

Programming in VISUAL BASIC

Syllabus

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website



drjeffsoftware.com/classroom.html

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Today's Agenda

COMP105BAS

1) Lecture 2:00pm – 2:45pm

☐ Final exam prep

Week **15**

Friday

Lab JD1538

2) Lab 2:45 – 4:45pm

☐ Lab 6

3) Break 3:20 – 3:30pm

4) Office hour: 4:45 – 5:45pm

HOLIDAYS

❖ Nov 23 – Thxgiving

Bad Tech Day

COMP105BAS



- ❖ Power-on PC!
- ❖ Check cables!
- ❖ Check settings!
- ❖ Use stick ...

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COMP105BAS

- ❖ Syllabus → slide 4
- ❖ VB.NET → slide 16
- ❖ Exams → slide 17


Section


COMP105BAS

Syllabus

Subjects

COMP105BAS

Week	1	2	3	4	5	6	7	8
Topic	Forms MVC	Vars/Typ Controls	IF-THEN Subroutines	Loops Splash	Strings	Arrays()	Midterm prep	Midterm
Visual Studio 							Midterm	Oct 19

Week	9	10	11	12	13	14	15	16
Topic	Menus	File I/O	Exceptions	More Controls	Holiday	Crypto	Final prep	Final
				Thxgvg				Final
								Dec 14

subject to change

Class	Class Title	Exam Date	Exam Time	Exam Room
COMP 105BAS-01 (16220)	COMP PROGRM/BASIC (Laboratory)	12/14/2018, Friday	3:00PM - 5:00PM	Jacaranda 1538

Assignments/Exams

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WEEK

1	2	3	4	5	6	7	8	
Lab 1	Lab 2	Lab 2	Lab 2	Lab 3	Lab 3	Lab 4.1	Lab 4.1	
							Midterm	Oct 19

9	10	11	12	13	14	15	16	
Lab 4.2	Lab 5	Lab 5	Lab 5	Holiday	Lab 6	Lab 6		
							FINAL	Dec 14




❖ All Labs must be submitted by Dec 7

Class	Class Title	Exam Date	Exam Time	Exam Room
COMP 105BAS-01 (16220)	COMP PROGRM/BASIC (Laboratory)	12/14/2018, Friday	3:00PM - 5:00PM	Jacaranda 1538

Lab Programs

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1. Hello World (I/O)
2. Guess Secret Name (Input, IF-THEN, loops, **Controls**)
3. Launch Panel (**Forms**: create/launch, Project properties)
4. Mortgages/Loans* (IF-THEN, *numerics*, *formatted output*)
5. TV Shows (*strings*, *arrays*, *files*, *menus*) (see “Channel 88”)
-  6. Stock Market* (*arrays*, *files*, *menus*, **Forms**)
7. *Blockchains** (algorithms: cryptography—encrypt, hash)
8. Palindromes/Anagrams (*strings*)
9. Prime numbers (algorithms, loops, *subs*, *arrays*, *files*)
10. Bowling League (*arrays*, *files*, *subs*, stats, **Classes**)
11. Calendar (algorithms, *formatted output*, Date/Time)
12. **Games** (arrays, random numbers)

