georgetown Technical College prohibits discrimination and harassment, including sexual harassment and abuse, on the basis of race, color, gender, national or ethnic origin, age, religion, disability, marital status, veteran status, sexual orientation, gender identity, or pregnancy in educational programs and/or activities.

Title IX Requirements

Horry Georgetown Technical College prohibits the offenses of domestic violence, dating violence, sexual assault, and stalking. Any student who believe he or she has experienced or witnessed discrimination including sexual harassment, domestic violence, dating violence, sexual assault or stalking is encouraged to report such incidents to one of the College's Title IX Coordinators.

*Faculty and Staff are required to report incidents to the Title IX Coordinators when involving students. The only HGTC employees exempt from mandatory reporting are licensed mental health professionals (only as part of their job description such as counseling services).

Inquiries regarding the non-discrimination policies:		
Student and prospective student inquiries	Employee and applicant inquiries concerning	
concerning Section 504, Title II, and Title IX and	Section 504, Title II, and Title IX and their	
their application to the College or any student	application to the College may be directed to the	
decision may be directed to the Associate Vice	Associate Vice President for Human Resources.	
President for Student Affairs.		
Dr. Melissa Batten, AVP Student Affairs	Jacquelyne Snyder, AVP Human Resources	
Title IX Coordinator	Section 504, Title II, and Title IX Coordinator	
Building 1100, Room 107A, Conway Campus	Building 200, Room 212A, Conway Campus	
PO Box 261966, Conway, SC 29528-6066	PO Box 261966, Conway, SC 29528-6066	
843-349-5228	843-349-5212	
Melissa.Batten@hgtc.edu	Jacquelyne.Snyder@hgtc.edu	