Designing Flexible Curricula

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Designing Flexible Curricula

Change as a constant

Obstacles to flexibility

Process of curricular change

Objectives versus tactics

Types of content knowledge

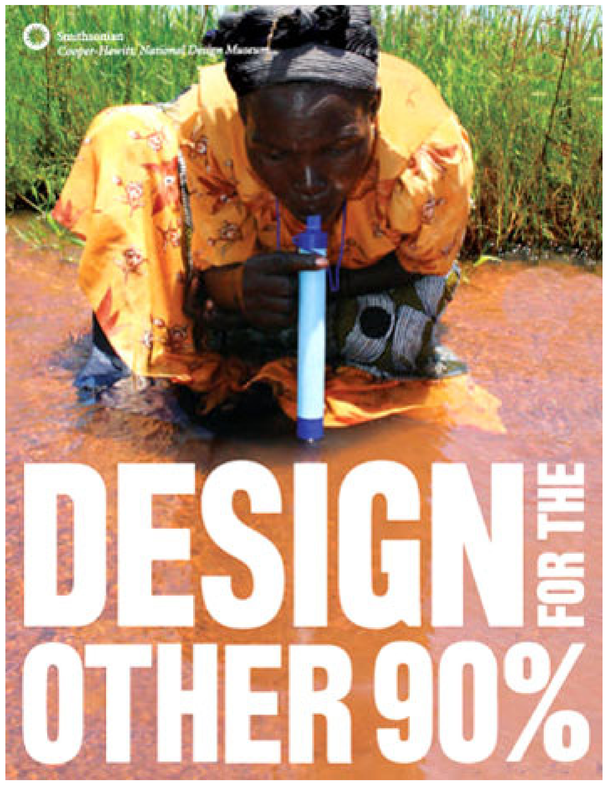
Pedagogical assumptions

Flexible frameworks

Change as a constant in design:

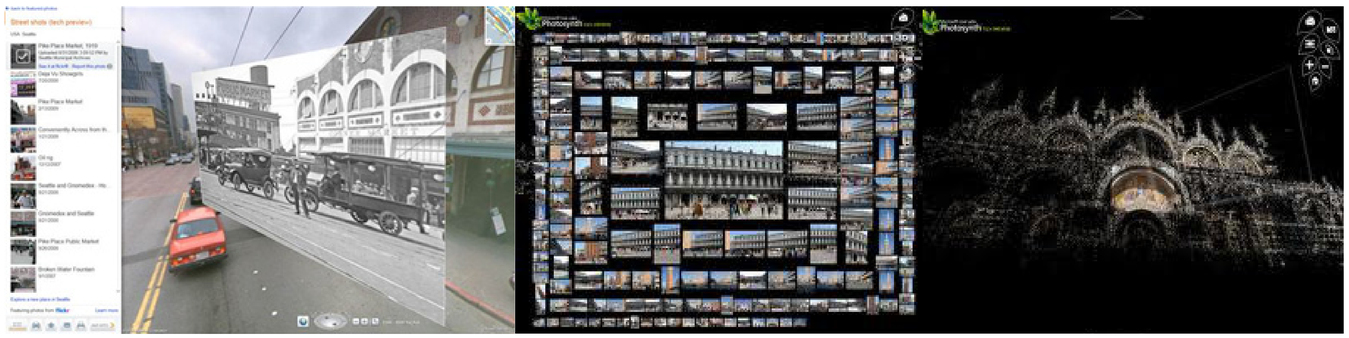
- ***Increasing complexity*** **in the scale of contemporary problems**
- ***Escalating demand*** **for interdisciplinary collaboration**
- ***Accelerating pace*** **of technological evolution**
- ***Growing participation*** **by users in the development of content and form**
- ***Expanding accountability*** **for predicting the outcomes of design action**

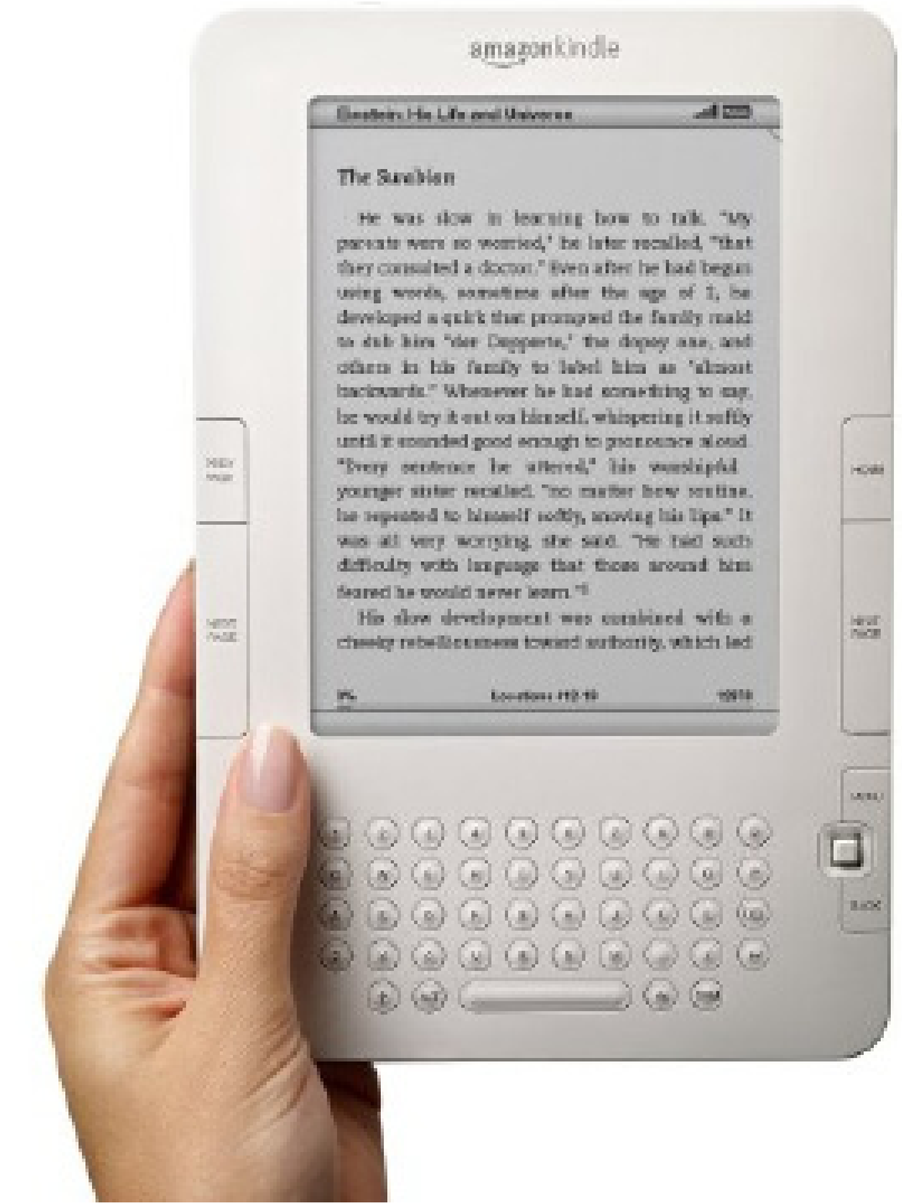
- ***Escalating demand*** **for interdisciplinary collaboration**



- ***Accelerating pace*** **of technological evolution**

email	**1976**
world wide web	**1991**
google search	**1997**
iPod	**2001**
augmented reality	**2008**





- ***Growing participation*** **by users in the development of content and form**

