Independent Project

Department of Design

des**194A & B**
des**199**
des**299**

Independent projects are student opportunities to receive upper division and potentially studio credit for completing a substantial self-driven project. Under the tutelage of a faculty sponsor, designers registered for these units will do research and create prototypes and eventually solutions to problems they research.

Name |

Independent Study

Starting can be the hardest part of the design process.

Your journey begins here.

All designers eventually put their learning to practice by starting their own self-driven projects. It's a big leap, but a leap that everyone can do. Designers have the power to make their ideas a reality. Independent studies and research are a way for students to commit academic time to designing a meaningful project and impacting the world while exploring their own design interests.

Let's change the world.

Strong design projects are built on collaborations with great people. This workbook is your personal journal; it will be a tool for you to record your insights and learnings and have a permanent document of them.

Be proud of your work.

Upon completion of this workbook, you will have recorded your process in a way that is transferable to your final project presentation. This workbook is meant to supplement and guide your research–you'll likely have answers and insights that will require further exploration than these pages can hold, and that's okay! This resource is to walk you through some of the main ideas behind a well-researched independent study.

Every research process is different, and as a researcher you'll often adapt your process to new findings. This workbook represents just one approach for undertaking design research.

What do you need?

- Great ideas!
- Independent Study Workbook
- 84 Units (upper division standing)

Please provide us:

Variable Units this quarter

Student ID Number

Coming up:

1. Project Scoping

Independent Study

Once you get started, you wont want to quit.

Section

1. Project Scoping

2. Research

3. Testing

Your problem space.

This step will guide you in making a deliberate choice about:

1. The problem space you would like to design your project for.

2. The faculty adviser you would like to work with to ensure your project will be directed and beneficial.

Evaluating Yourself

Self-evaluation is an important part of understanding who you are as a designer, and who you want to be. These questions are intended to help you determine a project that will be fulfilling.

Adding Definition

Every section in the book will have a definitions portion like this one. This is a space where we can define terms and include definitions to things that are footnoted. Let's take a look at some terms included in this section.

problem space (n.) a design issue and all of the different participants and systems that interact with it

actionable (adj.) something that can be tangibly done or carried out

unknown word (x.) use this space to add in any other words you might be unclear about

Self-Evaluation

Take a minute to self-reflect.

Every section will be formatted as a Q&A. With the right questions, your project will be much more focused and guided, and you'll know your next steps. Your project starts here:

1a. What is your strongest skill?

1b. What is an example of a project in which you successfully demonstrated or applied this skill?

2a. What skill do you want to improve?

2b. How would you utilize this skill?

3a. What is the project you're most proud of?

3b. What was your most important contribution?

Choosing a Mentor

Stand on the shoulders of giants.

Your faculty adviser will be an integral part of your design process and your growth as a designer! These steps are intended to connect you with a faculty advisor who will best assist you with your research.

1. You can find a list of faculty members – including their expertise, courses taught, previous research, etc. – from the Design department website.

2. Review this list and select 3 potential faculty members and write their names below:

Answer each of the following questions for each faculty member that you selected in step B.

1. What is your current relationship with this faculty member?

2. What expertise would they be able to contribute to your research?

3. What is their contact information?

Contacting Faculty

They're just an email away.

Formalize your request for a faculty adviser by selecting 1 of the faculty members and contact them – we recommend doing so by email so both you and the faculty can establish an early means of communication. Below is a recommended email format.

1. **Subject:** Independent Practice – Faculty Advisor Request | [Your Name]

2. **Body:**
Introduce yourself.
What is the problem that interests you?
How do you see yourself impacting the problem space?

Connect with the faculty.
What is your current relationship with this faculty?
What expertise are they able to contribute to your research?

Make it actionable.
Ask the advisor's availability.
Propose times to meet to discuss your project in the next week.

Once the faculty has responded, you can follow up in one of two ways based on their availability.

A. **If the faculty advisor is unavailable:**
Ask them for references or possible advisers to further your research.
Repeat step 1-2.

