

Harry McGregor and George Cohn
CIS218
Introduction to Voice over IP (VoIP)
January 6, 2015
hmcgregor@pima.edu
gwcohn@pima.edu

CIS218 Class information

January 20th	Review syllabus – Class intro – Telephony technology lecture / discussion
January 27th	Install base Linux environment – asterisk installation
February 3rd	Dial plan, configuration of hard phone
February 10th	Trunking, outside connectivity, Auto Attendant and IVR
February 17th	AsteriskNOW! installation
February 24th	Class Project: AsteriskNow! setup a "meetme room", and setup a trunk to reach the meetme room from the Debian PBX
March 3rd	Class Project: Auto recording of all phone calls
March 10th	Class Project: Asterisk Telemarketer Torture
March 17th	NO CLASS – Spring Break
March 24th	Asterisk T1 Hardware, Channel Bank Configuration and Analog dial tone
March 31st	Based on Class
April 7th	Based on Class
April 14th	Based on class
April 21st	Based on class
April 28th	Based on class
May 5th	Based on Class
May 12th	In-Class Online final exam with practical

This list is a sampling of the many possibilities. The exact content of the class will depend on the interests of the students enrolled and the time available.

Lab Resources

The classroom is set up with 27 computer systems for student use and two systems for the instructors.

Attendance and Grading Policy

Attendance: A daily attendance quiz will be offered for tracking. Attendance will carry a class weight 10%.

Completion of in-class Lab Activities:: The class weight of this section will be 20%.

Homework:: Pima CC is requiring a specific amount of assigned homework per credit hour. For this class, the formula results in 8 hours of homework per week. Homework will be posted to the MyPima class website, and may include tutorial videos, work inside a linux/asterisk environment from home, reading, and research papers as needed to meet this requirement. Homework will have a class weight of 10%

Final: The final will carry a class weight of 60%.

Course Grade Determination:

The weighted percentage of each of the performance measurements will be summed. The following table will be used to determine your grade:

Greater than 90%	A
Greater than 80% and less than 90%	B
Greater than 70% and less than 80%	C
Greater than 50% and less than 70%	D
Less than 50%	F

Initial Participation

Students who do not actively participate by taking the in the class attendance quiz at least once by the drop deadline will be dropped from the class. This may result in adverse financial consequences such as a change in financial aid, veterans' benefits, other benefits related to being a full-time student (see PCC BP 3108).

Continued Participation

If a student begins the course but does not actively participate by taking the in the class attendance quiz for 10 consecutive calendar days, the student's record will be flagged with the Registered but Not Attending (RN) status. The College will initiate contact to determine whether the student intends to return to the course. If the College is unable to confirm the student's intent to return, the student will be considered unofficially withdrawn for purposes such as financial aid and Veterans' benefits and adverse consequences may result for the student. (<https://www.pima.edu/about-pima/policies/board-policies/BP-3103.html>)

Software License and Copyright Statement

Some of the software used in our classes is copyrighted and is licensed to Pima Community College. Copying of licensed and/or copyrighted software is not permitted. Copying of some software can be desirable and encouraged. Check the license agreement. I hope most of the software used in this class is covered by the FSF (<http://www.fsf.org>) public license. It is copyrighted but copying is encouraged.

Americans with Disabilities Act

Pima County Community College District strives to comply with the provisions of Title III of the Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973. Students with disabilities requiring special accommodations are strongly encouraged to notify the instructor at the beginning of the semester so that appropriate verification and identification of reasonable accommodations may be made in a timely manner. (Accommodations cannot be made without verification of need.)

Install Guide – CIS 218

Username: pima23248

Open Debian VM: /home/pima23248/CIS218/Debian Gnu Linux/Debian Gnu Linux.vmx

Debian Installation Settings:

IP address: 10.227.5.(10 + system number)/24
gateway: 10.227.5.1
Name Server: 10.227.5.5
Host Name: a227-XX (ie a227-02)
Domain Name: cis218.a227.cis
Debian archive mirror: ftp.us.debian.org
Proxy server: <http://10.227.5.5:3128>
Create a normal user based on your name
Arizona Time Zone
Guided - use entire disk
Separate /home partition
Do not participate in the popularity contest
DO NOT SELECT GRAPHICAL DESTOP ENVIRONMENT !!!
Software Selection: SSH Server and Standard system utilities **ONLY**
Install GRUB to the MBR
You may want to install vim and gpm once your system is booted

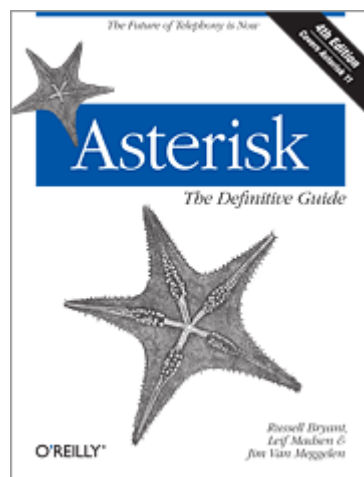
AsteriskNow Installation Settings:

IP address: 10.227.5.(40 + system number)/24
gateway: 10.227.5.1
Name Server: 10.227.5.5
Host Name: a227-XX-an (ie a227-02-an)
Domain Name: cis218.a227.cis

Polycom IP Settings:

IP address: 10.227.5.(220 + system number)/24
gateway: 10.227.5.1
Name Server: 10.227.5.5
NTP: 10.227.5.5
TFTP: 10.227.5.5
Host Name: a227-XX-polycom (ie a227-02-polycom)
Domain Name: cis218.a227.cis

Text: The textbook is ISBN-13: 978-1449332426 ISBN-10: 1449332420 Edition: Fourth Edition



There is an earlier version called Asterisk, the Future of Telephony which is available as free download or an online html version at <http://www.asteriskdocs.org/>.

While it does not cover the latest version, it is very useful as well.