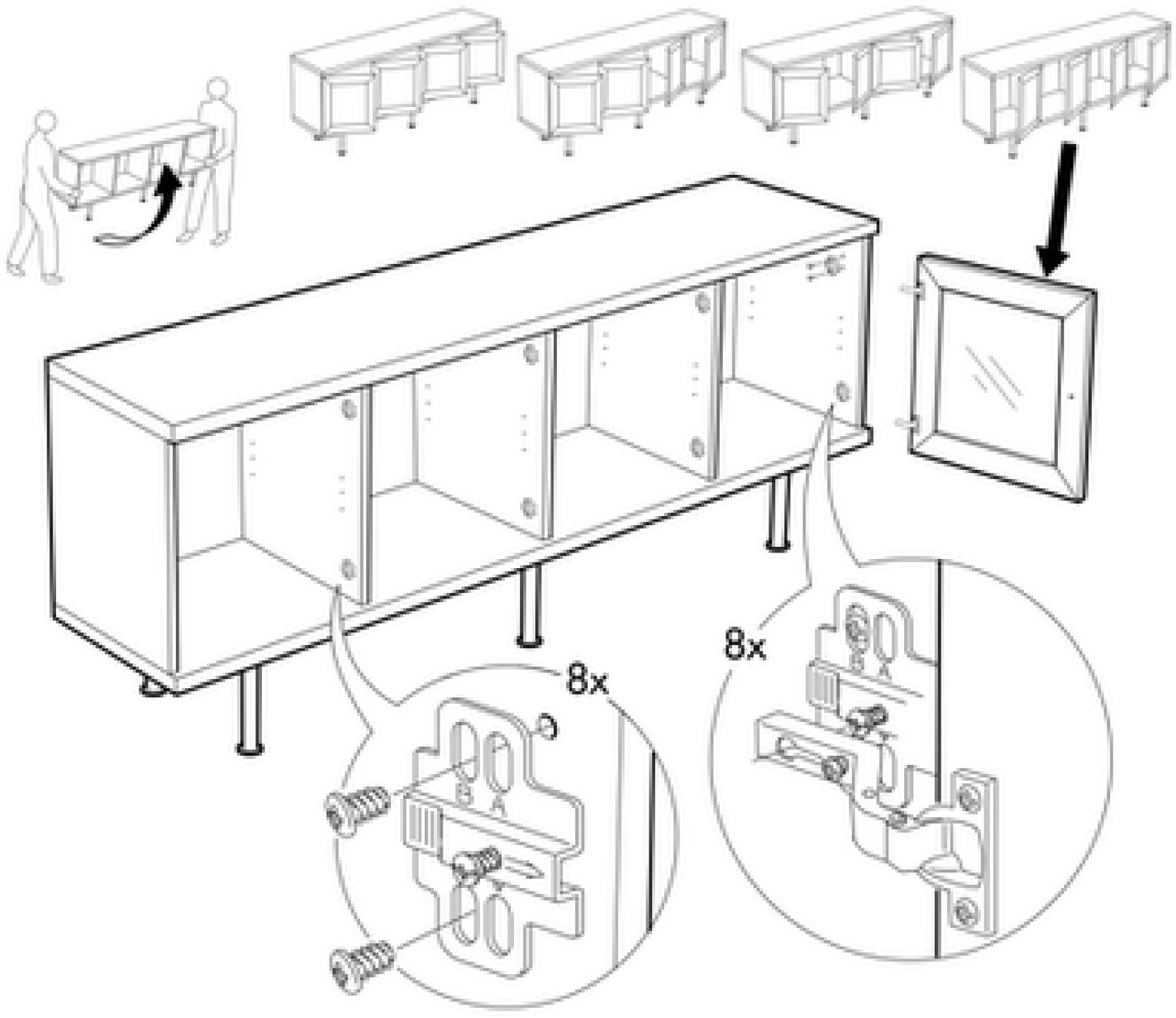
IKEA

flickr

d*s DIY contest

diystyle

facebook



- ***Expanding accountability*** **for predicting the outcomes of design action**

81% Design professionals say research is integral to their practice and that they engage in it regularly

69% College design department chairs say it is required of faculty and critical to the mission of the institution

70% Design professionals don't use students in research that is important to their practices

80% Professionals, faculty, and students cited *sustainability* as the most important area for design research, yet they ranked *systems theory* at the bottom of all possible topics

2005 Metropolis Magazine of 1051 design professionals, faculty, and students

Obstacles to flexibility:

- **Slow academic approval processes / rapidly shifting profession**
- **Decreasing budgets / expanding enrollments**
- **Curriculum-by-accrual strategies**
- **Marketing incentives for increasing curricular specialization**
- **Cult-of-personality teaching / lack of real consensus on content**
- **Faculty specialization and ownership of courses**
- **Overly rigid adherence to traditional scheduling and staffing**
- **Misperceptions of curricular mandates**

Obstacles to flexibility

Usually result in:	**When what we really want:**
Overly prescriptive curricula or a free-for-all with no accountability to common objectives and outcomes	**Curricula that are customizable and broadly supported by faculty**
Declining program relevance under a constantly changing context	**Curricula that are agile, continually responsive, and anticipatory of change**
Faculty frustration in no opportunities for innovation and too much to teach in too little time	**Curricula that are open to individual contributions and manageable in scope and scale**
Reduced effectiveness in arguing for change with administration	**Convincing rationales for change that respect institutional context / resources**

Process of curricular change

Projection →	Planning →	Delivery →	Assessment
analysis of strategic environment, both professional and institutional	**collective activity of the faculty in authoring a curricular plan**	**implementation of a plan across a specific period of time**	**critical evaluation of outcomes with respect to projections, plans, and delivery**
national benchmarks consultation/peers advice/professionals trend analysis institutional priorities	mission, goals, objectives learning outcomes measures/evidence resource assessment management structure implementation strategy	admissions criteria content knowledge curricular structure pedagogical frameworks faculty assignments	student evaluations exit interviews alumni surveys accreditation reviews employer feedback

Scales at which curriculum is built

Mission:	the big vision
Goals:	the 3-5 year priorities for the program
Objectives:	what students should know and be able to do, stated in terms of observable, measurable behaviors
Learning outcomes:	how good is good enough and by when it should be achieved
Measures/evidence:	illustrates the achievement of outcomes
Strategies:	courses and pedagogies through which students achieve outcomes
Tactics:	projects and lessons

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For example...

Mission:	To prepare undergraduates for entry to the profession of graphic design.
Goal:	To transition over the next two years from strategies that focus on the design of discrete objects to systems-level thinking that situates design between people and what they want to do in diverse contexts.

For example...

Objective:	Students will frame design investigations and critique solutions in terms that address the social, cultural and technological aspects of context and the physical and cognitive behaviors of people.
Learning outcome:	By the sophomore year, all students will be able to identify and describe relevant relationships among objects, people, and settings.
Measure/evidence:	Students in GD 201 will construct concept maps and develop semester projects within specific territories of the map.

Write a course objective, learning outcome, and desription of evidence for one of the following:

A typography course that anticipates the next iteration of mobile technology after the iPad.

A foundation studio course that prepares students to frame problems.

A studio course based on the design of tools and systems for collaboration.

Objective:

Learning outcome:

Measures:

Choose a course from your current curriculum and distribute its content under the following categories:

Things seen, heard, read, or othewise encountered:

Skills, theories, and concepts:

Understanding:

Choose a course from your current curriculum and distribute its content under the following categories:

Things seen, heard, read, or othewise encountered:

Skills, theories, and concepts:

Understanding:

Choose a course from your current curriculum and distribute its content under the following categories:

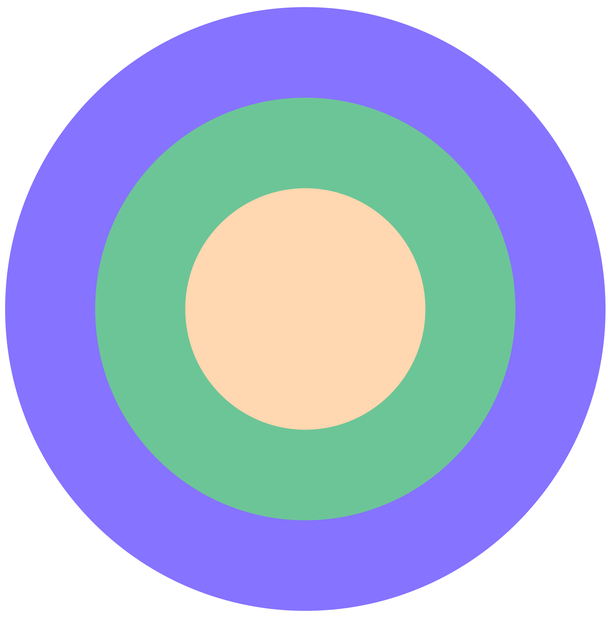
E EXPLAIN
I INTERPRET
A APPLY
P PERSPECTIVE
K KNOW WHAT THEY DON'T KNOW

Things seen, heard, read, or othewise encountered:

Skills, theories, and concepts:

Understanding:

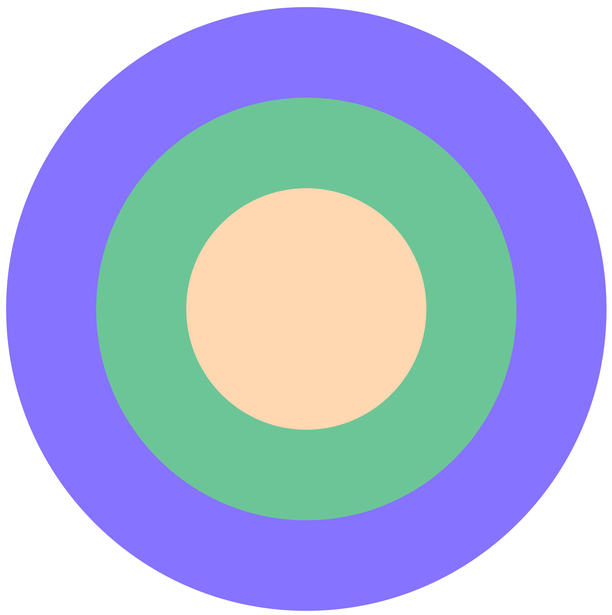
Types of content knowledge



Things to be familiar with/to have seen, heard, read, etc.
Temporary relevance

Understanding by Design, Grant Wiggins and Jay McTighe

Types of content knowledge:



Things to be familiar with/to have seen, heard, read, etc.
Temporary relevance

Theories, concepts, and skills
More stable but subject to change

JACQUES DERRIDA

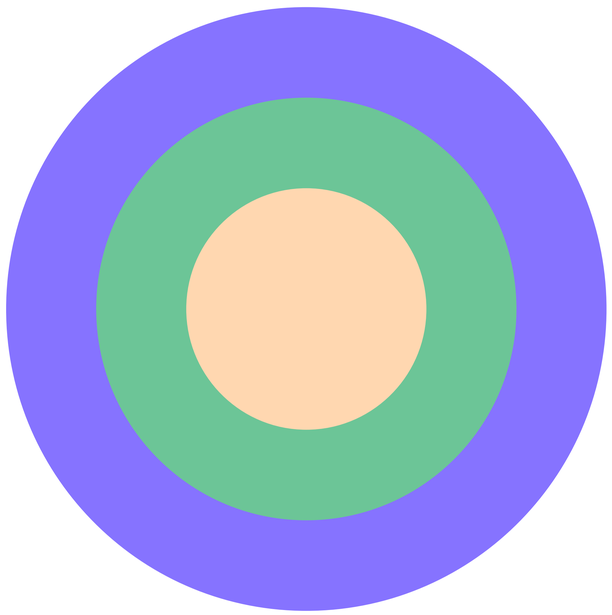
OF GRAMMATOLOGY

Translated by

Gayatri Chakravorty Spivak

CORRECTED EDITION

Types of content knowledge:



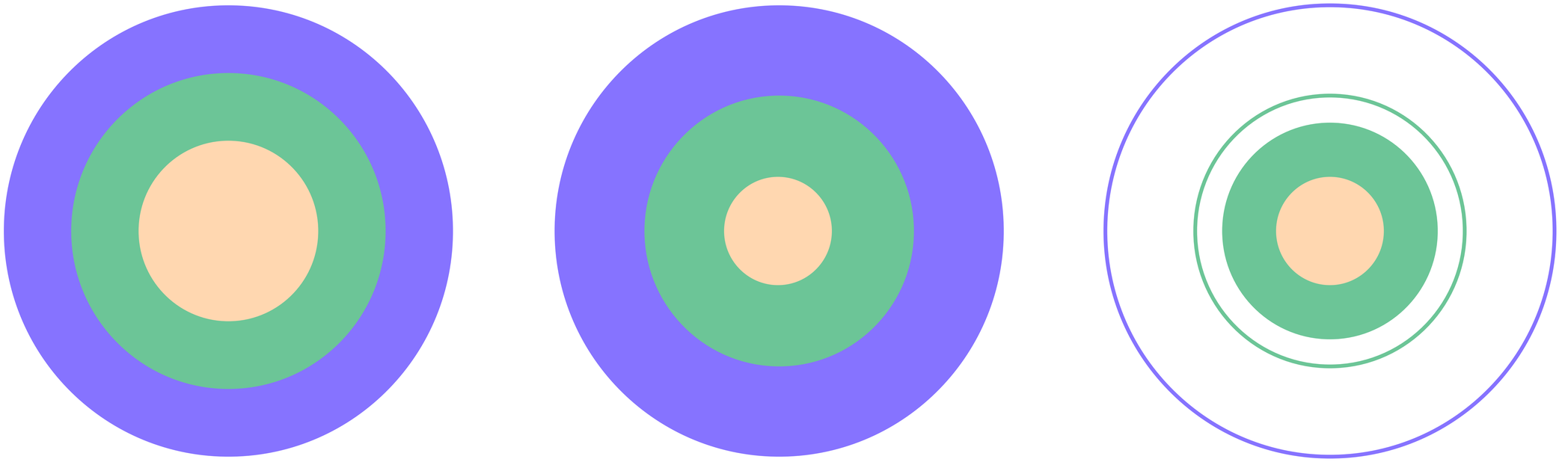
Things to be familiar with/to have seen, heard, read, etc.
Temporary relevance

Theories, concepts, and skills
More stable but subject to change

Enduring understanding
At the core of the discipline, stable

Metacognition
Empathy
Holding a perspective
Application
Interpretation
▲ **Explanation**

Types of content knowledge:



Increasing pressure to teach facts and skills, robbing time from content that is likely to endure

Many facts and skills decline in relevance after graduation and over a professional career

We can spend our time...

teaching all the tools and functions of CS5	**or how to make choices among various technologies and how to learn software**
teaching students how to make a website	**or about the nature of interaction and networked systems**
teaching about famous designers/objects	**or about perspectives, precedence, context, and what we can learn from history**
teaching what makes a good logo	**or about designing a service culture for organizations and companies**
teaching how to make social cause posters	**or how to move people from not being ready to know to being ready to take action and to publicly advocate for a position**

Approach A

Buckets for content
Scaffold from simple to complex
Individual faculty define projects

Graphic Design I
Graphic Design II
Graphic Design III

Typography I
Typography II
Typography III

Approach A	Approach B
Buckets for content **Scaffold from simple to complex** **Individual faculty define projects**	**Courses defined by products or segments of practice** **Courses defined by skills or tools**
Graphic Design I Graphic Design II Graphic Design III	Publication Design Exhibition Design Web Design
Typography I Typography II Typography III	Photoshop InDesign Flash

Types of design practice

Advertising design
Book design
Branding
Broadcast design
Corporate collateral
Direct mail/marketing
Exhibition design
Experience design
Game design
Icon/symbol design
Information design/mapping
Interaction design
Interface design
Logo and identity design
Magazine design
Mobile/small screen design
Motion graphics/title design
Newspaper design
Package design
Poster design
Retail/catalog design
Service design
Signage design/wayfinding
Social design/public service
Textbook/educational design
Typeface design
Universal design
Web design

Formats are not **enduring understanding**

If we build curricula around formats, we are likely to find ourselves unable to respond quickly to changing conditions, when new formats replace old or when the scope of the problem expands.

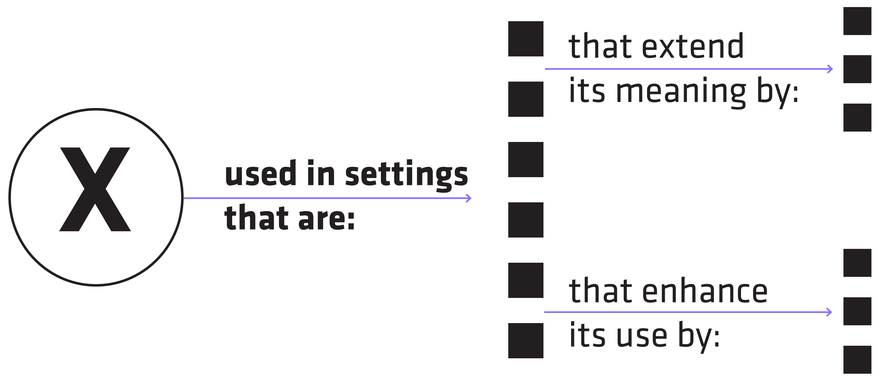
And if we tie the teaching of form to decontextualized exercises, we risk being only about abstract principles that are later challenged by shifting media contexts and by the growing need for things that are social as well as visual.