B. **If the faculty advisor is available:**
Write down the advisor's availability.
Follow up with a time and place to meet and discuss your project.

The First Meeting

It all starts with a hello!

You're almost ready to kickstart your work. You're going to learn so much from the conversations you have through your process, and the first will be your faculty mentor.

1. *Before the meeting*
Formalize the problem that interests you.
Formalize ways you want to impact the problem space.
What expertise would they be able to contribute to your research?

2. *During the meeting*
Ask your advisor for their long-term availability.
Ask your advisor for possible sources to begin your research on your problem space.
Work with your faculty advisor to draft a timeline to discuss your project over the course of the remaining quarter.
Decide the next time to meet and what your advisor can expect from you then.

3. *After the meeting*
Send a follow-up email to your advisor thanking them for their time. Include the next time you've agreed to meet and what your advisor can expect from you then.

You did it!

You've finished the first of three parts of this workbook. Now you have a problem space, a faculty advisor, and a few start points for researching. Moving forward, you'll be diving deeper into the problem space and getting a stronger understanding of who you're designing with and for. Congratulations, and let's get right to the research phase of your project!

Independent Study

There are resources and mentors all around just within your reach.

Just a reminder.

Self-driven projects are a big leap, but a leap that everyone can do. Remember, you're never alone in this. There are countless resources all around you filled with great knowledge to answer your questions. If you feel stuck, skim ahead a few pages and think about some possibilities of where your project could go.

Conversations count.

Every once in a while, step out of your seat and chat with one of your friends about some of the things you've covered. Each conversation you have will bring an insightful new perspective to your research.

Keep at it!

In self-driven projects, you're accountable to yourself instead of purely trying to cut deadlines. It takes a lot of energy, but you're taking big strides and doing great. Keep up the good work.

What do you need?

- [x] Great ideas and high energy!
- [ ] A completed project scoping phase
- [ ] A general idea about your direction

How do you feel?

Now that you've completed your first steps, take a moment to reflect.

Up next:

2. Research

Independent Study

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Great Conversations

Conversations are the cornerstones of strong design projects. In this section, you'll have great conversations and learn a ton.

1. You'll engage participants of the problem space you're trying to design for.

2. You'll read about past efforts at designing for the problem space and learn from the best designers' works.

Research Matters

Research ensures that you are addressing real community needs. Hoping to eliminate bias, be aware of bias in existing research, understand different viewpoints from a neutral start point.

A few phrases.

prior art (n.) historical precedents or previous attempts at doing something

unknown word (x.) use this space to add in any other words you might be unclear about

Conducting Research

Build your wisdom.

The following steps are intended to help you gather information from people who have proposed solutions to the problem space you're interested in, community members who are currently involved in the problem space, and secondary sources. To get you started:

1. What question is your project trying to answer?

2a. What experience do you have with the people involved in this space?

2b. What did you learn from these experiences?

3a. What is the project you're most proud of?

3b. What was your most important contribution?

3c. How might that contribution transfer to this?

Community Members

Great ideas come from working together.

Community members will fuel your project by providing first hand research about your project and sharing their insights with you.

1a. Brainstorm a list of community members involved in the problem space.

1b. How do the participants in the problem space interact with one another?

1c. List the services, if any, participants use to communicate.
What are barriers of communication between participants?

Community Members

2a. Who suffers from the problem space?

2b. How does the problem hurt them?

2c. What is the best way to get in contact with the affected group?
For what reasons would you not want to contact these people?

3a. Who benefits from the problem space?

3b. How do they benefit from the problem space?

3c. What is the best way to get in contact with these people?
For what reasons would you not want to contact these people?

4a. Are there any groups formally addressing the problem space?

4b. What is the best way to get in contact with these groups?

4c. What is their relationship with the problem space?
With people benefitting from it?
With people harmed by it?

Studying Precedents

A look back at our predecessors.

Engaging with prior art helps inform your knowledge of previous attempts at addressing the problem space.

