COP3353 – User-Level Intro to Linux

Summer 2020 Syllabus

Prime Directive

Anything not explicitly allowed by the instructor in writing (announcement, Canvas message, forum post, syllabus, or slides) is implicitly forbidden.

1. Instructor Information

Name Alessio Gaspar

Website http://cereal.forest.usf.edu/alessio

Canvas Messages In order to ensure a prompt response to your queries, make sure to only use Canvas messages (not emails or phone) to contact your instructor and teaching

assistants.

The instructor checks these on Mondays, Wednesdays, and Fridays

If you don't hear back from us within 48 business hours, please re-send your Canvas message or post a mention that you did not receive a response yet in

the "Questions about Technology-Related issues" Canvas forum.

Canvas Forums

- This course uses forums for you to post questions related to the study material, non-graded practice assignments, deadlines, or report technical problems you are having.
- Use these exclusively for questions about non-graded assignments.
- The instructor checks these on Mondays, Wednesdays, and Fridays
- The title of the forums should help you figure out which one to use to post any given question. In doubt, send a Canvas message to your instructor.

Address ENB343E

Department of Computer Science & Engineering

University of South Florida

4202 Fowler Avenue, Tampa, FL, 33620-9951

The best way to get in touch with me reliably and fast is by Canvas

nessage

Office Hours

Phone & Email

- Online office hours will be "walk-in" and held on Wednesdays from 2pm to 5pm using the "Blackboard Collaborate Ultra" software available in Canvas.
- To meet with your instructor, join the "Alessio Gaspar Office Hours" session, to be found in the "Blackboard Collaborate Ultra" section of our Canvas course site.
- Make sure you have a microphone and webcam to participate. Contact help@usf.edu to inquire about preparing your machine for a "blackboard collaborate" meeting beforehand if you need to.

Teaching Assistant Office Hours

- The "syllabus" section in the Canvas' course site will also list the days and times during which TAs will be holding their office hours, using the Blackboard Collaborate Ultra software.
- If you plan on meeting them online, you will need a webcam and microphone to participate. Make also sure you contact them ahead of time as, sometimes, TAs will not hear that someone joined the session, especially if they are already busy working with other students in their office.
- These sessions are a great way to receive help on the practice assignments, make sure you use this available resource to its fullest.
- The exact days and times during our TAs are available, along with their contact information, will be announced by your instructor during the first week of classes

2. Course Information

Prefix COP
Number 3353
Section 001
College EN
Department ESB
CRN 55145

Title User-Level Introduction to Linux for Information Technology

Delivery Method

Online Asynchronous

- No mandatory, weekly scheduled, "live" meetings in person or online.
- Every Monday by 11:55PM the material for the new week will be announced & made available on the course's Canvas site

Course Meeting
Times & Location
Required Textbook

n/a – see above

No required textbook for this course. Students will be provided with links to freely available material and instructor-authored material.

Pre-requisites
Description

COP2512 Programming Fundamentals for IT

Introduction to a modern Linux distribution; installation in a desktop-friendly virtualized environment, users and software packages management, usage of the shell for navigation, and text processing command line tools.

Course Objectives

On successful completion of this course, You will be able to;

- 1) use a modern Linux distribution in a virtualized environment
- 2) find helpful information about Linux tools
- 3) manage user accounts using both Graphical User Interface and Command Line Interface tools
- 4) manage software installation using both GUI and CLI tools
- 5) use the shell to navigate the file system and manipulate processes
- 6) use CLI tools to process data in text files
- 7) use regular expression to filter data in text files with CLI tools

Learning

Achievement of the above objectives will be measured by your ability to;

Outcomes

- 1) Install and configure a modern Linux distribution in a virtualized environment, take snapshots of the virtual machine
- 2) Investigate a new Linux tool or technology by finding and evaluating available online resources and applying them to perform specified
- 3) Use GUI and CLI tools to manage user accounts on a Linux system; e.g. add, remove, block, change password, set expiration date for user accounts...
- 4) Use UI and CLI tools to manage software installed on a Linux system; e.g. install, uninstall, purge, search for software packages...
- 5) Perform file system and process operations from the shell; e.g. assign permissions to files and folders, create or delete them, list background processes, kill processes...
- 6) Use CLI tools to manipulate data in text files; e.g. join, cut, paste, diff, patch, standard input and output redirections, piping...
- 7) Use regular expressions to filter data in text files; e.g. grep...