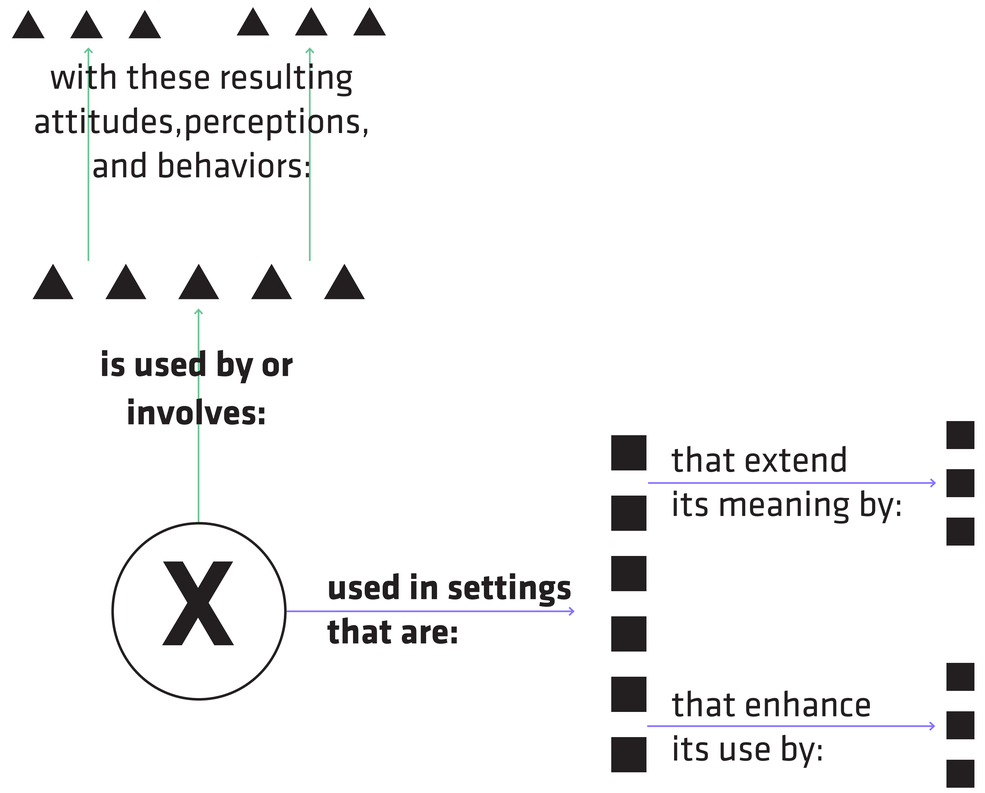
What is enduring is that:

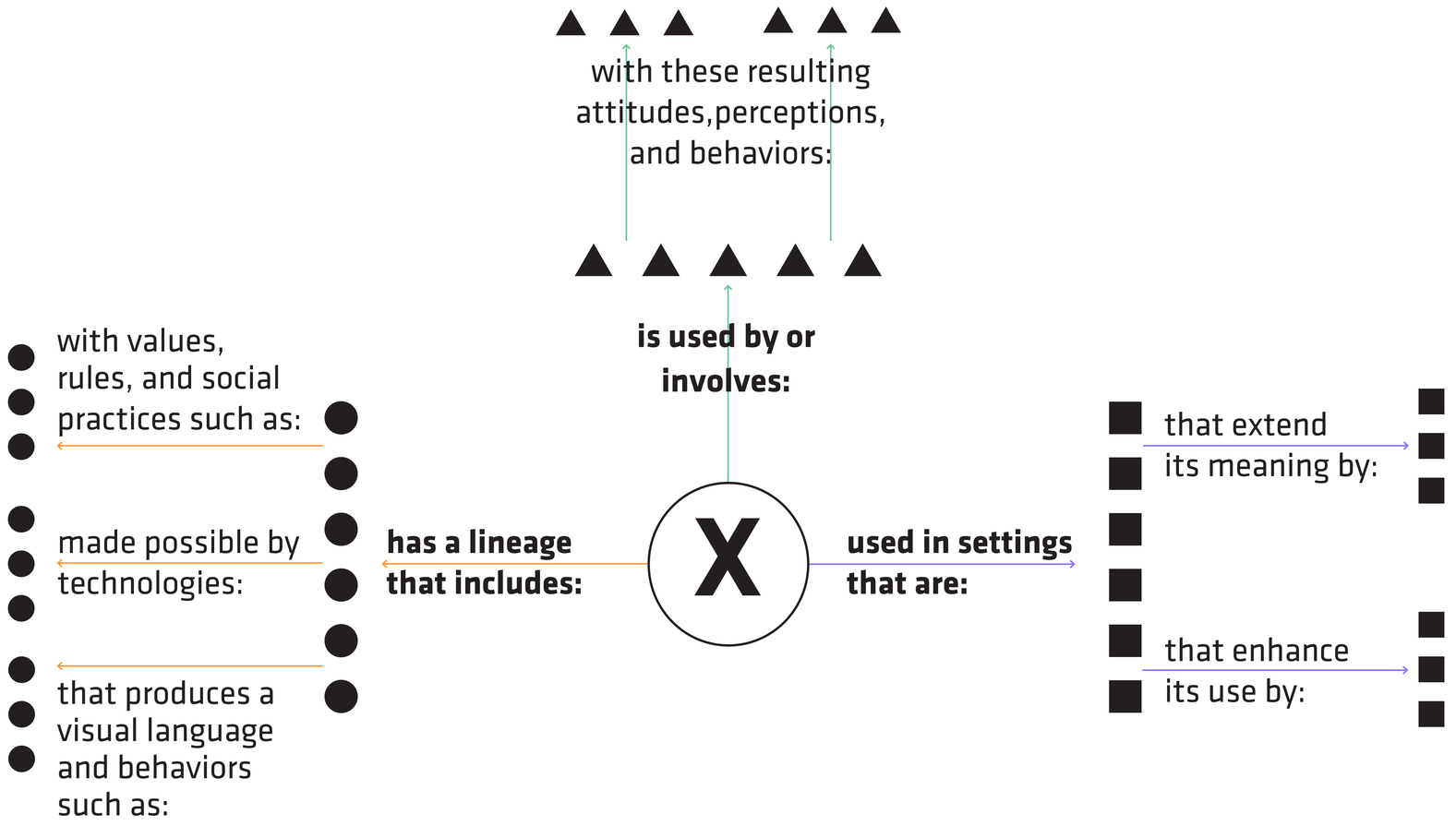
Design is a **mediation** between people and the relationships or activities they hope to accomplish in their interactions with their environments.