*Business oriented applications

Section

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News

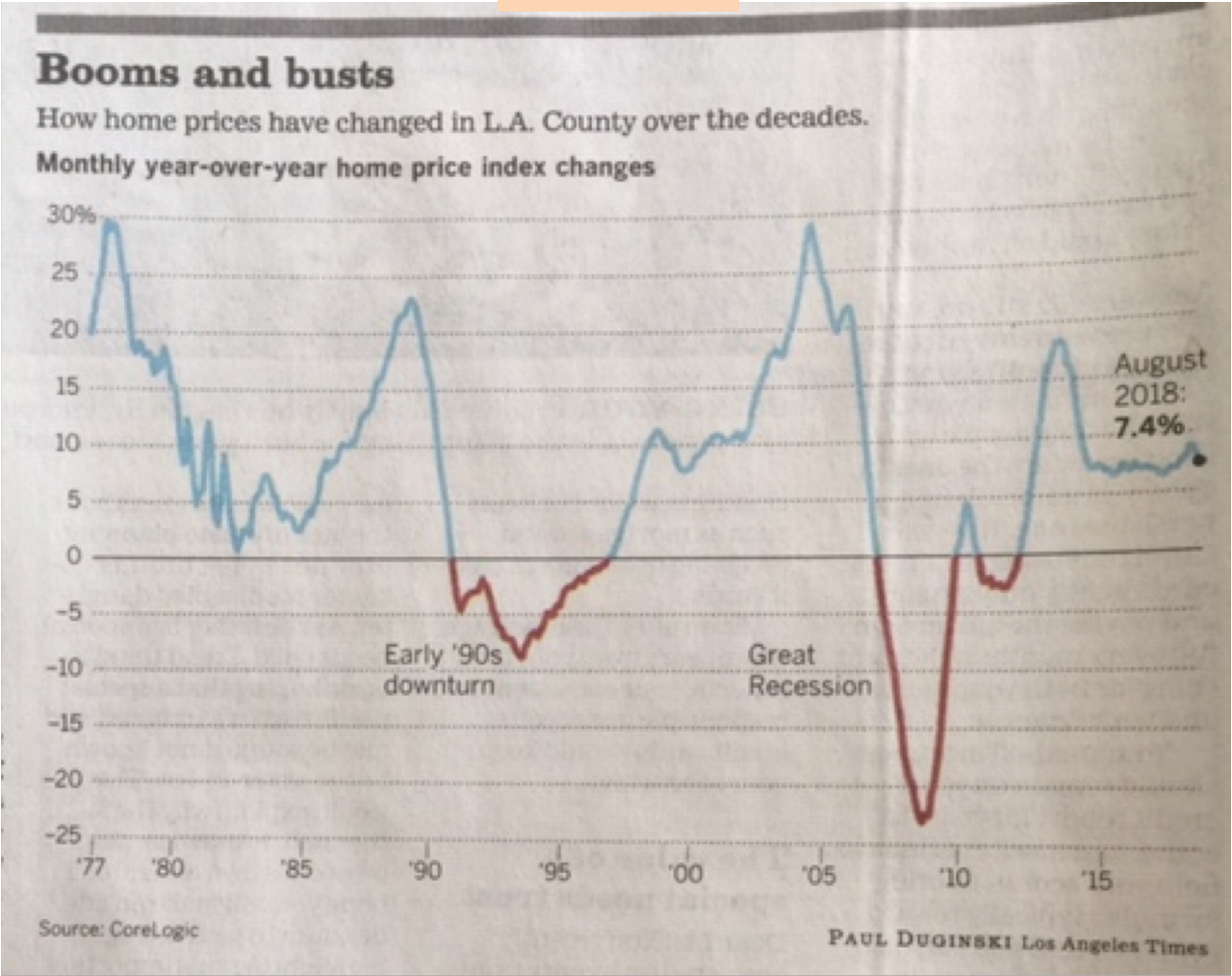
Stock Market



Home Prices

COMP105BAS

1977-2018



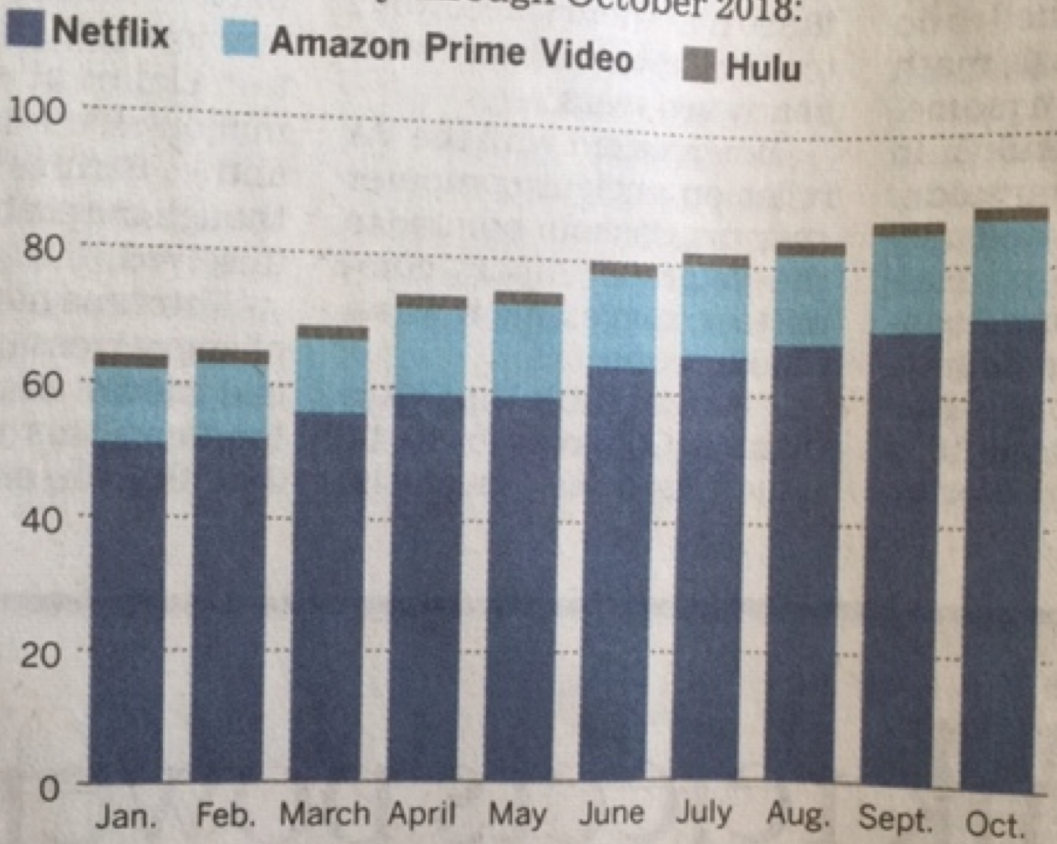
TV Shows

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Streaming

Growth in streaming animation

More original animated series are being created for streaming services. Here are the numbers of series by platform for January through October 2018:



Sources: Parrot Analytics, Hulu

PAUL DUGINSKI Los Angeles Times

This just in ...

NEWS

Historic Vote Ties Kilogram and Other Units to Natural Constants

November 16, 2018



The U.S. delegation at the 26th General Conference of Weights and Measures where more than 55 countries voted to redefine four of the seven base units for the International System of Units (SI). L-to-R: Eric Lin, director, Material Measurement Lab, NIST; Claire Saundry, director of International and Academic Affairs Office, NIST; Willie May, U.S. member of the International Committee on Weights and Measures and former NIST director; NIST Director and Undersecretary of Commerce Walter Copan; Barbara Cordero, finance analyst, Office of Management Policy and Resources, IO, Department of State and James Olthoff, Acting Associate Director of Laboratory Programs, NIST.

Credit: G. Porter/NIST



Undersecretary of Commerce for Standards and Technology Walter G. Copan votes yes on the resolution to redefine the International System of Measurements at the 26th General Conference on Weights and Measures today in Versailles, France. Delegates representing 60 nations passed the resolution unanimously.

Credit: Hans Michel/Courtesy BIPM

This just in ...

Quantum Advantages

Scientists have dreamed of having an accurate and precise measurement system that could be realized anytime, anywhere, since the 1700s. Scientific advances in quantum science, many of which have occurred at NIST and other NMIs around the world, have finally made this possible.

Quantum phenomena that are identical everywhere are already used to define the second, which is the SI unit for time, and the meter, the SI unit for distance. The second is defined as 9,192,631,770 natural oscillations of microwave radiation released by the element cesium and the meter is defined as the distance traveled by light in vacuum in 1/299,792,458th of a second. These revised definitions, implemented in 1967 and 1983, respectively, were necessary for the invention of GPS and many other modern technologies.