Before engaging with the prior art, consider the following:
Who authored or created the prior art?
What experience do they have with the problem space?
Who is their audience?

To start engaging prior art, answer the following questions:

1a. What is a past solution people have proposed in this problem space?

1b. What informed these solutions?

1c. To what extent were people who are affected by the problem space involved?

2a. How do people interact with this solution?

2b. How was the solution received by the people affected by the problem space?

3a. What aspects of the prior art affected your views or work within the problem space?

Reflect on Research

Reflecting on your research makes it human.

1a. How are interactions facilitated between people in the problem space?

1b. What platforms are being used to facilitate the interactions, and how might that play a part?

1c. In what ways are these interactions limiting?

2a. What are major points of tension between people in the problem space?

2b. How does this tension manifest in interactions?

3a. What are shared values or goals between people in the problem space?

3b. Are they aware of these commonalities?

3c. How do these values manifest in interactions?

Another one in the bag.

You've got a great start on your research. Up next, we're going to start putting some of your hunches to the test.

Independent Study

Starting can be the hardest part of the design process.

Dont forget:

Designers have the power to make their ideas a reality. Everybody needs a little help with this sometimes and it's okay to ask for guidance. Your mentor is here for you, and so are your peers. Check in with them once in a while to refresh your thinking and you'll be back on track.

You are a maker.

The ability to make ideas a reality is beautiful, and you're so close to making your research shareable. Put a little more time in and your work will be another step closer to making an impact in a real way.

You're onto something.

All your research and insights so far are already a victory. The things you've learned will help someone else move forward in their work. Celebrate this victory, and look ahead to more!

What do you need?

- [x] Great ideas!
- [ ] A completed project scoping phase
- [ ] A general idea about your direction

How do you feel?

Now that you've completed your next step, take a moment to reflect.

Up next:

3. Testing

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Test, test, test!

This step will guide you in answering these questions:

1. How can your hunches translate into prototypes?

2. How do we test your hunches through a prototype?

3. Then what?

Testing your ideas.

A prototype is quick and dirty. It can be as rough as a chair modeled in cardboard or as detailed as a full-scale 3D render; a static wireframe or an interactive app; a dyed fabric swatch to a hand-sewn skirt. Making prototypes is a great way to justify or debunk your hunches, and to quickly pinpoint areas for improvement.

Defining Words

hunch (n.) an assumption or hypothesis that has not yet been proven or disproven

unknown word (x.) use this space to add in any other words you might be unclear about

You're onto something

Instinct and intuition are great tools for designers.

After talking with community members, you probably have some hunches about ways to address the problem – these are a great jumping-off point. For each hunch, answer the following questions:*

1a. What's a hunch you have about the problem space?

2a. How does your experience with the community affirm or challenge this hunch?

3a. What does your hunch imply about the problem space or those involved?

1b. What's another hunch you have about the problem space?

2b. How does your experience with the community affirm or challenge this hunch?

3b. What does your hunch imply about the problem space or those involved?

Make your ideas

Explore your limitless ideas.

Prototypes do not necessarily need to solve the entire problem space. Prototypes can address one micro-issue at a time. Please complete these sentences.

4a. The perfect design solution to this problem would:

4b. Before that can happen, first I need to find out why/how:

4c. Before I can understand that, I need to find out why/how:

To find out, I'm going to create a prototype!

Prototype Brainstorm

Give form to your thoughts.

Use this page to brainstorm prototypes, and then dive right in and make some more detailed mock-ups of it.

Prototype Reflection

Reflecting on your prototype only improves it.

Take a moment to think about your prototype more critically so that you can refine it further.

1. Does your prototype represent the interests of your audience? If so, how?

2a. Who can your prototype reach? (If your prototype is a mobile app, will only smartphone users be able to access it? Is your mobile app geared towards an English-speaking audience?)

2b. Why did you choose this target audience over others within your problem space?

2c. What barriers block people from using existing solutions to the problems now?