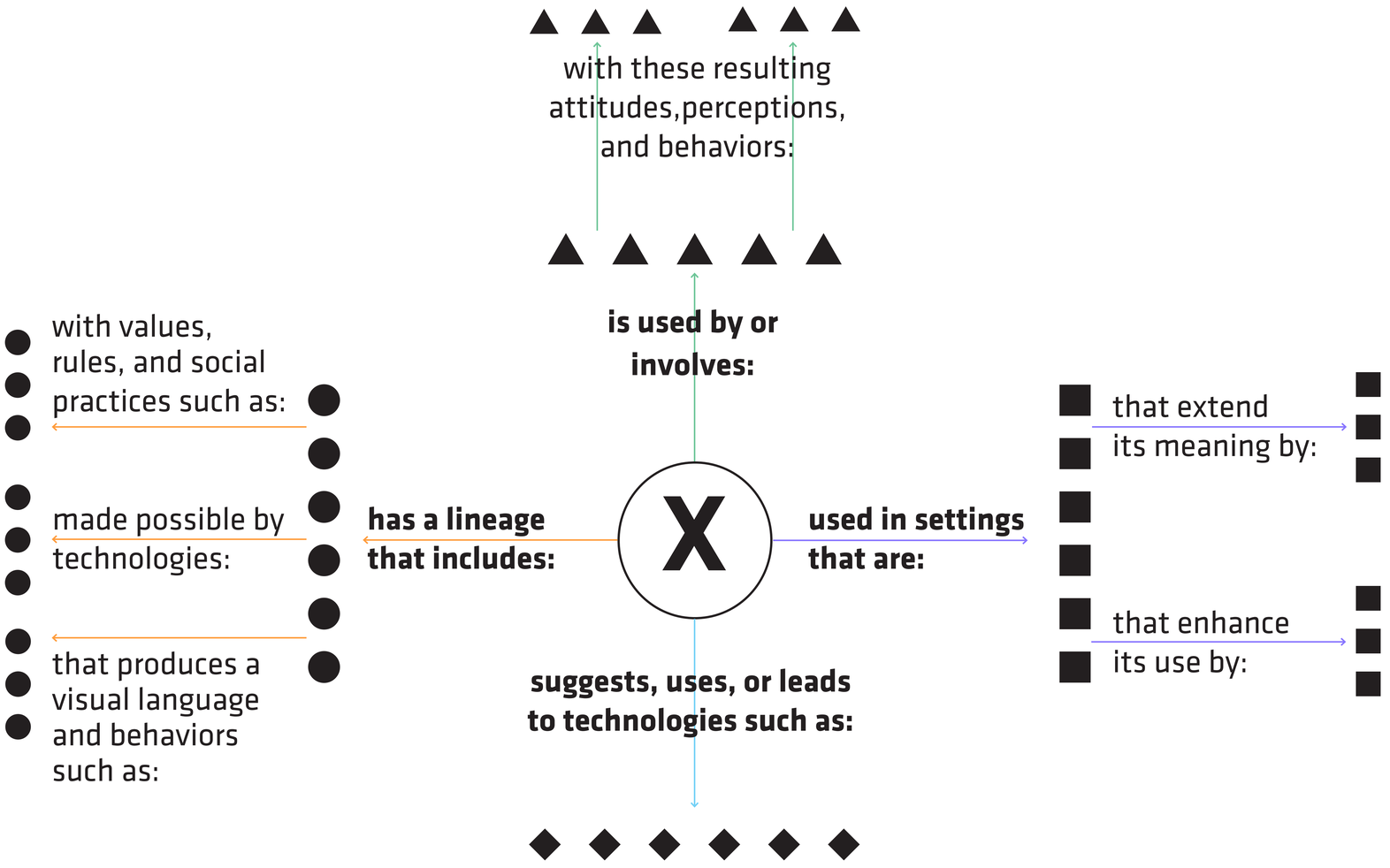
Design will be judged in its **goodness of fit between form and context,** and while the specific elements and qualities of that context (and form) will change, the general aspects of context are describable and always present.

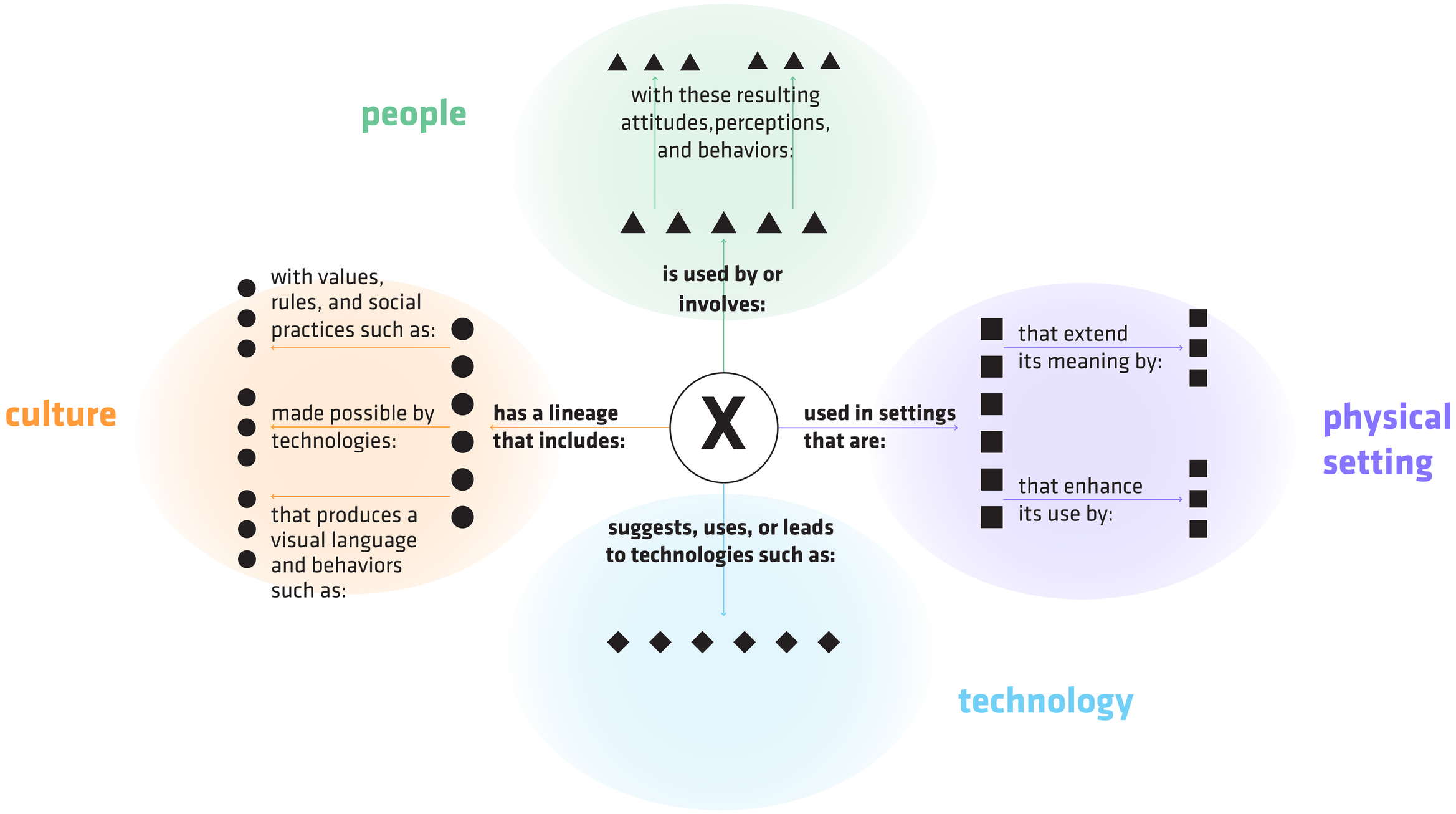
The role and character of design mediation can be viewed at **various scales** and from different **points of entry** to larger systems.


X
used in settings
that are:
that extend
its meaning by:
that enhance
its use by:

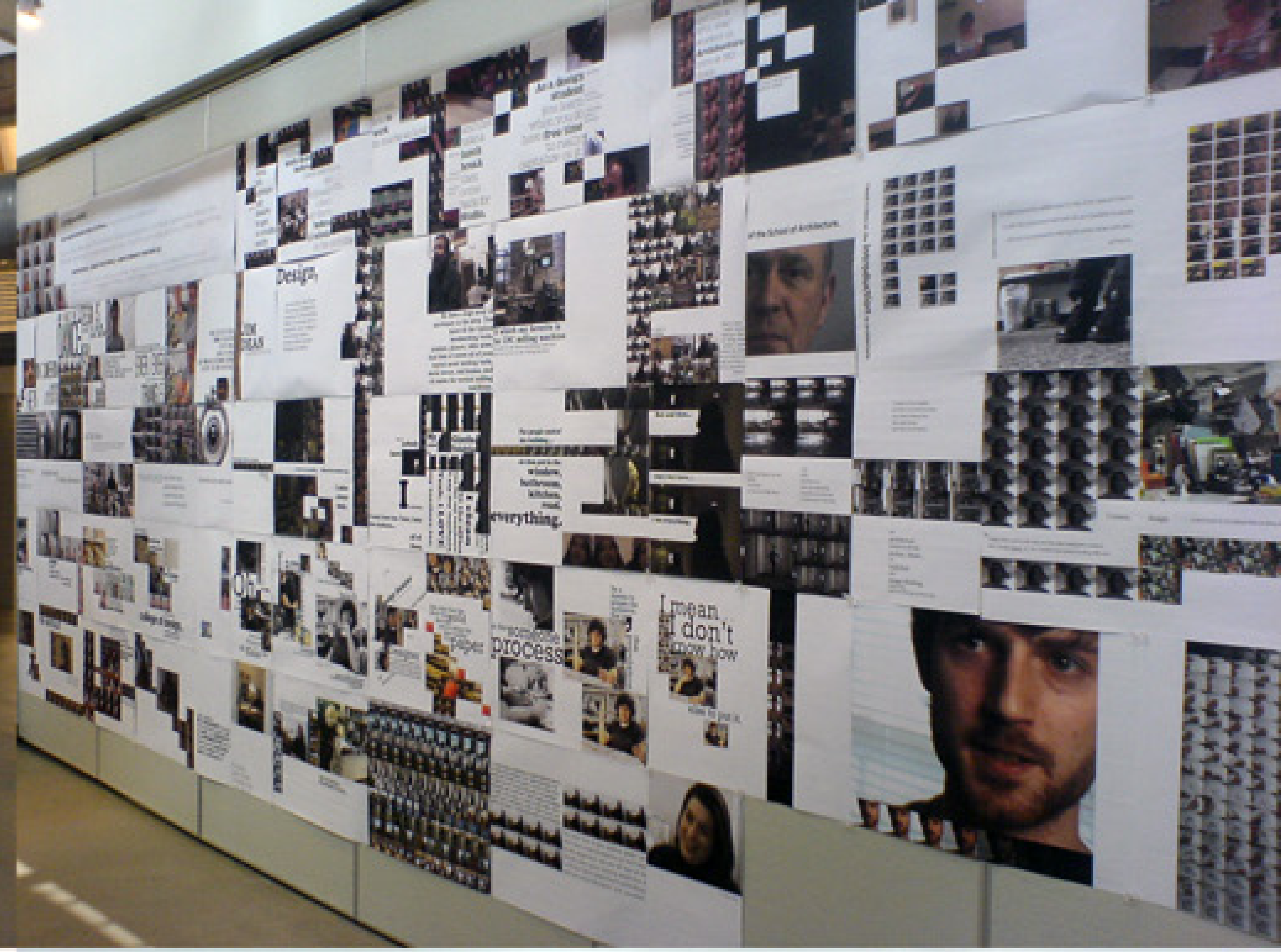

with these resulting
attitudes,perceptions,
and behaviors:
is used by or
involves:
X
used in settings
that are:
that extend
its meaning by:
that enhance
its use by:


with these resulting attitudes,perceptions, and behaviors:
is used by or involves:
with values, rules, and social practices such as:
made possible by technologies:
that produces a visual language and behaviors such as:
has a lineage that includes:
X
used in settings that are:
that extend its meaning by:
that enhance its use by:


with these resulting attitudes,perceptions, and behaviors:
is used by or involves:
with values, rules, and social practices such as:
made possible by technologies:
that produces a visual language and behaviors such as:
has a lineage that includes:
X
used in settings that are:
that extend its meaning by:
that enhance its use by:
suggests, uses, or leads to technologies such as:


people
with these resulting attitudes,perceptions, and behaviors:
is used by or involves:
with values, rules, and social practices such as:
culture
made possible by technologies:
that produces a visual language and behaviors such as:
has a lineage that includes:
X
used in settings that are:
that extend its meaning by:
that enhance its use by:
physical setting
suggests, uses, or leads to technologies such as:
technology


coming clean
the home washing machine revealed
lineage
hand washing
washer women
hand powered home washing machines
commercial laundries
hand laundry
family washes
laundromats
older automatic home washing machines
improved design
product differentiation and competitive edge
consumption
domesticity
public vs private
community
families
individuals
multiple families
earn more
do less house work
leisure gap
wage gap
Dry Clean Only
housewives
working women
measurements
2 cups
3 loads
medium
58 minutes
heavy-duty
the value of a woman
hand washing
social practices and attitudes
deus ex machina


DANCE
DESIGN IS
NEW
TRIANGLE
I'M CAMERON
HEY!
college of design.
I'M NATALIE

Design,
everything.
process
I mean, I don't know how


12
30
design is in action
"that right there is the

Pedagogical assumptions:

- **Students learn best under a simple-complex progression of ideas**
- **A formal language must be mastered before students can address complex situated problems**
- **All students need to be doing the same thing at the same time**
- **Desk crits are the best way to use studio time**
- **All students benefit from all-class critiques**

Flexible frameworks suggest that...

Important content may not require its own course

Instruction need not be 16 weeks in length

Faculty may not work with all of the students all of the time

Different students may achieve the same curricular outcomes through different curricular paths

Flexible curricular structures

Thematic structures and curricular logic vs. rigid requirements and cafeterias of courses

Pedagogies that support large class sizes / challenges to longstanding assumptions about teaching studio

Special topics offerings determined against goal-driven criteria

Common courses among programs

Thematic structures:

Sophomore / Object	**Technological system**	**timeline**
	Cultural system	**poster**
	Cognitive/social system (people)	**product instructions**
	Physical system (setting)	**experience map**
Junior / System	**Technological system**	**website (interactive system)**
	Cultural system	**identity program (branding system)**
	Cognitive/social system (people)	**publication (reading system)**
	Physical system (setting)	**signage (wayfinding system)**
Senior / Interacting systems	**Technological system**	**networking/collaboration**
	Cultural system	**advocacy**
	Cognitive/social system (people)	**learning**
	Physical system (setting)	**physical interaction**

Thematic structures / typography:

~~**letter > word > sentence > paragraph > page > publication**~~
print-based, reflective of drawn comping methods, inconsistent with knowledge demands placed on students by current technologies, and usually scaffolded in typography I, II, and III

relational systems:

formal systems
descriptive systems
technological systems
language systems
reading systems

Teaching larger studios:

Getting rid of desk crits
Getting rid of all-class critiques
Getting rid of all students doing the same thing at the same time

Structuring class time around common goals and needs
Reducing the risk in group work
Making good use of technology
Asking for presentations of learning outcomes, not projects

Special topics:

Allows quick response to opportunities and imperatives in the context

Guided by earlier decision-making about objectives

Can be targeted to specific student groups based on skills and needs

Takes advantage of unique faculty profiles or one-time staffing and expands overall faculty expertise

Suggests providing space within the curriculum that allows students to meet requirements through the special topics offerings - advised electives

Common courses:

Extend the teaching resources / eliminate wasteful redundancies

Provide interdisciplinary experiences for students and faculty

Introduces flexibility in scheduling

Designing Flexible Curricula / Education in a climate of constant change

Common courses:

Pink text is recommended content for first-year instruction / Bold text is where at least two programs share an interest

DRAWING	Architecture:	Art and Design:	Graphic Design:	Industrial Design:	Landscape Architecture:
Types of drawing:	• **Perceptual drawing (from observation of models, built environment, and nature)** • **Basic understanding of perspective** • **Basic understanding of orthographic conventions** • **Sighting / proportional relationships** • **Contour drawings (use of line to depict form and space)** • **Value map drawings (use of tonal values to depict form and space)** • **Measured paraline and perspective drawings** • **Architectural drawing conventions**	• **Analytical drawing (observation)** • **Perspective system** • **Orthographic system** • **Proportional awareness** • **Simple geometric shapes** • Construction of finished forms/objects • Grid systems and pattern networks • Tessellations, golden rectangle, reflection		• **Visual variables such as: line and objects (= profile; line and perspective systems; conveying scale and environment; depicting shadow and shade; shading as an impression of form; composition - unity and contrast; applied use of color in various media** • White-board sketching during client meetings and video conferences	• **Perceptual drawing (from observation of models, built environment, and nature)** • **Basic understanding of perspective** • **Basic understanding of orthographic conventions** • **Sighting / proportional relationships** • **Contour drawings (use of line to depict form and space)** • **Value map drawings (use of tonal values to depict form and space)** • **Measured paraline and perspective drawings** • **Architectural drawing conventions**
Related types of representation:	• Drawing with an emphasis on spatial representation	• **Use of implements and means to make marks on paper or other substrates (pens, pencils, brushes, chalk, markers, thread, etc.)** • **Use of graphics tablet to draw**	• **Explore various expressive qualities of mark-making tools and their translation through digital technology** • **Use diagramming, mapping, storyboarding, wire framing, and modeling methods in analyzing aspects of a problem or context, articulating patterns within data, capturing motion or behavior in key frames, and exploring relationships among components within a system** • Draw letterforms and glyphs - understand the difference between the mechanical drafting of a letterform and its optical impression within text • **Master Illustrator as drawing tool**	• **Combine hand drawing with digital tablet use and 3-D modeling programs**	• **Variable media - pencil, pens, markers, colored pencils, pastels, watercolor, etc.** • **Diagramming** • **Functional relationship mapping**
Role of drawing in the curriculum:	• **Basic representational drawings (orthographic, paraline, and perspectives) emphasizing use to visualize, clarify, and articulate design ideas** • Use of drawing simultaneously with physical models to think through a studio project	• **Drawing as a way to think** • **Rapid visualization of form** • **Increased observational skills** • **Making thumbnail sketches to generate ideas** • **Drawing to communicate to others** • **Process journal**	• **Make informed choices among representational strategies for communicating content and** addressing audience needs	• **Sketch fluently in order to communicate a broad range of subject matter and concepts** • **Use drawings to show concept development, idea generation, and idea refinement** • **Drawing as a way of seeing**	• **Understand the communicative value of each media type and its applicability to various studios and audiences** • **Drawing to think**
Elements of design understood through drawing:	• **Figure/ground relationships**	• **Composition**	• **Use the variables of value, texture, line, and shape** in the design of typographic layouts at both display and text sizes	• **Contrast, lighting, and composition** • **3-D modeling**	• **Scale/proportion** • **Figure / ground** • **Light/shade/shadow**

