

# The Computer Science Professionals' Hatchery

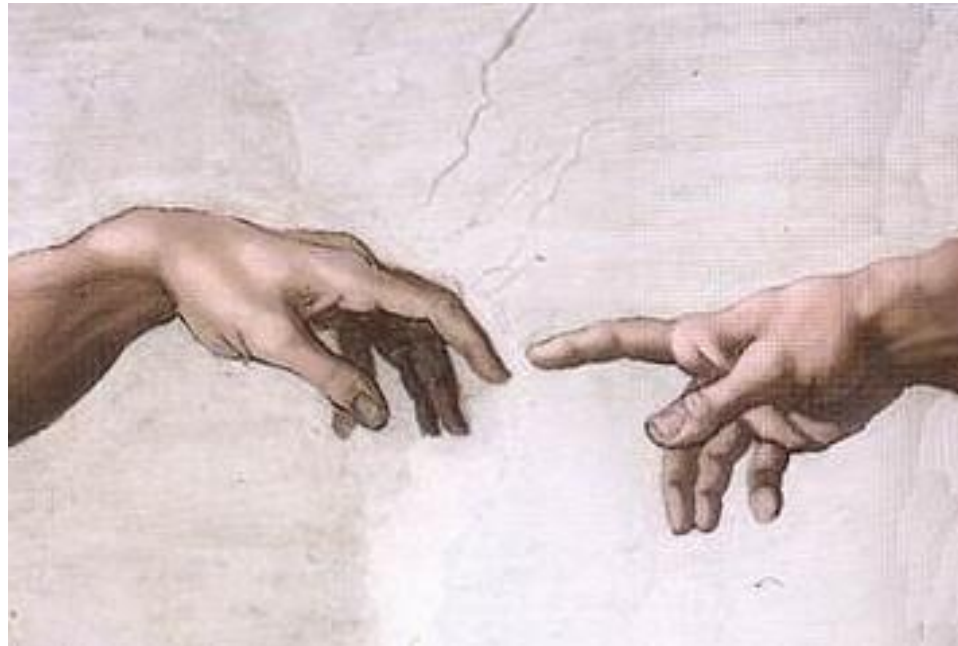
## **Incorporating Focused Professional Skills, and Inclusion, Diversity & Social Justice into the Computer Science Curriculum**

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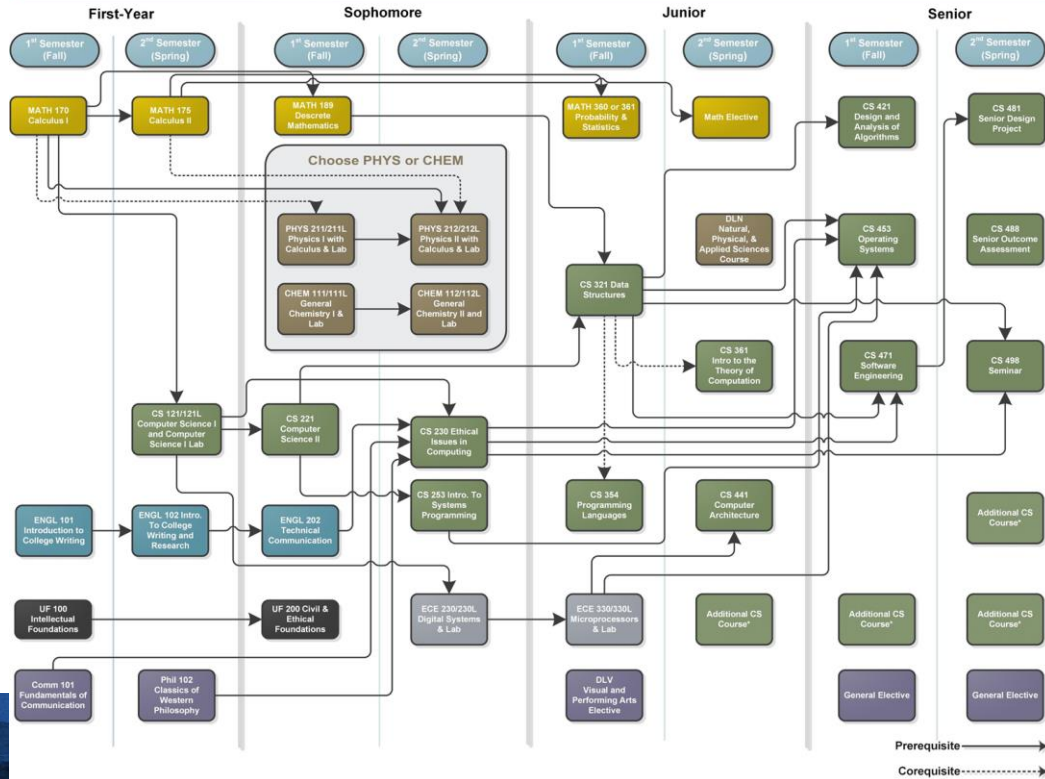
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# In the Beginning



# The Curriculum Was 'Only Technical'

Boise State University Undergraduate Computer Science Pre-requisites, 2016-2017





# Then, the 21st Century

(after the mise-en-scene 20th Century)



# “Easy to fix...”



From left, Jeremy Weinstein, Hilary Cohen, Mehran Sahami and Rob Reich of Stanford are developing a computer science ethics course for next year. Christie Hemm Klok for The New York Times

Sam Hodgson for the NYTimes: <https://www.nytimes.com/2018/02/12/business/computer-science-ethics-courses.html>

# And it was (kinda) good

(but...)