Availability of Course Material, announcements and assignments This course is delivered to you using the following resources;

CANVAS SITE

- This course should be listed when you log into Canvas.
- We will use the Canvas site to communicate via forums, via Blackboard Collaborate, submit assignments or exams, take quizzes...
- The details on the specific activities that we will use Canvas for will be provided to you by your instructor during the semester

WEBSITE

- In addition to the above, we will also use a web site to give you access to material such as videos, PDF files, Links...
- You will find this material at http://cereal.forest.usf.edu/edu/COP3353/

Tentative Schedule The following tentative timeline might be modified during the semester.

Week	Module	Lecture Topic	GQ	DF	PA	Exams
#	#					
1	-	First Week Module	special	special	special	n/a
2	M01	Basic Usage	GQ-01	DF-01	PA-01	
3	M02	Serious CLI	GQ-02	DF-02	PA-02	
4	M03	Basic SysAdmin	GQ-03	DF-03	PA-03	
5	M04	Managing Packages	GQ-04	DF-04	PA-04	Midterm
6	M05	File System	GQ-05	DF-05	PA-05	
7	M06	The UNIX way	GQ-06	DF-06	PA-06	
8	M07	Regular Expressions	GQ-07	DF-07	PA-07	
9	M08	Bash Scripting	GQ-08		PA-08	
10		Review & Final Exam	n/a	n/a	n/a	Final

Legend

Week#

Week's number in the semester. Please note that we skip spring break week.

Module # Self-Explanatory Lecture Topics Self-Explanatory

GQ Graded Quizzes, 3 points each. See syllabus for first week quiz

PA Practice Assignments
DF Discussion Forums

3. Assessment of Student Outcomes

Grading Criteria and/or Scale:

Grades will be on this scale

(no final rounding up, 69 IS 69 and not 70)

100-90	Α	4.0
80-89	В	3.0
70-79	С	2.0
60-69	D	1.0

Evaluation Items

Item	Weight % of final grade		
Graded Quizzes	20%		
Practice Assignments	20%		
Participation to "DF" Forums	20%		
Midterm	20%		
Final (comprehensive)	20%		
Total Points Available	100%		

Proctored, online, Graded Quizzes

- They will be administrated using Canvas and will allow students to evaluate their understanding of all the modules of a given week.
- You are allowed to take the quiz up to 5 times and your grade will be the best grade obtained.
- Each quiz attempt will have a time limit.
- While you take a quiz, you are not allowed to use any notes, books, documentations or software. You should have only your browser open with a single tab opened on the Canvas quiz you are taking.
- Your attempts will be proctored using Proctorio.

If you experience a technical difficulty while taking the GQs;

- Send a Canvas message to your instructor immediately with documentation of the problem you encountered (e.g., screenshots, official documentation of medical emergency...).
- Under specific documented situations your attempt will be cleared and you will be allowed to retake the quiz. However, you need to understand that this is exceptional and only for situations which may be documented.
 - The instructor is not required to grant you another attempt because you clicked on the wrong button. In face-to-face exams no one gets another try because they forgot how to write.
 - It is your responsibility to have a fast and reliable internet connection when enrolling in an offering which relies on internet to provide you with material, communication and assess your performance. Similarly, in a face-to-face exam, you do not get to

take the exam again because your pen ran out of ink.

- Such extra attempts might be granted only if you provided verifiable documentation on what happened right when the problem happened.
- Such extra attempts won't be granted as extension to the deadline.
 E.g. if you take the quiz 3 hours before the deadline, bump into a problem, send a canvas message to your instructor, get a response 2 hours later, then you have only 1 hour left
- Such requests will be processed as time permit. Sending a canvas message at 9pm the day of the deadline will most likely result in a response the next day, too late to grant another attempt.

Proctored, online, Exams

All exams in this course will be time-limited, closed book and notes, one attempt only, online exams, proctored using the Proctorio software.

