IST191: Linux Administration (RHA RH134-9)
IST191-W38 Course Schedule for 2025SP
Wednesdays from 7:00 PM to 8:55 PM on Zoom

Instructor Contact and Class Information:

Instructor: Beau Sanders

Office: Barton Campus, Building 103, Room 223D

GTC Gmail: sandewbs@my.gvltec.edu (preferred method of contact)

GTC Office Phone: 864-250-8314

Cell: 864-325-7240 (preferred phone; identify yourself in texts and voicemail)

Office Hours and Class Schedule (Note 2): https://beausanders.org/schedule/

For scheduling purposes weeks start on the Monday of each week in the semester

Unit Tests are open Monday through Wednesday during test weeks; proctored by Respondus (Note 4)

Attendance Assignments = (A)

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IST191 Tentative Course Schedule (Note 1)

Unit #	✓	Week	Topic/Activity	Due Date
Unit 1		**1**	**IST191 Orientation**	
			Download and read "Getting Started Guide for IST191"	
			Post introduction to class in Blackboard	
			Download and read IST191 Syllabus and Course Schedule	
			Submit Syllabus Quiz	
			Obtain online access to RH134-9 textbook	
			Explore links for IST191 in associated websites (Note 3)	
		1	**Chapter 1: Improve Command-line Productivity**	
			Read and Study Chapter 1	
			Watch Unit 1 Lecture Video	
			Unit 1 Assignment (A)	
			Lab 1-1: Section 1.2: Guided Exercise: Write Simple Bash Scripts	
			Lab 1-2: Section 1-4: Guided Exercise: Loops and Conditional Constructs in Scripts	
			Lab 1-3: Section 1.6: Guided Exercise: Match Text in Command Output with REGEX	
			Lab 1-4: Section 1.7: Lab - Improve Command-line Productivity	
			Participation (Note 7)	
		1	**All Unit 1 Course Content Due**	**Sunday, January 19, 2025**
		2	**MLK Day on Mon Jan 20 - No Classes**	
Unit 2		**2**	**Chapter 2: Schedule Future Tasks**	
			Read and Study Chapter 2	
			Watch Unit 2 Lecture Video	
			Unit 2 Assignment (A)	
			Lab 2-1: Section 2.2: Guided Exercise: Schedule a Deferred User Job	
			Lab 2-2: Section 2.4: Guided Exercise: Schedule Recurring User Jobs	
			Lab 2-3: Section 2.6: Guided Exercise: Schedule Recurring System Jobs	
			Lab 2-4: Section 2.8: Guided Exercise: Manage Temporary Files	
			Participation (Note 7)	
		2	**All Unit 2 Course Content Due**	**Sunday, January 26, 2025**

IST191 Tentative Course Schedule (Note 1)