Put a good person in a bad system, and the bad system wins almost every time (Rummler & Brache, 1995)

<http://envisioningtheamericandream.files.wordpress.com/2014/04/don-draper.jpg>

# So, change the culture of the system



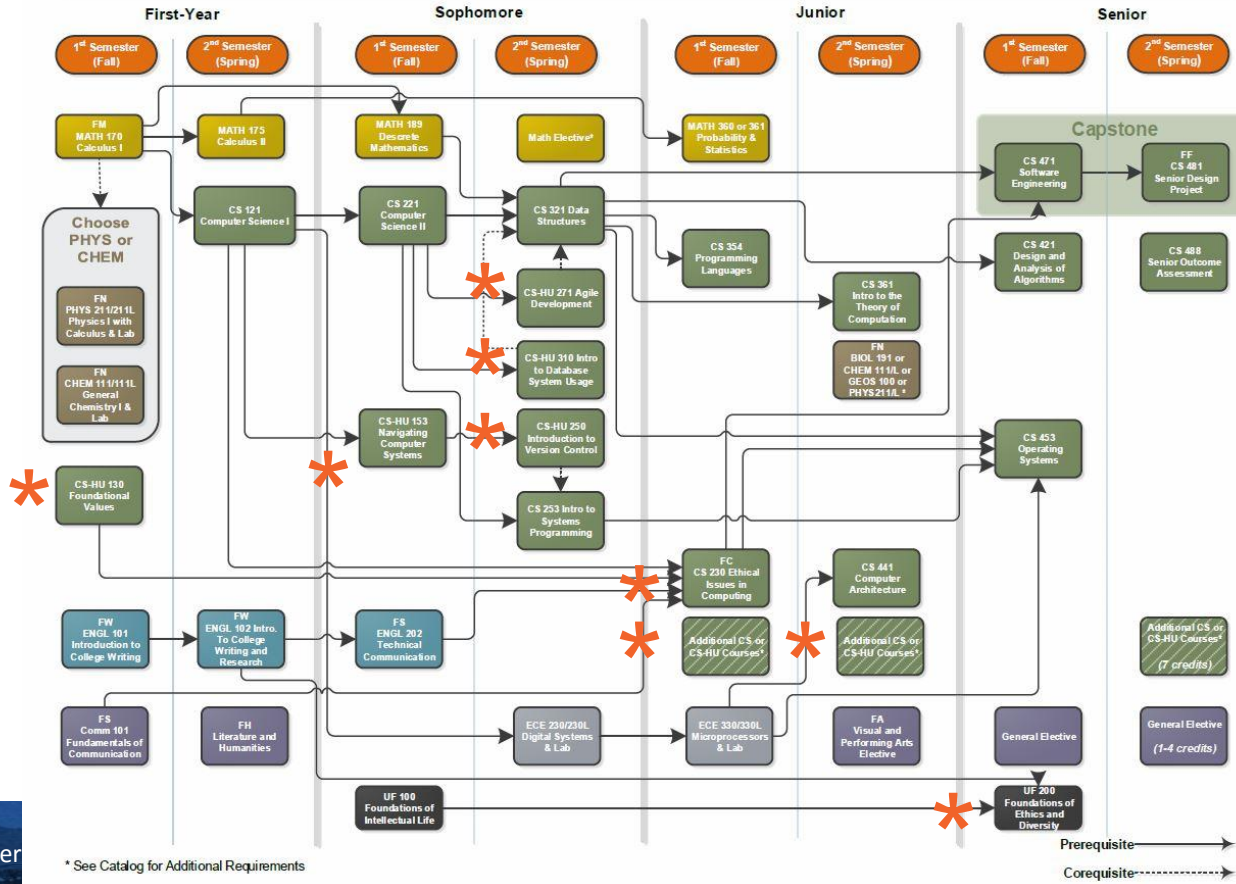
Embed (sprinkle?) 1-credit courses through curriculum that:

1. Incorporate specific technical skills important to local employers
2. Critical ideas and practices to promote inclusion, diversity & social justice





