



## Linux & IT Support: CIT-220 & CIT-205 Syllabus | FALL 2021 & SPRING 2022

instructor:	<b>Eric C. Darsow</b> CCAC North CIT Department Faculty Instructor <b>Dan Marshall</b> West Allegheny HS Instructor
office Hours:	<b>Periods 5,6, &amp; 8</b> by appointment (get a pass)
semester:	<b>Fall 2021</b> <b>Spring 2022</b>
instructor Contact methods:	<b>In-person preferred, followed by phone calls: 412.894.3020</b> , then email: edarsow@westasd.org dmarshall@westasd.org
CIT Dept chair	<b>Professor Rebecca Elinich</b> relinich@ccac.edu
CIT Dean	<b>Conroy, Sara J.</b> sconroy@ccac.edu
course Credits	<b>CIT-120: 3.0 credits</b> <b>CIT-250: 3.0 credits</b>
prerequisites	<b>CIT-115</b>

### I: Course Descriptions

**CIT-220: Linux System Administration** This course provides students with the knowledge and skills to configure, monitor and support servers running the Linux operating system using security best practices, scripting and automation. Topics include system architecture, package management, shell commands, file systems, administrative tasks, network configuration, system security and troubleshooting fundamentals. Course objectives are consistent with many of those required for CompTIA Linux+ certification.

**CIT-205: Help Desk and User Support-** This course focuses on information and services within an organization that requires user support specialists to enhance productivity and to resolve problems. Topics include an overview of the user support services field, hardware and software evaluation, facilitation of product standards, needs assessment, system installation, user training, documentation preparation, troubleshooting and other forms of assistance. Problem solving, communication skills and interpersonal relations are emphasized throughout the course.

### II: Learning Outcomes

- CIT-220:** 1. Upon successful completion of the course, the student will:
2. Configure hardware settings, run levels and shutdown options.
  3. Install a boot manager with shared libraries.
  4. Use various tools to perform package management.

5. Use shell commands to administer the system, perform basic file management, manage processes, create scripts and perform basic file editing.
6. Create partitions, file systems, disk quotas and file permissions.
7. Set up a display manager.
8. Manage user and group accounts and related system files.
9. Manage printers and printing.
10. Configure and troubleshoot basic client-server networks.
11. Perform essential security administration tasks.

**CIT-205:** Upon successful completion of the course, the student will:

1. Summarize the role and responsibilities of computer help desk and user support personnel.
2. List examples illustrating the importance of customer service and support.
3. Describe Help Desk operations, technologies and environments.
4. Perform needs assessments related to current and new hardware and software requirements.
5. Explain the need to define, communicate and enforce product standards.
6. Summarize the use of performance standards.
7. Identify the common processes, procedures and service levels related to customer service.
8. Prepare appropriate documentation such as training manuals, online help and product standards guidelines.
9. Identify the roles and responsibilities of support personnel when installing and maintaining computer software and hardware systems.
10. Classify ergonomic factors affecting the user's environment.

### III: The nitty gritty

**textbook & materials** **Course website:** Master course website with session-specific content, submission portals, and assignment details: Canvas & <https://technologyrediscovery.net>

**letter Grades** A point-based system will be used to assign letter grades according to the district staff handbook. Each 9-weeks grade will be based on two major inputs:

- 1) 60%: Quality and effort on weekly work bundles which consist of
  - a) Skills practice artifacts and
  - b) Culminating questions and/or tasks
  - c) Daily class engagement & peer help
- 2) 40%: Quality and effort on quarter projects which require synthesis of the core concepts of the quarter

These two values will be mathematically combined to assign a letter grade based on the official West Allegheny SD scale:

90-100% = A ; 80-89.99% = B  
70-79.99% = C ; 60-69.99% = D  
<= 59.99% = F

	In the spirit of this college-level course <b>***NO EXTRA CREDIT***</b> opportunities exist; instead, a lenient makeup work policy is provided to encourage a sole focus on course content.
due dates	Our weekly work cycle <b>begins on Monday</b> and proceeds <b>through Friday</b> . Completed weekly cycle documents and artifacts should be placed in your student folder for review Monday and Tuesday evenings by your instructor. You'll get feedback before submitting your next cycle's work.  For at least the first two 9-weeks, Eric Darsow will be present in class Monday, Tuesday, and Wednesday for <b>primary instruction</b> . Thursdays and Fridays provide a chance for <b>independent practice</b> of core skills and thoughtful completion of: a) Weekly work culminating questions b) Skills practice with online Canned Test Out materials available via a browser.
attendance & tardiness	<i>Attend class per West Allegheny High School's official attendance policy.</i> Instructors will not provide remediation for content that students missed due to unexcused absences unless extenuating circumstances dictate a more lenient approach.
tests:	<b>The only high-stakes test will be the Test Out certification test taking place in the 4th 9-weeks period.</b> Low-stakes, mini assessments and projects will constitute the bulk of your submitted work
technology	All necessary computers are supplied by West Allegheny HS in our lab classroom
Academic Honesty	<b>Provide written credit to all relevant authors</b> of all code, writing, and project work for this course, including yourself and folks who help you (but who may not be published authors). Include direct URLs of websites consulted.  <b>Honor the copyrights</b> associated with all content used in this course.  <b>Consequences:</b> Students suspected of academic dishonesty will be asked to produce documentation to support any attributions (or, non-attributions). The West Allegheny School District's academic honesty policy applies in this course.

	Incident Report form, and many other College services through the MyCCAC portal: <a href="https://my.ccac.edu">https://my.ccac.edu</a>
student handbook	All students are expected to read and comply with the policies and regulations set forth in the CCAC Student Handbook, including without limitation the College's policies regarding academic and behavioral conduct, the procedures for requesting an accommodation based upon a disability, pregnancy or pregnancy related condition, or a religious observance, and for reporting unlawful discrimination and harassment.  The Student Handbook is available to view and download along with the full text of the College's <i>Policy Manual</i> , <i>Administrative Regulations Manual</i> , and the Civil Rights Complaint Procedure:  <a href="https://www.ccac.edu/academic-rules-and-regulations/rules-and-regulations.php">https://www.ccac.edu/academic-rules-and-regulations/rules-and-regulations.php</a>  <a href="https://www.ccac.edu/president/policies-and-regulations.php">https://www.ccac.edu/president/policies-and-regulations.php</a>
diversity	Title IX of the Education Amendments 1972 (20 U.S.C. 1681 et seq.) and its implementing regulations, 34 C.F.R. Part 106, prohibit discrimination on the basis of sex in education programs or activities operated by recipients of Federal financial assistance. It is the landmark legislation that bans gender based discrimination in schools and colleges.  <i>"No person in the U.S. shall, on the basis of sex be excluded from participation in, or denied the benefits of, or be subjected to discrimination under any educational program or activity receiving federal aid."</i>  <a href="https://www.ccac.edu/diversity/title-ix.php">https://www.ccac.edu/diversity/title-ix.php</a>  <a href="https://www.ccac.edu/diversity/notices.php">https://www.ccac.edu/diversity/notices.php</a>
disability	Information concerning the process and documentation required to request a disability-related accommodation can be obtained by contacting the campus' Office of Supportive Services for Students with Disabilities (OSSSD) or by visiting the OSSSD information page  <a href="https://www.ccac.edu/supportive-services/supportive.php">https://www.ccac.edu/supportive-services/supportive.php</a>

## V: Content licensing and sharing

licensing	All non-computer code content on technologyrediscovery.net (course content, images, media) is licensed under the Creative Commons Share-Alike license (CC BY-SA 4.0); no attribution required.  <a href="https://creativecommons.org/licenses/by-sa/4.0/">https://creativecommons.org/licenses/by-sa/4.0/</a>  Computer code is licensed by file; most course code is copylefted under the GNU Public License
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## IV: Official CCAC notices

my.ccac.edu	Students are reminded that they can access their course information and CCAC email account, the CCAC Academic Calendar (including add/drop/withdrawal deadlines), the Student Handbook, the College's
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