- These will be administered online using Canvas and will require you to be able to work with the software used in this course.
- They will also be proctored using USF online proctoring software.
 Please see the USF Policy on online proctoring in the next section for software / hardware / policy requirements
- If you have any question about these, you are only allowed to discuss them with your instructor or the TA. The work you submit to be graded must be only the result of your personal work

Please note that the settings of our online proctored exams will require you to;

- Own a webcam and microphone compatible with the USF Proctorio software – you will have an opportunity to test things using our First Week Quiz in Canvas
- Be ready to show to your webcam a valid ID; i.e. either driver license or USF Student ID
- Access Canvas using the Google Chrome web browser which is the only one compatible with the *Proctorio* plugin you will have to install
- Work on a single monitor while you take the exam; disconnect any secondary monitor
- Do not communicate with anyone, physically or online, while taking the exam. Sound, video, network traffic, and screen activities will be monitored in order to flag any suspicious behavior

While you take exams;

- You will be allowed to use your Linux virtual machine and the software installed on it as part of the activities of this course
- You will only be allowed to access the manpages on your Linux system and no other resources (web or other).
- Do not use any web resource besides the one explicitly authorized in writing by your instructor. Do not use any search engine or similar technology

Participation to "DF" forums

Some modules have a "DF" or "Discussion Forum" activity. These are meant to get the discussion going in the group about a specific Linux technology. They involve internet searches or experimentations with your Linux virtual box. Make sure that you provide good references to justify anything you state in your posts in order to receive credit. Someone simply posting their unsubstantiated opinions or referencing bad sources of information, e.g. "Smith-the-internet-guy's IT Blog", will not receive credit.

The instructor evaluates what is "good enough" for credit in order to avoid having a few students spam forums with last minute, poor quality, posts which will only waste the time of the other students who want to learn. The grade for each DF forum will be assigned based on the following guidelines;

- 0 Insufficient / not submitted in time / not using required format.
- 1 Some effort but would fail if this was an exam. Think "D" or "F".
- 2 Satisfactory. Good work, would lead to a passing grade. Think "B" at most.
- 3 Very good work; goes way beyond minimal requirements. Think "A" grade.

The

The TA will be responsible for collecting and grading the PA assignments.

- He or she will post announcements ahead of time to let you know what they expect you to upload to Canvas for these assignments.
- Make sure you spend many hours every week working on the practice assignments in order to develop the necessary skills to be successful with the exams.
- It is your responsibility to ask *specific* questions early in the week to help you complete the PA. These questions must be asked in person to the TA during their office hours or by emailing them. Do not use forums to ask questions about any graded assignment. Waiting the last minute to ask something in the lines of "I don't understand, can someone help?" does not qualify as a specific-enough question meant to help you understand the material.

Proctorio Proctoring Software

All students must review the syllabus and the requirements including the online terms and video testing requirements to determine if they wish to remain in the course. Enrollment in the course is an agreement to abide by and accept all terms. Any student may elect to drop or withdraw from this course before the end of the drop/add period.

Online exams and guizzes within this course may require online proctoring. Therefore, students will be required to have a webcam (USB or internal) with a microphone when taking an exam or quiz. Students understand that this remote recording device is purchased and controlled by the student and that recordings from any private residence must be done with the permission of any person residing in the residence. To avoid any concerns in this regard, students should select private spaces for the testing. The University library and other academic sites at the University offer secure private settings for recordings and students with concerns may discuss location of an appropriate space for the recordings with their instructor or advisor. Students must ensure that any recordings do not invade any third party privacy rights and accept all responsibility and liability for violations of any third party privacy concerns. Setup information will be provided prior to taking the proctored exam. For additional information about online proctoring you can visit the online proctoring student FAQ available at http://www.usf.edu/innovativeeducation/resources/student-services/online-proctoring.aspx

Practice Assignments

4. USF Policies

While advisors, directors, department chairs and administration are available to assist students in meeting academic regulations, policies and procedures, it is ultimately the student's responsibility to be acquainted with all academic regulations, policies and procedures, and to meet all requirements.

Policies about disability access, religious observances, academic grievances, academic misconduct, and several other topics are governed by a central set of policies that apply to all classes at USF. These may be accessed at: https://www.usf.edu/provost/faculty-info/core-syllabus-policy-statements.aspx [The link shown is that which accesses the referenced site.]

