

Student 2.0

Week 1 | Needfinding Results



Anna, Matthew, Aditi and Radha

Our Team



Aditi Poduval
Senior,
SymSys HCI



Matthew Stewart
Senior,
CS HCI



Radha Jain:
Junior,
CS & Econ



Anna Carroll
Senior,
CS HCI

Stanford WebLogin Needfinding Presentation matrix_ay_2017-18_to po CS 142 | Carta

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Econ Teaching Matrix 2017-18

UNDERGRADUATE CLASSES

COURSE NAME	FALL	WINTER
Principles of Economics	Taylor	Duggan
Microcosm of Silicon Valley & Wall Street	Shanahan	Shanahan
Navigating Financial Crises		Toloui
Understanding the Welfare System	MacCurdy	
Experimental Economics		Niederle
Energy, the Environment and the Economy		Wolak
Causes and Consequences of the Rise in Inequality	Pistaferri	
Capitalism, Socialism, and Democracy		
The Economics of Immigration		Abramitzky
Measuring the Performance of Governments in the IIS	Duggan /& Ballmer)	
Education as Self-Fashioning: The Active, Irreducible Self		
Media, Markets, and Social Good		
Economic Analysis I - Micro		
Economic Analysis II - Micro		
Economic Analysis III - Macro		
Economic Policy Seminar		
Introduction to Statistical Methods		
Applied Econometrics		
Advanced Topics in Econometrics		
Financial Markets and Institutions: Recent Developments		
Economics of Innovation		
Development Economics		
Field Research Methods and Applications		
Economic Development, Microfinance, and Entrepreneurship		
Economics of Health and Medical Care		
Credit markets and development: Some evidence		
Market Design		
Decision Modeling and Information		
Introduction to Financial Economics		

Stanford Bulletin ExploreCourses

https://explorecourses.stanford.edu/search;jsession...

IPS 203: Issues in International Economics

Topics in international trade and international trade policy: trade, growth and poverty, the World Trade Organization (WTO), regionalism versus multilateralism, the political economy of trade policy, trade and labor, trade and the environment, and trade policies for developing economies. Prerequisite: ECON 51, ECON 166.

Terms: Win | Units: 5 | Grading: Letter (ABCD/NP)

Instructors: Aturupane, C. (PI)

Schedule for IPS 203

IPS 209: Practicum

Applied policy exercises in various fields. Multidisciplinary student teams apply skills to a contemporary problem in a major international policy exercise with a public sector client such as a government agency. Problem analysis, interaction with the client and experts, and presentations. Emphasis is on effective written and oral communication to lay audiences of recommendations based on policy analysis. Enrollment must be split between Autumn and Winter Quarters for a total of 8 units.

Terms: Aut, Win | Units: 1-8 | Repeatable for credit | Grading: Letter (ABCD/NP)

Instructors: Stoner, K. (PI)

CS 142: Web Applications

Pin this course

▼ AT A GLANCE

Concepts and techniques used in constructing interactive web applications. Browser-side technologies such as HTML, cascading stylesheets, the document object model, and JavaScript frameworks as well as server-side JavaScript, sessions, and object-oriented databases. Is and application scalability. New models of web application deployment. Prerequisites: CS 141 or CS 142, and CS 106B.

Go to Explore Courses

Terms

Course

PSYCH 75

CS108

ECON102A

PWR

MKTG 374

WINTER Course

Course

ECON 183

CS110

CS142 or CS148

ECON 102B

ENGR25B

WINTER Course

Course

CS103

FALL Course Name Units

PSYCH 30 Intro to Perception 3

ECON 190 Accounting 3

ECON 178 Behavioural Econ 3

CS147 Introduction to Hu 3

g103

SENIOR

FALL Course Name Units

CS109

CS110

CS142 or CS148

ECON 102B

ENGR25B

WINTER Course

Course

CS103

CS109

CS110

CS142 or CS148

ECON 102B

ENGR25B

CS To do:

Courses Units Quarters Available Uncomplete Prereq Recommended Comments

CS103 5 Aut, Spring

CS109 5 Winter, Spring 108

CS110 5 All

CS191W (writing in the major) 5

ENGR 25B (biotech ENGR real) 3

CS157 (Infor Maths) 3

CS161 (Design and Analysis of Algorithms) 3

CS103 5 All + Sum 103, 109

CS147 4 Autumn CS142 or CS193

CS247 4

CS191W (3 courses) 3

CS142 (Web Applications) 3 Win, Spring 108

CS148 (Introduction to Computer Graphics and Imaging) 4 Aut, Sum

CS194H (User Interface Design Project) 4 Winter 147 Mostly project

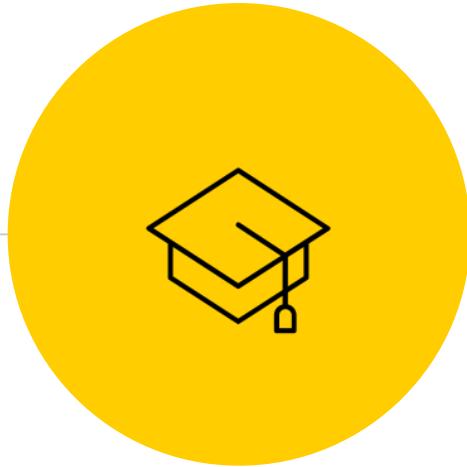
CS210A (Software Project Experience with Corporate Partners) 4 Winter 109, 110 Apply to this

CS376 (Human-Computer Interaction Research) 4 Autumn A- or better in 147 or 247

CS377A (Topics in Human-Computer Interaction) 4

CS377B (Topics in Human-Computer Interaction) 4

CS377C (Topics in Human-Computer Interaction) 4



Academic Planning

4 year plans, adding majors/minors, balancing
requirements, studying abroad

1

Needfinding & Methodology





Who did we interview? (I)

Do students at other schools face similar pain points?

- Semester school students (UNC & Creighton)
- Other quarter system students (Northwestern)

How do university-level advisors tackle academic planning?

- Stanford faculty / department advisors



Semester Student Interviews



Varun

Varun is a **premed** biology student at **Creighton**.



Paige

Paige is a senior who gets priority for course registration at **UNC**.



Cecilia

Cecilia is a **pre-law** student studying classics at **Northwestern**.



Course Advisor Interview



Greg

Graduated Class '16, and completed a co-term in CS.

Advises students about requirements, scheduling, and choosing classes.



Who did we interview? (II)

How do **Stanford students**
feel about academic
planning?



- ◉ “Average” Students
- ◉ Student Athletes
- ◉ Leaders of student orgs
- ◉ Students with off-campus jobs
- ◉ Double majors/minors
- ◉ Students who changed majors



Stanford Student Interviews (I)



Tony

Tony **worked part time** for Dropbox, while pursuing a CS major.



Becca

Becca is a **student athlete** who is majoring in HumBio.



Diego

Diego is an earth systems major who **studied abroad** 3 times.



Stanford Student Interviews (II)



Julia

Julia is a student-athlete who decided her major junior year



Ali

Ali is a CS major, Econ and Chinese minor, and president of SWIB.



Yousef

Yousef was deciding between three majors until junior year.