1

Pink text is recommended content for first-year instruction / Bold text is where at least two programs share an interest

COMMUNICATION / PRESENTATION	Architecture:	Art and Design:	Graphic Design:	Industrial Design:	Landscape Architecture:
Preparing a visual presentation:	• Studio based; not common courses	• **Assemble an attractive, readable, and distinctive Powerpoint (or other format) digital presentation** • **Design an attractive storyboard or poster about creative work or research** • **Label and provide commentary for samples in a notebook (typed, using appropriate fonts and sizes)** • **Photography** • **Typography** /**Make good selections of typographic elements that support the hierarchy of information in the argument** • **Concept/thought mapping**	• **Produce simple presentations of research and design solutions in print and screen-based form, using visual and verbal elements** • Identify sources of visuals that will support design solutions in presentations - use them with full crediting and fidelity • **Articulate the audience and settings for the presentation and their characteristics that argue for certain communication vehicles or approaches over others** • **Master the basic technology (photography, drawing, scanning, etc.) and layout software needed to produce these presentations** • Recognize how much and what kind of verbal explanation is necessary to support arguments in the presentation of design solutions, distinguishing the differences for when you're there and when you're not • **Make good selections of typographic elements that support the hierarchy of information in the argument** • **Craft models, maps, diagrams, and charts in support of design research and solutions to design problems** • Organize elements in ways consistent with the hierarchy of the project narrative and the attention demands on the audience - scale information in ways that are appropriate to the argument and that don't distract from core ideas	• **Produce simple presentations of research and design solutions in print and screen-based form, using visual and verbal elements** • **Articulate the audience and settings for the presentation and their characteristics that argue for certain communication vehicles or approaches over others** • **Make good selections of typographic elements that support the hierarchy of information in the argument**	• **2-D layout and composition** • **3-D model making** • **Craft** • **Effective use and development of Powerpoint or similar software** • Development, recording, and use of process drawings • **Storyboarding (large projects)** • **Photography / Videography** • **Mapping (ortho, photos, drawn)**
Delivering an oral or written presentation:		• **Prepare and deliver a digital presentation of their own work** • **Prepare and deliver a simple verbal presentation - outlining, notes, body language, set up, image and text management, clear and organized verbal delivery** • **Enhance writing skills and choose appropriate writing methods** • **Present work in a physical portfolio - organization, labeling, commentary, consistency in page size, access for review**	• **Practice making oral and written explanations of projects - organize content for maximum effect in communicating the status of the project and its goals (also ADN)** • **Determine the sequence of presentations that best reflects the progress of the project and choose vehicles for presentation that are appropriate to the stage of the project (also ADN)**	• Understand the difference between speaking voice and writing voice • Learn the importance of building an argument and maintaining the flow of logic without interruptions/divergence • How to write or speak effectively in fewer words • Listening to client and then analyzing needs and presumptions that may be erroneous • **Practice making oral and written explanations of projects - organize content for maximum effect in communicating the status of the project and its goals (also ADN)**	• Basic rules of conduct for presentation • Verbal defense of an idea • **Written reflection of process and outcomes** • **Concept/descriptive narrative** • Charette facilitation • **Portfolio/web development** • **Report writing**

2

Pink text is recommended content for first-year instruction / Bold text is where at least two programs share an interest

MATERIALS / MATERIALITY	Architecture:	Art and Design:	Graphic Design:	Industrial Design:	Landscape Architecture:
Kinds of materials:	• **Concrete** • **Wood** • **Masonry** • **Steel** • **Materials relating to construction systems (cladding, glass, metal, and plastics)** • Advanced structural applications (concrete, wood, steel, and masonry)	• Recycled materials • Textiles, thread, fabric, dye • Paper, paint, inks • Wood, clay, stone, metals	• Reflective surfaces (ex. paper) • Backlit surfaces (ex. computer) • Projected surfaces • Environmental surfaces (ex. exhibition and signage) • Dynamic versus static surfaces	• **Concrete, wood, steel** • Metalworking processes and precision machining • Injection molding, polymer processing, and composites at various scales • Desktop and 3D modeling/thinking • Woodworking • Joinery, Japanese methods • Additive/subtractive processes	• **Concrete** • **Wood** • **Masonry** • **Metals** • Soils and plant materials • Water • **Recycled products** • **Composites** • **Fabrics/textiles**
Concepts related to the use of materials:		• **Sustainability** • **Material effect on message or communication** • **Understanding how to make use of constraints of specific materials, tools, and production methods** • **Exposure to and experimentation with new materials - testing for essential characteristics** • **Knowledge of links between materials, concepts, structures, uses - appropriateness** • Develoments in material sciences • Knowledge of haptic characteristics of making and interacting with objects • **Importance of sequence in using tools and materials** • **Manipulating, joining, connecting, or blending different materials** • **Attention to detail - for craft, safety, and aesthetics** • **Safety in use (=repercussions of misuse and miscalculation of tolerances)** • **Scale appropriateness in use of materials, balance of parts**	• **Sustainability** • **Legibility** • **Expressiveness** • **Behavior (in virtual environments)**	• **Sustainability** • **Understanding how to make use of constraints of specific materials, tools, and production methods** • **Importance of sequence in using tools and materials** • **Scale appropriateness and sense that all components are balanced in their loading** • **Issues learned in Dana Raymond's studio** • **Draping with cloth**	• **Hands-on making** • **Essential material properties** • Life-cycle costing • Cost estimating • **Scale** • **Strength and aesthetics** • **Fundamental methods of assembly** • **Material interface and the art of detailing** • **Safety - shop protocols and certifications**

3

Pink text is recommended content for first-year instruction / Bold text is where at least two programs share an interest

PROFESSIONAL PRACTICES	Architecture:	Art and Design:	Graphic Design:	Industrial Design:	Landscape Architecture:
Knowledge of the field:	• **Nature of professional practice** • **Role and function of practicing architect**	• **Know skills necessary for different kinds of professional practice**	• **Become familiar with various types of practices and professional contexts (ie. advertising agency, in-house corporate, small studio, large studio, freelance, etc.)** • Analyse shifting paradigms for design practice (AIGA Designer 2015, National Design Policy) • Establish relationships with professional associations	• **Become familiar with various types of practices and professional contexts (ie. advertising agency, in-house corporate, small studio, large studio, freelance, etc.)** • Analyse shifting paradigms for design practice (AIGA Designer 2015, National Design Policy) • Establish relationships with professional associations	• **Roles and responsibilities** • **Scope of practice - breadth of industry, limitations, trends**
Management/business skills:	• **Office and project management**	• **Direct teams** • **Technical writing** • Working with studio assistants/employees	• **Model how professionals manage project teams and work with vendors** • **Describe methods and procedures used by design offices for getting new work (branding, estimating, bidding, and billing)** • **Identify critical areas in establishing and maintaining designer/client relationships (ex. communication briefs)**	• **Model how professionals manage project teams and work with vendors** • **Describe methods and procedures used by design offices for getting new work (branding, estimating, bidding, and billing)** • **Identify critical areas in establishing and maintaining designer/client relationships (ex. communication briefs)** • Case studies and challenging situations • How to deal with challenges as lower-level employee	• **Branding** • **Technical writing** • **Project teams and teamwork** • **Office and project management** • **Industry standard practices** • Time management/time tracking
Legal, ethical, and financial issues:	• **Ethics** • **Contracts and fee structures** • **Legal and regulatory conditions in the practice of architecture**	• **Understand ethics, fair use, copyright, payment, commissions** • **Understand issues for independent artists and small businesses** • **Make a business plan** • **Identify intellectual property and copyright issues**	• **Discuss ethics and standards of fair practice, including work for hire and confidentiality** • **Practice writing letters of agreement and simple contracts** • **Identify intellectual property and copyright issues** • **Recognize the challenges of setting up a practice** (ex. partnerships vs subchapter S corporations)	• **Discuss ethics and standards of fair practice, including work for hire and confidentiality** • **Practice writing letters of agreement and simple contracts** • **Identify intellectual property and copyright issues** • **Recognize the challenges of setting up a practice** (ex. partnerships vs subchapter S corporations)	• **Ethics** • **Contracts and fees** • **Legal and regulatory issues** • Understanding licensure (rules, regulations, and processes) • Title versus practice act
Getting a job:		• **Compose resume, standard business letter, design philosophy or artist statement, press release** • **Compile and present portfolio of work** • **Making professional websites**	• **Organize job searches, including letters of introduction, resumes, portfolios, internships, freelance, and salary expectations**	• **Organize job searches, including letters of introduction, resumes, portfolios, internships, freelance, and salary expectations**	• Capstone - how to leverage final projects • **Portfolio preparation** • **Resume preparation** • **Interview skills and awareness**