Unit #	✓	Week	Topic/Activity	Due Date
Unit 3		**3**	**Chapter 3: Analyze and Store Logs**	
			Read and Study Chapter 3	
			Watch Unit 3 Lecture Video	
			Unit 3 Assignment (A)	
			Lab 3-1: Section 3.4: Guided Exercise: Review Syslog Files	
			Lab 3-2: Section 3.6: Guided Exercise: Review System Journal Entries	
			Lab 3-3: Section 3.8: Guided Exercise: Preserve the System Journal	
			Lab 3-4: Section 3.10: Guided Exercise: Maintain Accurate Time	
			Lab 3-5: Section 3.11: Lab - Analyze and Store Logs	
			Participation (Note 7)	
Unit 4		**3**	**Chapter 4: Archive and Transfer Files**	
			Read and Study Chapter 4	
			Watch Unit 4 Lecture Video	
			Unit 4 Assignment (A)	
			Lab 4-1: Section 4.2: Guided Exercise: Manage Compressed tar Archives	
			Lab 4-2: Section 4.4: Guided Exercise: Transfer Files Between Systems Securely	
			Lab 4-3: Section 4.6: Guided Exercise: Synchronize Files Between Systems Securely	
			Lab 4-4: Section 4.7: Lab - Archive and Transfer Files	
			Participation (Note 7)	
		3	**All Unit 3 and Unit 4 Course Content Due**	**Sunday, February 2, 2025**
Unit 5		**4**	**Chapter 5: Tune System Performance**	
			Read and Study Chapter 5	
			Unit 5 Assignment (A)	
			Watch Unit 5 Lecture Video	
			Lab 5-1: Section 5.2: Guided Exercise: Adjust Tuning Profiles	
			Lab 5-2: Section 5.4: Guided Exercise: Influence Process Scheduling	
			Lab 5-3: Section 5.5: Lab - Tune System Performance	
			Participation (Note 7)	
		4	**All Unit 5 Course Content Due**	**Friday, February 9, 2024**
		5	**Unit Test 1: Covers Units 1, 2, 3, and 4 (Note 4)**	**Mon Feb 10 to Wed Feb 12**
Unit 6		**5**	**Chapter 6: Manage SELinux Security**	
			Read and Study Chapter 6	
			Watch Unit 6 Lecture Video	
			Unit 6 Assignment (A)	
			Lab 6-1: Section 6.2: Guided Exercise: Change the SELinux Enforcement Mode	
			Lab 6-2: Section 6.4: Guided Exercise: Control SELinux File Contexts	
			Lab 6-3: Section 6.6: Guided Exercise: Adjust SELinux Policy with Booleans	
			Lab 6-4: Section 6.8: Guided Exercise: Investigate and Resolve SELinux Issues	
			Lab 6-5: Section 6.9: Lab - Manage SELinux Security	
			Participation (Note 7)	
		5	**All Unit 6 Course Content Due**	**Sunday, February 16, 2025**
Unit 7		**6**	**Chapter 7: Manage Basic Storage**	
			Read and Study Chapter 7	
			Watch Unit 7 Lecture Video	

IST191 Tentative Course Schedule (Note 1)

Unit #	✓	Week	Topic/Activity	Due Date
			Unit 7 Assignment (A)	
			Lab 7-1: Section 7.2: Guided Exercise: Add Partitions, File Systems, and Persistent Mounts	
			Lab 7-2: Section 7.4: Guided Exercise: Manage Swap Space	
			Lab 7-3: Section 7.5: Lab - Manage Basic Storage	
			Participation (Note 7)	
Unit 8		**6**	**Chapter 8: Manage Storage Stack**	
			Read and Study Chapter 8	
			Watch Unit 8 Lecture Video	
			Unit 8 Assignment (A)	
			Lab 8-1: Section 8.2: Guided Exercise: Create and Extend Logical Volumes	
			Lab 8-2: Section 8.4: Guide Exercise: Manage Layered Storage	
			Lab 8-3: Section 8.5: Lab - Manage Storage Stack	
			Participation (Note 7)	
		6	**All Unit 7 and Unit 8 Course Content Due**	**Sunday, February 23, 2025**
Unit 9		**7**	**Chapter 9: Access Network-Attached Storage**	
			Read and Study Chapter 9	
			Watch Unit 9 Lecture Video	
			Unit 9 Assignment (A)	
			Lab 9-1: Section 9.2: Guided Exercise: Manage Network-Attached Storage with NFS	
			Lab 9-2: Section 9.4: Guided Exercise: Automount Network-Attached Storage	
			Lab 9-3: Section 9.5: Lab - Access Network-Attached Storage	
			Participation (Note 7)	
Unit 10		**7**	**Chapter 10: Control the Boot Process**	
			Read and Study Chapter 10	
			Watch Unit 10 Lecture Video	
			Unit 10 Assignment (A)	
			Lab 10-1: Section 10.2: Guided Exercise: Select the Boot Target	
			Lab 10-2: Section 10.4: Guided Exercise: Reset the Root Password	
			Lab 10-3: Section 10.6: Guided Exercise: Repair File-System Issues at Boot	
			Lab 10-4: Section 10.7: Lab - Control the Boot Process	
			Participation (Note 7)	
		7	**All Unit 9 and Unit 10 Course Content Due**	**Sunday, March 2, 2025**
		8	**Unit Test 2: Covers Units 5, 6, 7, and 8 (Note 4)**	**Mon Mar 3 to Wed Mar 5**
Unit 11		**8**	**Chapter 11: Manage Network Security**	
			Read and Study Chapter 11	
			Watch Unit 11 Lecture Video	
			Unit 11 Assignment (A)	
			Lab 11-1: Section 11.2: Guided Exercise: Manage Server Firewalls	
			Lab 11-2: Section 11.4: Guided Exercise: Control SELinux Port Labeling	
			Lab 11-3: Section 11.5: Lab - Manage Network Security	
			Participation (Note 7)	
		8	**All Unit 11 Course Content Due**	**Sunday, March 9, 2025**
Unit 12		**9**	**Chapter 12: Install Red Hat Enterprise Linux**	
			Read and Study Chapter 12	