We provide, in the remainder of this section, additional notes supplementing the above resources. The other sections of this syllabus also supplement these resources with additional instructor- and course-specifics policies.

Student Code of Conduct

The University of South Florida values a community based on the principles of integrity, civility, and respect. As such, the USFP community expects students to behave in a manner that supports these principles. The Student Code of Conduct is a document which describes behavior that is counteractive to these principles and how the university will hold students accountable to those inappropriate behaviors.

Online Proctoring

All students must review the syllabus and the requirements including the online terms and video testing requirements to determine if they wish to remain in the course. Enrollment in the course is an agreement to abide by and accept all terms. Any student may elect to drop or withdraw from this course before the end of the drop/add period.

Online exams and quizzes within this course may require online proctoring. Therefore, students will be required to have a webcam (USB or internal) with a microphone when taking an exam or quiz. Students understand that this remote recording device is purchased and controlled by the student and that recordings from any private residence must be done with the permission of any person residing in the residence. To avoid any concerns in this regard, students should select private spaces for the testing. The University library and other academic sites at the University offer secure private settings for recordings and students with concerns may discuss location of an appropriate space for the recordings with their instructor or advisor. Students must ensure that any recordings do not invade any third party privacy rights and accept all responsibility and liability for violations of any third party privacy concerns. Setup information will be provided prior to taking the proctored exam. For additional information about online proctoring you can visit the online proctoring student FAQ. http://www.usf.edu/innovativeeducation/resources/student-services/online-proctoring.aspx

Netiquette

General Communication Guidelines

 Act professionally in the way you communicate. Treat your instructors and peers with respect, the same way you would do in a face-to-face environment. Respect other people's ideas and be constructive when explaining your views about points you may not agree with.

- Be sensitive. Be respectful and sensitive when sharing your ideas and opinions. There will be people in your class with different linguistic backgrounds, political and religious beliefs or other general differences.
- Proofread and check spelling. Doing this before sending an email or
 posting a thread on a discussion board will allow you to make sure
 your message is clear and thoughtful. Avoid the use of all capital
 letters, it can be perceived as if you are shouting, and it is more
 difficult to read.
- 4. Keep your communications focused and stay on topic. Complete your ideas before changing the subject. By keeping the message on focus you allow the readers to easily get your idea or answers they are looking for.
- 5. Be clear with your message. Avoid using humor or sarcasm. Since people can't see your expressions or hear your tone of voice, meaning can be misinterpreted.

Email and Discussion Board

- 1. Use the subject line effectively by using a meaningful line of what your email or discussion is about.
- 2. Keep your emails and postings related to the course content. You should not post anything personal on a discussion board, unless requested by the instructor.
- 3. Any personal, course or confidential issues should be directly communicated to the instructor via email. The discussion boards are public spaces; therefore any issues should not be posted there.

5. Additional Course-Specific First Day Attendance Policy

Due to this course being delivered in an online asynchronous way, first day attendance will be taken using a First Week Quiz. The latter will be available on the Canvas site for this offering until the Friday of the first week at 1pm. By then, you will have to have not only taken it to completion, but also achieved 100% of the available points for this quiz. Failure to do so will result in you being marked "absent" on the first day attendance Canvas tool.

Important remarks;

- The quiz only features questions which are meant to allow you to certify that you complied to all requirements for the first week.
- These require you to have actually complied with all first week requirements before you certify you are indeed compliant. Therefore, start working as early in the week as possible.
- You are able to take this quiz multiple times, unlike the other graded quizzes we will be using this semester. So you might take it, learn from your mistakes; take it again until you score the required 100% on it. Make sure you do this before the deadline
- You may verify whether you got this quiz right by looking at its gradebook entry
- If you decide to drop from the offering, you still need to work with the registrar on ensuring you are properly dropped. Simply not taking the quiz or scoring less than 100% of the available points does not wave other required procedures for you to drop.