In May 2019 when the revised definition of the kilogram is implemented, it will be based on three fundamental constants: the Planck constant, the speed of light and the cesium atom's natural microwave radiation. The Planck constant describes the size of the packets of energy or quanta that atoms and other particles use to absorb and emit energy.

Kg

The current kilogram mass exerts a specific amount of force in Earth's gravity. The revised definition replaces this determination of mechanical force with an electromagnetic measurement tied to the Planck constant and based on electrical current and voltage. Using an instrument called a Kibble balance, after its inventor Bryan Kibble, an electric current is generated in a coil to produce a magnetic field strong enough to balance a mass of one kilogram. The method requires a precision measurement of local gravity, which varies depending on elevation and several other factors. It also requires moving the coil through a magnetic field of known strength and at a known speed, hence the tie as well to constants used to determine time and frequency.

Add/Drop & Waitlist

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❖ Week 1

- Enrollment: **Open** (class full)
- Waitlist: must attend all classes

❖ Week 2

- Enrollment: **Closed**
- Waitlist: will be given **permissions**

❖ Week 3

- Enrollment: last week to **DROP**
- Waitlist: last week to use **permissions**

❖ Week 4+ → no changes

- Enrollment: **Closed** + **NO DROPS**
- Waitlist: **permissions** expired

LMS: Moodle → Canvas

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CSUN is Moving to Canvas!

Throughout the 2017 calendar year, CSUN will transition from Moodle to Canvas -- a modern, and learning platform for today's faculty and students.

The Cool Things You Can Do With Canvas



❖ NOT using

<https://www.youtube.com/watch?v=TdDS6gVdI10>

Fall 2016	Spring 2017	Summer 2017	Fall 2017	Spring 2018
Moodle Only	Moodle Canvas	Moodle Canvas	Moodle Canvas	Canvas Only

Class Website

<http://drjeffsoftware.com/classroom.html>



DR JEFF
SOFTWARE
INDIE APP DEVELOPER

HOME

PRODUCTS

SERVICES

LICENSING

MORE...

TECH HISTORY

CLASSROOM

Dr Jeff's CSUN class CS105BAS Portal

LAST UPDATE: SEP 14, 2018

Course SYLLABUS ←

Lab Form ←

LECTURE SLIDES -- SYLLABUS & LECTURE



csun-cs105-lecture.pdf
Download File



LAB SLIDES -- VISUAL STUDIO LABS



csun-cs105-lab.pdf
Download File

slides PDF files

History of Technology



drj-classroom-history.pdf
Download File

Introduction to Technology



csun-cs110-intro.pdf
Download File

Class Years/Majors

❖ Majors:

- 16 IS-Biz
- 1 CIT
- 1 X

❖ Years:

- 16 seniors
- 2 juniors

❖ Sex:

- 12 M
- 6 F

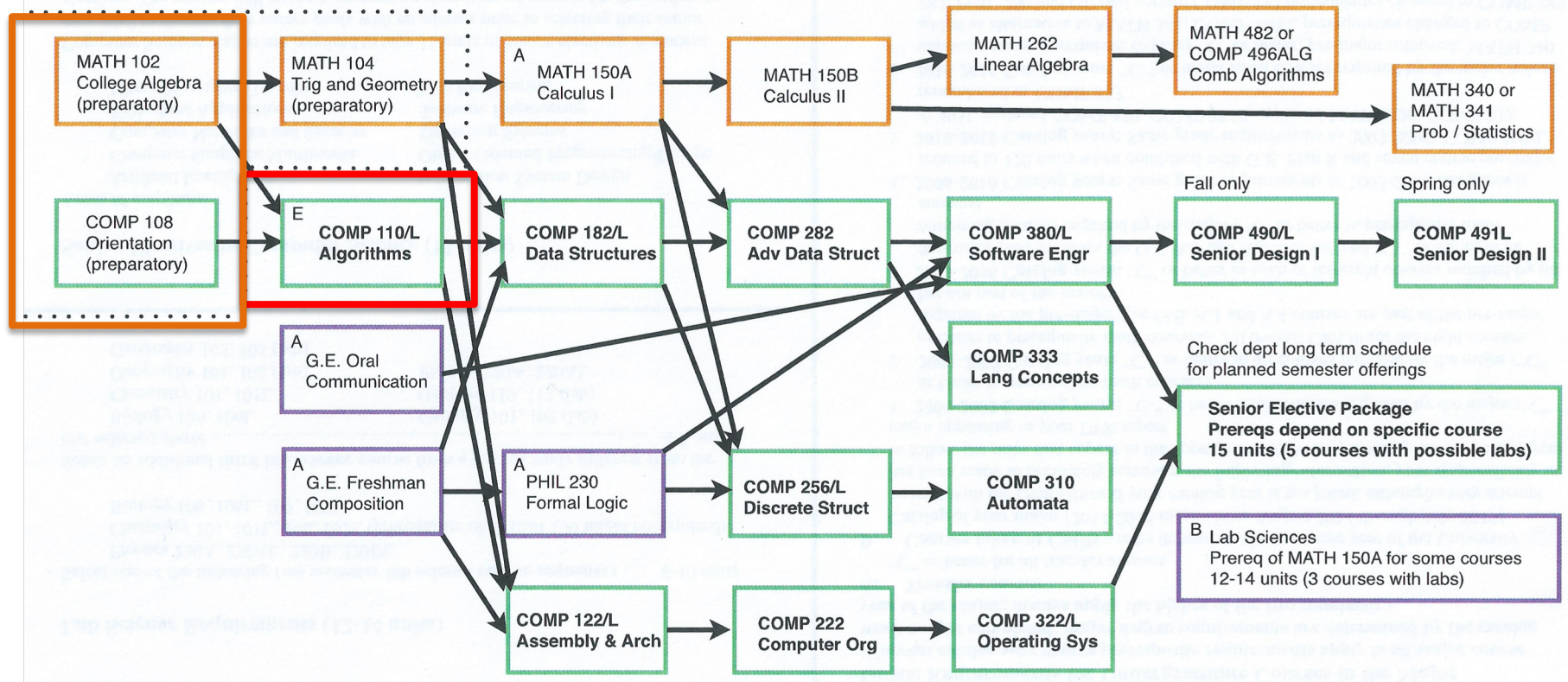
Distributions		
Year	Major	Sex
5	B-IS	M
4	B-IS	M
4	B-IS	M
4	B-IS	M
4	B-IS	M
4	B-IS	M
4	B-IS	M
4	B-IS	M
4	B-IS	M
4	B-IS	M
4	B-IS	M
4	B-IS	F
4	B-IS	F
4	B-IS	F
4	B-IS	F
3	CIT	F
3	X	F

