COP3353 – User-Level Intro to Linux

Spring 2017 Syllabus

1. Instructor Information

Name	Alessio Gaspar
Website	http://cereal.forest.usf.edu/alessio
Email	alessio@usf.edu

- Use for personal / private questions, or questions about anything graded. The Canvas forums are where you should post anything else.
- If you don't hear from me within 24 business hours, please re-send your email or post in the support forum to report the potential issue.
- Use only your USF email address so that you are not spam-filtered
- Do not email me at alessio@mail.usf.edu it will not reach me
- **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 a daily basis and is subscribed to the **support forum** in order to provide fast response.
 - Refer to announcements and website for details on the role of each forum and the rules for using them.
- **Canvas Messages** Do not message your instructor using the Canvas messaging system.
 - This includes replying to announcements & replying to grade feedback.
 - Failure to do so will result in delays in getting a response from your instructor or even lost messages.
 - It is your responsibility to avoid these issues by instead using your USF email address to email your instructor as instructed above.

Address ENB343E

Department of Computer Science & Engineering

University of South Florida 4202 Fowler Avenue Tampa, FL, 33620-9951

813 974-2932 Phone

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

All office hours require you to make an appointment at least 24 business hours ahead. These are not walk-in.

Online office hours will be held TBD. When you book some online office hour time, a link will be sent to you. See Course-Specific **Technology Requirements**. Contact help@usf.edu to inquire about preparing your machine for a "blackboard collaborate" meeting beforehand if you need to.

In-person office hours will be held TBD

To Be Announced

Office Hours

Teaching Assistant

2. Course Information

Prefix COP
Number 3353
Section TBD
College EN
Department EIT
CRN TBD

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

Course Meeting
Times & Location
Required Textbook

n/a – see above

Guide to Unix and Linux

Harley Hahn, McGraw-Hill Higher Education, 2009 ISBN-10: 0-07-313361-2, ISBN-13: 978-0-07-313361-4

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, students will understand;

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

Learning Outcomes

Achievement of the above objectives will be measured by a student's ability to;

- 1) Install and configure a modern Linux distribution in a virtualized environment, take snapshots of the virtual machine
- Investigate a new Linux tool or technology by finding and evaluating available online resources and applying them to perform specified tasks
- 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 login to 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/linux/LO/

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

Week	Begins	Module	Lecture Topic	GQ	DF	PA
#	on	#				
1		FWM	First Week Module	special	special	special
2		M01	CLI & Desktop	GQ-01	DF-01	PA-01
3		M02	Help & Users	GQ-02	DF-02	PA-02
4		M03	Managing Packages	GQ-03	DF-03	PA-03
5		M04	Bash Shell	GQ-04	DF-04	
6		M05		GQ-05	DF-05	PA-05
7		M06	Filters	GQ-06	DF-06	PA-06
8		Midterm				
9		M07	Filters	GQ-07	DF-07	PA-07
10		M08	Regular Expressions	GQ-08	DF-08	PA-08
11		M09	File System	GQ-09	DF-09	PA-09
12		M10	Processes	GQ-10	DF-10	
13		M11	Bash Scripting	GQ-11		PA-11
14		M12		GQ-12		PA-12
15		Final				
16						

Legend

Week#

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

Date of the Monday starting this specific week. Begins on

Module # **Self-Explanatory Lecture Topics** Self-Explanatory

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

Practice Assignments PΑ 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	30%
Proctored, online, Exams	50%
Participation to "DF" Forums	20%
Total Points Available	100%

Graded Quizzes

- They will be administrated using Canvas and will allow students to evaluate their understanding of all the modules of a given week.
- The quiz for a given module will be available on a Saturday at 11:55pm and you will have until Monday at 11:55pm to take it.
- During this time, you will not be allowed to ask any questions on the forums regarding material related to the quiz questions. If you have any questions during or after the quiz, you are only allowed to discuss it with your instructor by emails.
- You are allowed to take the quiz a single time and need to complete it in one shot during the allotted time. If you experience a technical difficulty, email your instructor immediately with documentation of the problem you encountered. 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 will rely 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 emailed details on what happened and documentation 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, email your instructor, get a response 2 hours later, then you have only 1 hour left
- Such requests will be processed as time permit. Sending an email at