6. Additional Course-specific Technology Requirements

Ground Rules

- The following are not suggestions but requirements which you need to meet by the time you certify meeting them in our first week quiz.
- Failure to meeting the requirements or certifying that you meet them in the first week quiz will result in you being dropped from the course.
- If at any point during the semester, the instructor establishes that you failed to meet these requirements and did not disclose it or drop the course, you will be asked to drop the course without further support.
- You are responsible to ensure you meet all these requirements see technical support below for available resources

Technical Support

Laptop

Requirements

- If you encounter technology-related problems, immediately use the online helpdesk at https://livechat.health.usf.edu/
- Alternatively, you may want to contact help@usf.edu for support and copy your instructor to the original email request.
- You must own a laptop to work in this course
- It must allow you to access the USF Tampa Campus wireless network
- It must run Windows 10 and the complete Microsoft suite of office software.
- The above machine must allow you to run efficiently the course software that you will be required to install and test during the first week; refer to instructor announcements and other material made available to you during the first week.
- If the course uses on-campus exams, your laptop must be able to operate for up to 2:30 hours on its battery charge without being plugged in.
- In order to be able to engage in online live sessions, you will also be required to use a microphone and headset.

Internet Access

In order to participate in an online course, you need the following;

- At least daily access to the Internet
- Reliable internet connection preventing you from being dropped during online activities, and receive zero points for them if they are graded
- Fast internet connection allowing you to meet your instructor or other students using Blackboard Collaborate
- Internet browser and plugins necessary to run Blackboard Collaborate, Canvas, Proctorio, and other software used in online courses at USF.
- This course will be using specialized software. Details on where to download the software and how to install it will be provided during the first week.
- Usage of this specific software in the course is mandatory for all course activities. A grade of 0 will be assigned to any submission developed using another environment
- You must ensure that your software is working properly by the end of the first week or drop this offering.
- The instructor is not responsible for adapting the software to the specifics of your personal computer. Requests to do so will be ignored

Software Requirements

and won't constitute a substitute to the above.

- USF NetID
- **USF Email**
- You must have a USF Student ID in order to sign up for your USF NetID that is required for access to the Learning Management System.
- E-mail: Every enrolled USF student receives an official USF e-mail
 account that ends with "usf.edu." Every official USF correspondence
 to students is sent to that account. Students should go to the USF
 Information Technology website for "New User" information at
 http://www.it.usf.edu

Technical Issues

This is an online offering, we are using technology. Technology is not 100% reliable. Do not wait the last minute to submit and assignment. Make sure you schedule your work to be able to recover from last minute technical difficulties. Failing to do so puts the responsibility in your camp, not the instructor's, not the LMS team's, not the "internet".

- Make sure you verify the contents of the files you're about to upload for an assignment BEFORE to upload them.
- Make sure that you know how to submit assignments via the LMS before to take this offering.
- You will not be granted extra delays to resubmit if you encounter a technical problem which cannot be documented, e.g.
 - o ISP "phantom" outage / Mysterious PC failure / Lost emails
 - "I submitted it in blackboard but you didn't get it"
 - 0 ...

It is therefore recommended that you submit early and carefully. Emails should be used only for personal inquiries and you should follow up if you do not get a response within 24 business hours. Backup your files at home and do not wait to take an online exam during unfavorable weather.

Canvas

- Students are expected to already know how to use the Learning
 Management System deployed at USF before to enroll in this offering.
- If you are unsure as to what this entails, contact immediately the USF help desk at help@usf.edu to receive training.
- Last minute technical issues due to a lack of preparedness won't constitute a valid excuse.

7. Additional Instructor-Specific Policies

Instructor's Right to Modify the Course Syllabus. Expectations in students' communications As the instructor of record for this course, I reserve the right to modify the course syllabus at any time during the semester to address changes needed in content, course resources, assignments, due dates, etc.

- Use your USF official email address to send emails and make sure you refer the offering you are enrolled in along with the context of your question; e.g. "I am taking COP3515 IT Program Design and I have problems with quiz 302-Q, question #4". Emails which fail to provide this information might take much longer before they are processed
- Be polite and respectful to your interlocutor at all times, regardless of

- their rank; e.g. student, TA, tutor, instructor...
- Insults, sarcasm, excessive punctuation marks or other violations of netiquette will not be tolerated. Students sending such emails will be subject to USF policies on Academic Disruption.
- At the very minimum, the student will be added to the instructor's email spam filter and remove from the course's Canvas site thus preventing him or her from further disrupting the teaching process.