Curriculum-CS

COMP105BAS

CSU Northridge, Computer Science Department COMPUTER SCIENCE MAJOR

2015-16 Catalog Requirements

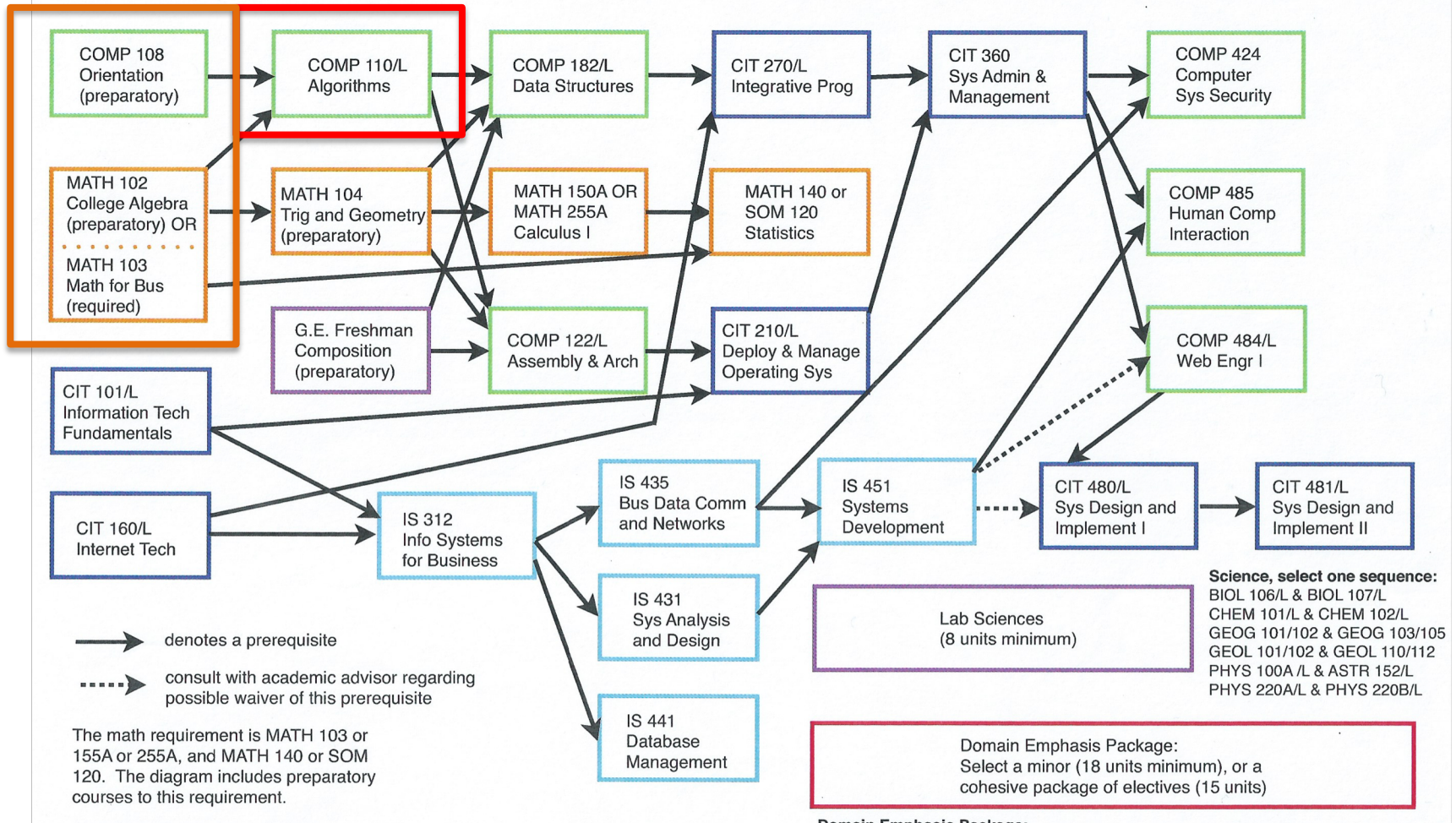


Curriculum-IT

COMP105BAS

CSU Northridge, Computer Science Department COMPUTER INFORMATION TECHNOLOGY MAJOR

2015-16 Catalog Requirements

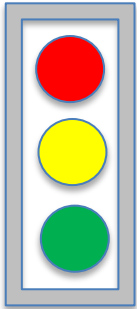


Grading – Scale

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Grade	Pct	Interpret
A+	98	VERY good
A	92	
A-	90	
B+	88	PRETTY good
B	82	
B-	80	
C+	78	BARELY good
C	72	
C-	70	
D+	68	substandard
D	62	
D-	60	
F	<60	failed