IST191 Tentative Course Schedule (Note 1)

Unit #	✓	Week	Topic/Activity	Due Date
			Watch Unit 12 Lecture Video	
			Unit 12 Assignment (A)	
			Lab 12-1: Section 12.2: Guided Exercise: Install Red Hat Enterprise Linux	
			Lab 12-2: Section 12.4: Guided Exercise: Automate Installation with Kickstart	
			Lab 12-3: Section 12.7: Lab - Install Red Hat Enterprise Linux	
			Participation (Note 7)	
Unit 13		9	**Chapter 13: Run Containers**	
			Read and Study Chapter 13	
			Watch Unit 13 Lecture Video	
			Unit 13 Assignment (A)	
			Lab 13-1: Section 13.4: Guided Exercise: Creating Containers with Podman	
			Lab 13-2: Section 13.6: Guided Exercise: Container Image Registries	
			Lab 13-3: Section 13.8: Guided Exercise: Managing the Container Lifecycle	
			Lab 13-4: Section 13.9: Lab: Run Containers	
			Participation (Note 7)	
		9	**All Unit 12 and Unit 13 Course Content Due**	**Sunday, March 16, 2025**
		10	**SPRING BREAK - Mar 17 to Mar 22 - No Classes at GTC**	
		11	**Unit Test 3: Covers Units 9, 10, 11, 12, and 13 (Note 4)**	**Mon Mar 24 to Wed Mar 26**
Unit 14		11	**(Jang) Chapter 14: The Apache Web Server (Pages 679-732)**	
			Read and Study Chapter 14	
			Watch Unit 14 Lecture Video	
			Unit 14 Assignment (A)	
			Lab 14-0: Install Rocky Linux in a VMware Workstation Pro Virtual Machine	
			Lab 14-1: Exercise 14-1: Install the Apache Server (Page 683)	
			Lab 14-2: Exercise 14-2: The Apache Welcome and the noindex.html Story (Page 697)	
			Lab 14-3: Exercise 14-3: Create a List of Files (Page 698)	
			Lab 14-4: Exercise 14-4: Password Protection for a Web Directory (Pages 705-706)	
			Lab 14-5: Exercise 14-5: Set Up a Virtual Web Server (Page 718)	
			Participation (Note 7)	
		11	**All Unit 14 Course Content Due**	**Sunday, March 30, 2025**
Unit 15		12	**(Jang) Chapter 15: The Samba File Server (Pages 733-772)**	
			Read and Study Chapter 15	
			Watch Unit 15 Lecture Video	
			Unit 15 Assignment (A)	
			Lab 15-1: Exercise 15-1: Configure a Samba Home Directory Share (Page 756)	
			Lab 15-2: Exercise 15-2: Configuring a Samba Share for Group Collaborations (Page 759)	
			Participation (Note 7)	
		12	**All Unit 15 Course Content Due**	**Sunday, April 6, 2025**
Unit 16		13	**(Jang) Chapter 13: A Varity of E-Mail Agents (Postfix) (Pages 645-660)**	
			Read and Study Chapter 13 pages 645-660	
			Watch Unit 16 Lecture Video	
			Unit 16 Assignment (A)	
			Lab 16-1: Exercise 13-3: Create Users Just for Email (Page 649)	
			Lab 16-2: Configure Postfix Email Service (PDF Instructions in Blackboard)	