Academic Dishonesty

- You are expected to work independently on all graded activities. Every graded work is required to be personal work only. Using material authored by others (e.g. found on the web, previous students, knowledgeable friends...) or seeking other peoples' advices besides the instructor is considered cheating.
- Any question about graded assignments can be only asked to your instructor by email or in person. It should never be asked on a forum.
- Any form of cheating or plagiarism will be sanctioned by a 'FF' grade for all party involved.
- Being unable to explain any aspect of the material you submitted to be graded as your own work will be considered the result of cheating and will be sanctioned the same way.
- The instructor reserves every right to use any possible mean to assert if a given student cheated or not. This may include, but is not limited to, (automatic) comparisons to other sources, questioning student(s), etc.

Grading, Grading Criteria and/or Scale

- No late assignments will be accepted. You are responsible for attempting your submissions ahead of time enough to allow you to seek help should a technical issue occur.
- No credit nor make-up for missed exams, quizzes or assignments
- Serious situations will be considered as exceptions to the above only with justifications (e.g. police, medical reports, etc) which will be investigated.
- There will be no "pre-grading" nor "proof-reading" of work you are expected to submit later as part of a graded learning activity. You will have opportunities to get feedback on practice assignments.
- If there is a conflict with my final examination and another course exam you have, please let me know as soon as possible so that we can schedule a make-up exam for you.

Grades Errors

- Errors in grading are considered errors when the students is able to provide irrefutable evidence that his or her solution is [1] working and [2] in line with the requirements.
- Subjective considerations will not be taken into consideration nor will errors from the student in interpreting the requirements. Being able to interpret instructions correctly is an ability which is also measured as part of a learner or an IT Professional's evaluation.
- Errors in grading must be reported in detail to the instructor, by email within 48 hours. However, the instructor's subsequent decision on the matter will be final. Further communications on that issue will be ignored. Grading is *not* a negotiation, any more than your future boss' judgment of your work's quality is.

Gradebook Usage

- Students are expected to monitor their gradebook daily.

 Students are expected to read the feedback on every grade as they are released. Questions should be emailed to your instructor only within 48 hours of the grades release.

- Staying registered beyond the first week implies acceptance of this syllabus' terms.
- Anything not explicitly authorized in writing by the instructor, i.e. syllabus / announcements / emails / instructions, is considered disruptive or unethical behavior from students. If in doubt, you are expected to email your instructor to verify the appropriateness of a given behavior prior to engage in it.
- If a given communication from your instructor contradicts another, it is your responsibility to email your instructor to verify which policy is appropriate.
- Please make sure that you turn off your cellular phone during scheduled class meetings (online or face-to-face) and do not use your computer for non-course related purposes when engaged in live online sessions.

8. Advice

Engage in Learning

- Make sure you use the gradebook to review your grades and feedback on the various items every week so you may monitor your progress.
- Check the course's sites for updates or announcements on a daily basis.
- Do not simply "do the minimum". A learning activity might not be graded, e.g. posting on forums to ask / answer questions, but yet it may be essential to your academic experience.
- Depriving yourself of such opportunity has generally a very negative impact on both grade and quality of the skills you develop during your degree.
- A 3 credit course at USF generally require students to devote 12 hours of work every week during spring and fall semesters.
- During summer semesters, which are 10 weeks only but need to cover the same material than our 16 week long semesters, this number of hours proportionally rises to about 20.
- Do not wait for the last minute to work on your assignments. The most effective way to work is to have multiple work sessions over the week.
- This allows you to have time to ask questions, and get responses, before deadlines. If you do not give yourself the time to work like so, you might implicitly forfeit any opportunity to actually get help.

Get Help Early & Often

- As a student, it is your responsibility to work on both graded and nongraded assignments / quizzes / exercises regularly with the intent to develop your understanding of the material being taught.
- However, you should also seize opportunities to get help with this task.
 This offering has many such opportunities readily available to support your learning; meeting with the instructor online or in-person, using forums to ask questions, working on non-graded practice assignments with other students...
- Establish, early in the semester, a regular dialog with your instructor. I

Other

am always happy to discuss your experience in the course. Do not hesitate to reach out to me regarding any problems you might have; e.g. technology, learning activities, difficulties with the material, questions about the BSIT program, how to make the most out of your study time...