**Boise State University Undergraduate Computer Science Pre-requisites, 2018-2019**





# We Partner With Industry To Identify Technical Skills & Social Needs

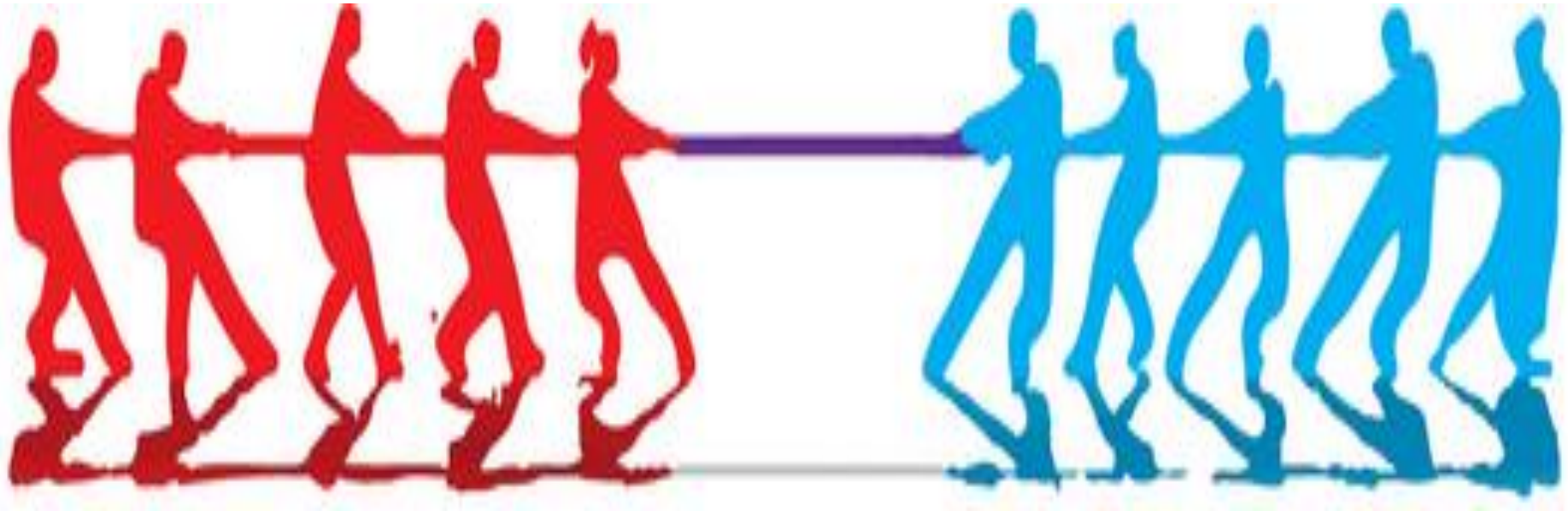
## Current CS-HU (CS-Hatchery Units)

1-credit courses in technical and professional skills, each of which also embeds case studies that highlight issues of ethics, inclusion, social justice

- CS-HU 130 Foundational Values
- CS-HU 153 Navigating Computer Systems
- CS-HU 250 Intro to Version Control
- CS-HU 269 HCI Concepts
- CS-HU 271 Agile Development
- CS-HU 274 Software Testing
- CS-HU 310 Intro to Database System Usage
- CS-HU 375 Secure Programming
- CS-HU 390 Interviews, Jobs, Careers
- CS-HU 398 Current Topics in CS

# Not everyone sees it that way

(but new faculty seem to...)





What do we want?

**STAGE 1**  
Identify Industry & Social Needs

**STAGE 2**  
Create & Update CS-HU Curriculum

Offer incentives to faculty & industry to offer CS-HU courses

**Continuous Spiral**

Formative Evaluation

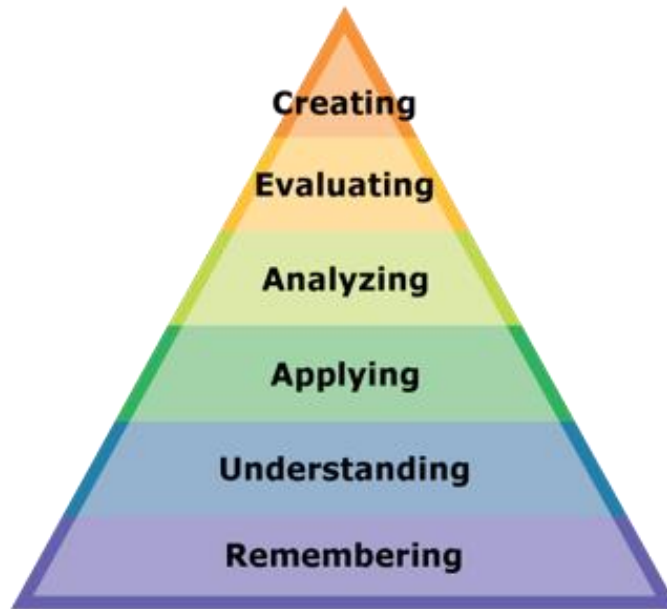
**STAGE 4**  
Do Students & Industry Accomplish Goals of CSP-Hatchery?

**STAGE 3**  
Update 3-credit Courses

Incorporate ID&SJ into existing curriculum

# All CS-HU Courses Use EBIPs

(Evidence Based Instructional Practices)



# All CS-HU Courses Include ID&SJ

(Customized to fit content as indicated by principal instructor)