Unit #	✓	Week	Topic/Activity	Due Date
			Participation (Note 7)	
		13	**All Unit 16 Course Content Due**	**Sunday, April 13, 2025**
Unit 17		**14**	**(Jang) Chapter 13: An Introduction to Domain Name Services (BIND) (Page 633-645)**	
			Read and Study Chapter 13 pages 633-645	
			Watch Unit 17 Lecture Video	
			Unit 17 Assignment (A)	
			Lab 17-1: Configure BIND DNS in Rocky Linux (PDF Instructions in Blackboard)	
			Participation (Note 7)	
Unit 18		**14**	**DHCP and vsFTP Servers (Instructor's Lecture Slides)**	
			Read and Study Instructor's Lecture Slides on DHCP and vsFTP	
			Watch Unit 18 Lecture Video	
			Unit 18 Assignment (A)	
			Lab 18-1: Configure vsFTP in Rocky Linux (PDF Instructions in Blackboard)	
			Participation (Note 7)	
		14	**All Unit 17 and Unit 18 Course Content Due**	**Sunday, April 20, 2025**
		15	**Written Final Exam: Covers All Units (Notes 4 & 5) (A)**	**Mon Apr 21 to Wed 23**
Unit 19		**15**	**Comprehensive Review and Exam Prep**	
			Lab 19-0: Download Rocky Linux 9 Virtual Machine for IST191 Skills Based Lab Exam	
			Lab 19-1: Section 14.2: Lab: Fix Boot Issues and Maintain Servers	
			Lab 19-2: Section 14.3: Lab: Configure and Manage File Systems and Storage	
			Lab 19-3: Section 14.4: Lab: Configure and Manage Server Security	
			Lab 19-4: Section 14.5: Lab: Run Containers	
		15	**All Unit 19 Course Content Due**	**Sunday, April 27, 2025**
		16	**Skills Final Exam: Red Hat Network Services (Note 6)**	**Wednesday, April 30, 2025**

IMPORTANT NOTES:

1   It is important to check the course electronic **Calendar** weekly in Blackboard. The dates shown above are tentative and are for planning purposes only. The dates can be changed by the instructor at any time. Check the course electronic **Calendar** in Blackboard for the actual dates.

2   Check the instructor's posted office hours at **https://beausanders.org/schedule/**. Please make an appointment if you want to meet with your instructor during his office hours.

3   **Instructor's Website**
https://beausanders.org/IST191/
Download Lecture Slides, Virtual Class Videos, and other course information
Username = ist191
Password = kickstart

4   **Unit Tests and the Written Final Exam in IST191** will be scheduled Monday, Tuesday, and Wednesday each test or exam week, unless otherwise specified and highlighted with an asterisk (*). All Unit Tests and the Written Final Exam will be taken at home and proctored by Respondus Lockdown Browser with Monitoring.

5   The **IST191 Written Final Exam** will cover Units 1 through 18. A Review Sheet of terms is posted in Blackboard.

Unit #	✓	Week	Topic/Activity	Due Date
		6	The **Skills Based Exam** will be taken as a class during Exam Week. Each student will complete five skills based labs. Red Hat Linux Network Services will be installed and configured during the IST191 Skills Based Exam. The Skills Based Exam will be proctored by the instructor.	
		7	**Participation Requirement**	

Participation Requirement

Zoom Classes and Online Classes:

All students who attend the virtual in-person Zoom class session will automatically get full participation credit for the week.

For students who did not attend the weekly lesson.
1. Follow the Yuja link that contains the lecture recordings.
2. Watch all recordings for the current unit.
3. All videos must be watched entirely through the end. This information is tracked.

Note: Viewing the videos in the course from other non-Yuja sources will not count towards the weekly Participation grade. Watching the unit videos does not count as attendance for the virtual in-person Zoom meeting portion of the week.

Traditional Face-to-Face Classes:

All students who attend a traditional face-to-face class in a classroom will automatically get full participation credit for the week. If a traditional class student does NOT attend class, then they must watch the complete Lecture Video using the Yuja link in this class to get Participation credit. Watching the Lecture Video will NOT count for attendance for traditional class students.
1. Follow the Yuja link that contains the lecture recordings.
2. Watch all recordings for the current unit.
3. All videos must be watched entirely through the end. This information is tracked.