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TECHNOLOGY	Architecture:	Art and Design:	Graphic Design:	Industrial Design:	Landscape Architecture:
Basic computing skills and attitudes:	• **Adobe Creative Suite (Photoshop, InDesign, Illustrator)** • Basic 3-D modeling (Sketchup)	• **Find help with technology problems in the college, online, and after graduation** • **Understand approaches to learning new software** • **Understand software appropriateness** • **Select the right tool for the right task** • **Master file management** • **File sharing parameters**	• **Locate college resources for technical assistance related to networking, printing, projecting, and hardware support** • **Adopt effective and varied software skills (including how to use tutorials, online help services, manuals, etc.)** • Master the basics of an operating system (including finder, hard drive, and system preferences) • Master the basics of network use (including logins, passwords, workflow, and server options) • **Use standard protocols for file management and backup** • **Demonstrate a functional understanding of electronic communication (including email, posting visual work on blogs and websites, file and document sharing, etc.)** • Learn to burn CDs and DVDs		• **Importance of backups** • **Select the right tool for the right task** • Comprehension of Mac and PC platforms (including parallels) • **Understand file sharing, management and workflow** • **Understand connectedness of programs** • Exposure to general industry standards (i.e. naming conventions)
Peripherals and presentation formats:	• **Scanning and printing**	• **Master printing protocols** • **Laser cutter** • **Scanning methods** • **How to use digital camera** • **Using the plotter** • **Understand legal issues related to the internet and email** • **Make digital presentations**	• Master the basics in the use of digital cameras and digital video for research and documentation • **Demonstrate the ability to scan, assemble, enlarge and reduce, and output electronic and printed images from these cameras** • Demonstrate a functional understanding of simple wordprocessing (including effective use of grammar and spellchecks) • **Use digital research skills as identified in UNDERGRADUATE RESEARCH** • **Produce simple PDF, Keynote, or Powerpoint slide shows**		• Hardcopy vs. digital presentations • **Scanning, printing, plotting** • Available media types (bond, glossy, etc.) • Laser cutter • Construction documentation
Disciplinary software:	• Basic Rendering • **2-D vector graphics (AutoCAD and Illustrator)** • Intermediate rendering and composition (Podium and **Illustrator**) • Building Information Modeling (Revit) • Advanced digital modeling (Rhino)	• **Create a website (software?)** • **Basic InDesign** • **Basic Photoshop** • **Basic Illustrator**	• **Adobe Creative Suite (Photoshop, InDesign, Illustrator)** • **Website production, including CSS, Flash, Dreamweaver**		• **Adobe CS4 (Photoshop, Illustrator, InDesign)** • **AutoCAD** • Sketchup • iMovie • Microsoft Word and Excel • GIS (ArcView)

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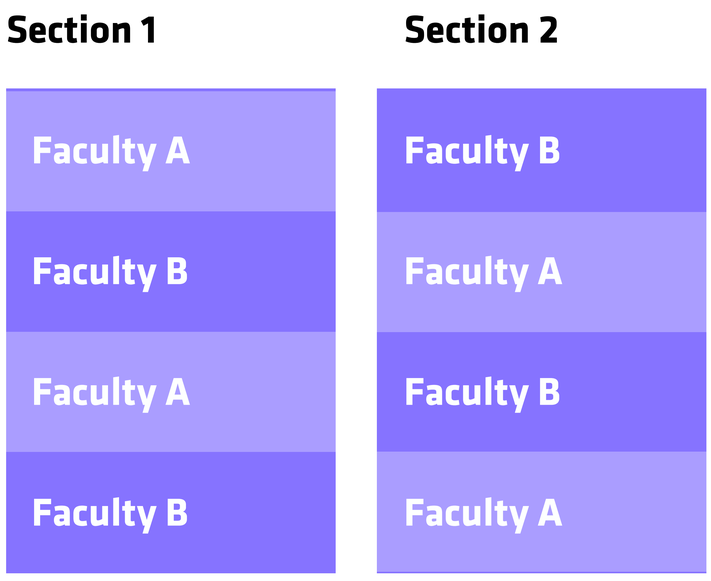
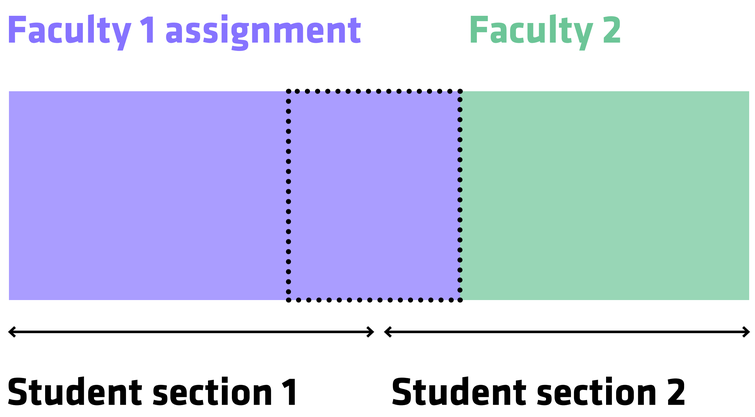
TEACHING SEMINAR (DDN 685 COURSE)	Architecture:	Art and Design:	Graphic Design:	Industrial Design:	Landscape Architecture:
Authoring curriculum:	NO INFORMATION SUBMITTED ON THIS TOPIC	• **Structuring an effective studio-based course** • **Structuring an effective studio-based project**	• **Writing curricular and course objectives / descriptions** • **Writing project objectives / descriptions** • Scaffolding project sequences	• Would be effective for training TAs and Adjuncts	• **Lesson planning**
Teaching formats:		• **Structuring a series of lectures and related readings** • **Presenting course material in a variety of formats**	• **Teaching lecture classes and seminars** • **Structuring material for presentation to large audiences** • **Using readings** • **Integrating writing in design**		• **Teaching lecture classes and seminars** • **Integrating writing in design**
Pedagogy:		• **Classroom management - structuring the environment to maximize learning** • Addressing student questions	• **Pedagogy and classroom management** • What to look for in the work of experienced teachers - doing observations • Managing collaborative and sponsored projects		• **Pedagogy and classroom management** • **Pedagogy - performance vs. prescription** • Conflict resolution
Evaluation:		• **Providing meaningful and specific commentary and grades**	• **Evaluating student performance - writing rubrics** • **Critiques and grading**		• **Evaluating student performance - creating rubrics** • **Critiques and grading**
Course contexts / related skills:			• Role of general education in professional design curricula • Developing undergraduate research skills • **Use of technology in classrooms** • **Presentation and resource strategies**		• **Use of technology in classrooms** • **Presentation and resource strategies**
Planning and projection:			• Educational landscape in design • Strategic planning and projections • Building the curriculum within the context of national trends and the strategic environment		
Faculty responsibilities:			• Faculty assessment - teaching, research, and service • The tenure process • Grants and sponsored research		
Getting a job:			• Developing a teaching portfolio • Searching for a teaching position • Preparing for a teaching interview		
History:			• History of design education		

6

Flexible faculty assignments





Half the faculty preparation
Twice the faculty expertise
Identical instruction for each section

Combines two sections; two disciplines; or two student levels
Two types of instruction taught to different class sizes
Two different levels of faculty commitment

Flexible faculty assignments

Modules: **Students take three of three**

Faculty 1	Faculty 2	Faculty 3

Modules: **Students take two of three**

Time slot A	**Faculty 1**	**Faculty 2**	**Faculty 3**
Time slot B			

Time for discussion...