Proctored, inperson, Exams

- 9pm the day of the deadline will most likely result in a response the next day, too late to grant another attempt.
- Both the midterm and final exams in this course will be time-limited, one attempt only, online exams proctored using the Proctorio software.
- Each will be 2 hours long

-

The following will result in receiving zero points to any of these exams and thus potentially fail the course;

- 1. Inability to take the exam due to lack of proper equipment; e.g. it is your responsibility to ensure that you own a laptop allowing you to perform all required exams tasks and run all necessary software
- 2. Communicating in any way during the exam with anyone or use of search engines or similar technologies to obtain information on how to answer exams' questions
- 3. Using resources not explicitly allowed for this exam by the instructor and in writing in the exams' instructions; e.g. google, software, hardware...

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.

Practice Assignments

Although they are not graded, it is recommended to spend many hours every week working on the practice assignments in order to develop the necessary skills to be successful with the exams.

Please note that the GQs will assume that you were able to complete successfully the practice assignments during the week. As such you may have questions on these in the GQs. It is your responsibility to ask *specific* questions early in the week to help you complete the PA. Waiting the last minute to ask something in the lines of "I don't understand, can someone help?" does not qualify for a specific question meant to help you understand. It is just an attempt at getting responses before the examination time. These questions will not be addressed.

Extra Points

Please also note that you are not allowed to post questions about the study material or the PAs after Saturday 11:55pm on the forums. You have until Saturday 11:55pm every week to work on the course material and request help understanding it. By the time the GQs are released, asking questions on topics related to the GQ questions will be processed as a cheating attempt. Extra points are not available every semester and are assigned at the discretion of the instructor to reward students who have shown outstanding contributions. Sometimes, end of semester surveys are made available & participation is rewarded with a few points. Regardless, plan on passing without any extra points.

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.

You are therefore referred to the following resources which detail the various USF Policies about which you should be knowledgeable before to enroll in any course;

- USF Undergraduate Catalog for the current academic year
 - http://www.ugs.usf.edu/catalogs.htm
 - Standard Policies http://www.ugs.usf.edu/ugc/standard policies.htm/
 - Academic Policies and Procedures sections http://ugs.usf.edu/pdf/cat1516/08ACADEMICPOL.pdf
- USF Undergraduate Studies website
 - http://www.usf.edu/undergrad/
 - List of regulations for undergraduate polices at http://www.usf.edu/undergrad/faculty/policies.aspx
- USF Office of Student Rights & Responsibilities http://www.sa.usf.edu/srr
 - Student Code of Conduct
 http://regulationspolicies.usf.edu/regulations/pdfs/regulation-usf6.0021.pdf
- USF Students with Disabilities Services
 - http://www.usf.edu/student-affairs/student-disabilities-services/

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.

Academic Support and Accommodations for Students with Disabilities Student Code of Conduct

- Students in need of academic accommodations for a disability may consult with Students with Disabilities Services to arrange appropriate accommodations.
- Students are required to give reasonable notice prior to requesting an accommodation.

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.

University Emergency Policy

In the event of an emergency, it may be necessary for USF to suspend normal operations. During this time, USF may opt to continue delivery of instruction through methods that include but are not limited to: Blackboard, Elluminate, Skype, and email messaging and/or an alternate schedule. It's the responsibility of the student to monitor Blackboard site for each class for course specific communication, and the main USF, College, and department websites, emails, and MoBull messages for important general information.

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 11:55am. 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

If you encounter technology-related problems, immediately contact help@usf.edu for support and copy your instructor to the original email request.

Laptop Requirements

- 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 8 or 8.1 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.
- You must be able to bring this laptop to use during our proctored, inperson exams, along with its power supply and necessary electrical cords.
- 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
- 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, and other software used in online courses at USF.
- This course will be using specific software tailored to the needs of this offering
- 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 and won't constitute a substitute to the above.

USF NetID

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.

USF Email

E-mail: Every enrolled USF student receives an official USF e-mail account that ends with "mail.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 assignment via the LMS

Software

Requirements

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"
 - o ..

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.
- 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.
- 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

Academic Dishonesty

- 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.

Other

- 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.

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 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...