Question Topics

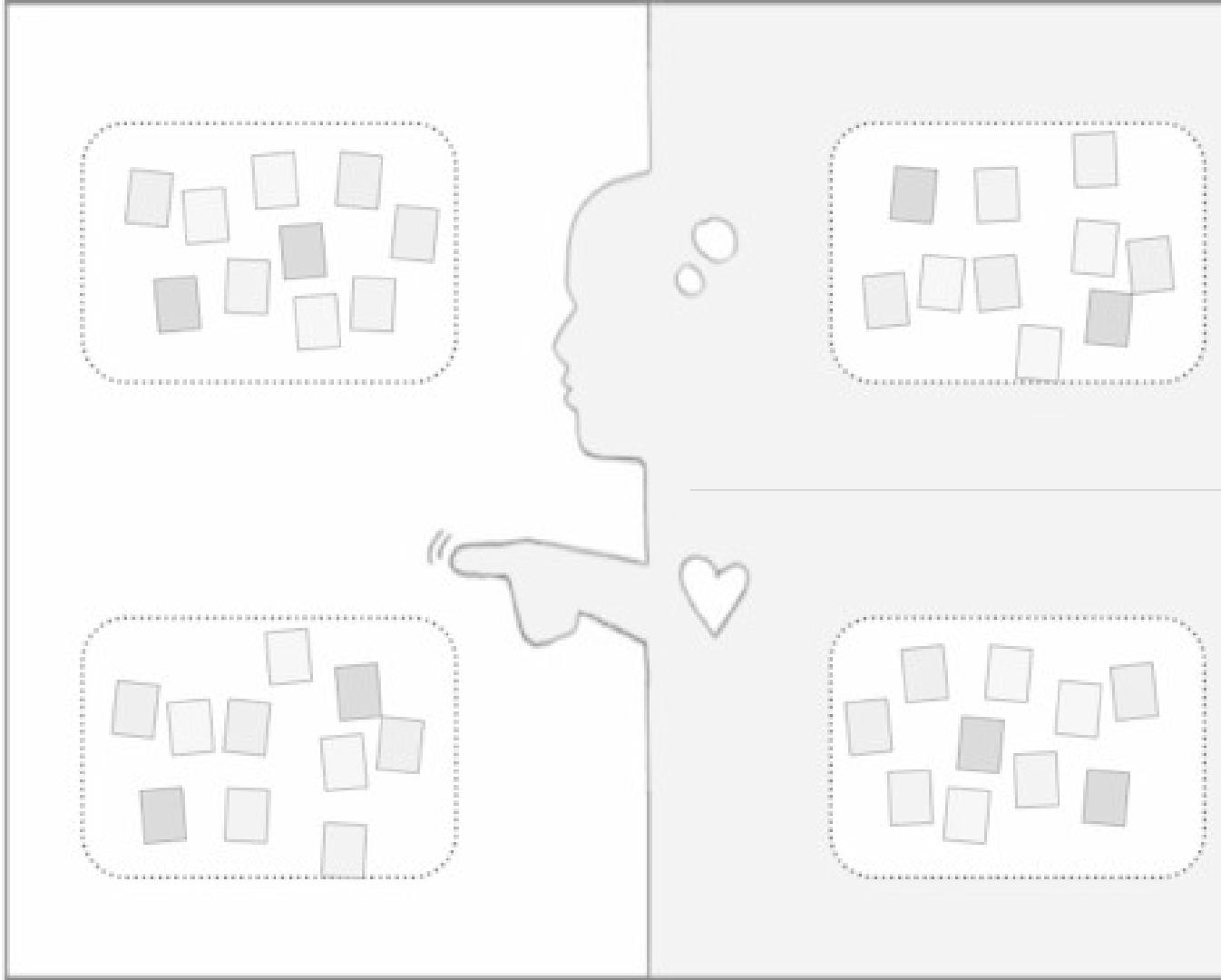
Planning a
major

Class
scheduling

Balancing
commitments

2

Interview Results



“It’s hard to keep track of multiple potential majors at once.”

“I had to change track and redo my four year plan.”

“I did not have a plan and it destroyed my Stanford experience.”

“No one told me I had to make a 4-year plan.”

“

“As a freshman I knew what I wanted and was able to accomplish all of my goals -- 1 major, 2 minors, & study abroad.”

“Students relax when they visualize how to complete their major”

“I came to Stanford because of the study abroad opportunities.”

“It takes extra work to complete academic planning as an athlete.”

A yellow circular graphic containing two black double quotes (”). It is positioned above a vertical grey line that extends downwards from the bottom of the circle.



Themes & Patterns

Organized Freshman

- Knew major
- Planned study abroad
- Kept doors open



The Switcher

- Thought they knew major
- Some missed out opportunities



Regretful Senior

- Chose major late
- Lack of flexibility
- Regret freshmen classes





Themes & Patterns

1. Coordination difficulties

Manually coordinating classes with extracurriculars.

Everyone had made a 4 year plan, but rarely saw anyone else's

Changing majors = unable to study abroad

Lack of academic support for double majors/minors



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Themes & Patterns

2. Unclear on structure of major

Rely on verbal information
for choosing electives

Unclear on differences
between major/minor

Learnt about key information
senior year

Despite interest, too much
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3

Analysis





Tensions, Contradictions, Surprises

Student desire to **explore**.

vs.

Student desire to **finish degree** on track.

Academic demands.

vs.

Athletic / **extracurricular** / health demands.

Stanford's **resources** for academic planning.

vs.

Lack of awareness & use of such resources.

Freshmen who have a **clear idea** of future path.

vs.

Freshmen who **lack direction** for future path.



SAY

- “I didn’t know I had to make a four year plan”
- “Not knowing my major sooner ruined my academic experience at Stanford”
- “I had 3 four-year-plans when deciding majors”



THINK

- *Freshmen should have a plan*
- *It took a long time to plan schedules.*
- *One course can change a major*
- *Shopping around for classes is falsely advertised.*



DO

- Visualize schedules by sketching a plan
- Open 4 different websites
- Make 4 year plans as sophomores
- Overlook advisors as a resource



FEEL

- *Regretful*: to not plan as a freshman
- *Grateful*: to have figured out major early
- *Frustrated*: to miss out on opportunities due to (lack of) planning



Important Needs & Insights

Stories that inspire us:

- Students who regret not planning earlier, often at great cost.
- Athletes who need further support planning around conflicts.
- Advisors who use course knowledge to lead students to success.



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Stanford students need:

- To have an idea of their 4 year plan earlier
- To visualize major possibilities
- To keep doors open freshmen year



Next, we hope to learn about...

Success & failure stories about course recommendations.

Alumni reflections: what they wish they knew.

Experiences of humanities students while planning courses.



Questions?