color coding



Grading – Weights

6 Labs

14 weeks @5 ea

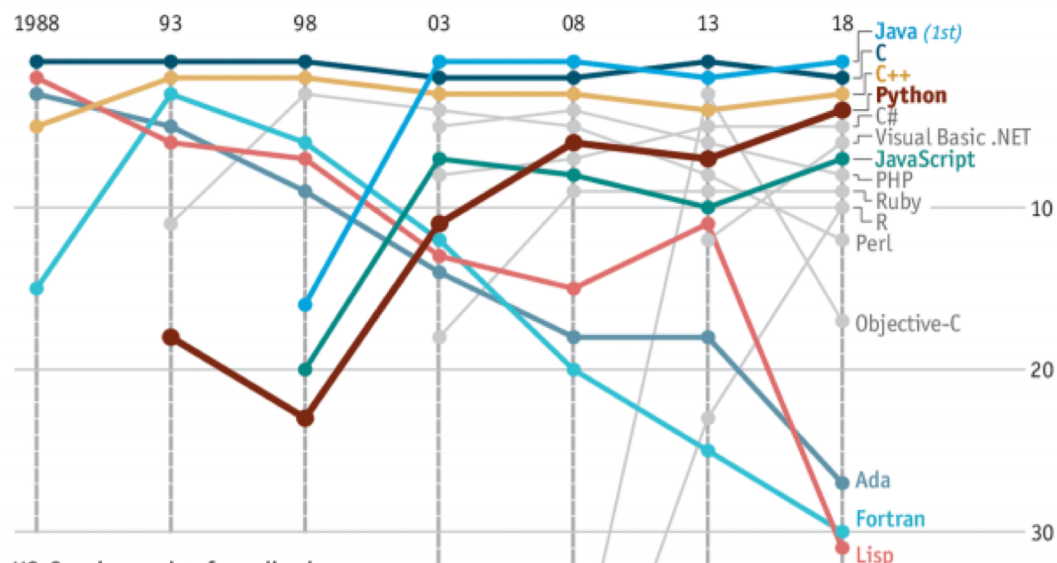
Category	Weight	
Labs	70	Programming 70
Midterm	10	Testing 30
Final	20	

HLL Usage by Search/Use

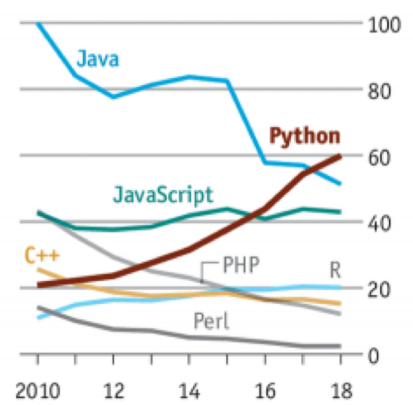
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Code of conduct

Ranking of programming languages*



US, Google searches for coding languages
100=highest annual traffic for any language



Source: TIOBE, Google Trends

* Ranked by global search-engine popularity

❖ Usage

Language	Usage by percentage
Java	21%
C	17%
C++	6%
Python	5%
C#	4%
PHP	3%
Visual Basic .NET	2%
Javascript	2%
Perl	2.2%
Ruby	2%
Assembly language	1%

(Source: <http://www.tiobe.com>)

Section

Exams



Exams

COMP105BAS

- ❖ Midterm (8th week = Oct 19)
 - Use Scantron

- ❖ Final (Dec 14)
 - Use Scantron
 - Write program segments

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➤ Make arrangements for alternative times

Midterm Prep

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❖ General knowledge (7)

- ☐ .NET Framework
- ☐ Visual Studio
- ☐ SDK/IDE/API
- ☐ MVC
- ☐ Controls
- ☐ Subs

❖ open book, notes, PC

❖ Multiple choice (Scantron 882-E)

❖ 30 mins → 2 mins ea

❖ Labs 1-3 (8)

- ☐ Lab 1 (2)
- ☐ Lab 2 (4)
- ☐ Lab 3 (2)

total = 15

Final Exam Prep

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❖ General (6)

❖ 2 hours total ➤ budget your time

❖ Strings (2)

❖ Arrays (1)

❖ Multiple choice (Scantron 882-E)

❖ Midterm top 2 (2)

❖ Controls (3)

❖ 1 hour → 2.4 mins ea

❖ Event Handlers (2)

❖ Subroutines (2)

❖ Exceptions (1)

❖ Labs 4-6 (6)

total = 25

❖ Write on separate paper

❖ Write code snippets (3 @5 each)

☐ Labs 4-6

total = 15

❖ 1 hour → 20 mins ea

Grand total = 40