Ideas percolating p.2

Explore your limitless ideas a second time.

Now that you've reflected, try answering these questions again. Note how your answers may or may not have changed.

3a. The perfect design solution to this problem would:

3b. Before that can happen, first I need to find out why/how:

3c. Before I can understand that, I need to find out why/how:

To find out, I'm going to create a prototype!

Second Prototype Brainstorm

Give form to your thoughts another time..

Use this page to brainstorm prototypes, and then dive right in and make some more detailed mock-ups of it.

User Testing

Put your ideas to the test.

User testing is essential to ensuring that your design is meeting the community's needs. Whether or not your design is successful is highly dependent on the reaction of its users.

1. How long does an interaction with your prototype typically last?

2. How many people can interact with your prototype at once? Is your prototype easy to replicate so multiple people may interact with it at once?

3a. Who is the closest person you know (not including yourself) involved with the problem space?

3b. Do they need to be physically present for you to test your prototype on them?

3c. How do you expect they will interact with your prototype?
What interaction would assure you that your prototype was successful?

After Testing

The results are in.

After you've tested your prototype, take a moment and answer the questions so that you can figure out what your next steps are!

1a. Was their interaction as you expected?

1b. What about their interaction with your prototype was expected?
What about their interaction with your prototype was unexpected?

2. What was your initial hunch?
To what degree did their interaction make you affirm or doubt your hunch?

After Testing

3. What did you learn from observing people interact with your prototype?
How can you improve your prototype based on what you've learned?

At this point, you may choose to go through as many cycles of prototype revision as necessary until you feel that your community partner or user is satisfied. We've allotted some space for you to start that here, but you'll probably need more. Happy prototyping! We know you can do it.

Prototype Revision

Control+Z, and back at it again.

Use this page to brainstorm how your prototype might be revised before you go through with the changes that you discovered.

Independent Study

It's about the journey.

Presentation Matters

You've done a lot of great work and come a long way on your project. Even if you don't plan on continuing your project, sharing what you've learned is a great way to either get others involved or pass the torch on to someone else. This way, the progress you've made won't be forgotten. Your prototypes will continue to inform and inspire solutions to the problem space you've created.

Presenting Research Findings
There are several ways to share all that you've learned from your project. To determine which way is the best for the goals of your project, consider your audience and discuss your project with your faculty sponsor. Here are a few suggestions:

Charette
Elevator Pitch
Keynote / Powerpoint
Blog
Essay
Research Conference
Mock or real proposal for a project.

There are countless ways to present your work–any form of presentation informs future designs and helps other students learn from your research. What form of presentation you choose is highly dependent on the situation. Your faculty sponsor will provide you valuable guidance about how you might present and share your work.

Your workbook is done.

Congratulations on completing your Design 199 workbook! We hope it helped you through your project and made your design work even stronger than it already was. We'd love to hear your thoughts about the workbook and revise or correct anything unclear, ambiguous, or confusing. If you have any comments about the workbook, please fill them out below before turning it in to your faculty sponsor.

Give thanks.

Take some time to thank your mentors for all the insights and help they provided on your project. This includes your faculty sponsor, and any community members you may have met along the way.

Additional Reading

Below is a list of sources that inspired this workbook. These sources will help you think about design and the larger context it acts in more critically.

"How Designers Destroyed The World." talk by Mike Monteiro.

"Why It's Selfish to Avoid Giving Negative Feedback". Christian Jerrett.

Design for the Real World. Victor Papanek. 978-0-89733-153-1

Designing for Social Change. Andrew Shea. 978-1-61689-047-6

Teaching As a Subversive Activity. Neil Postman & Charles Weingartner.

Doing Research In Design. Crouch & Pearce. 978-1-84788-579-1

"Where Do Good Ideas Come From?" TED talk by Steven Johnson.

"Official Piracy Policy." Yacht Band.

"Solving the World's Biggest Problems Takes Ensembles, Not Soloists." Design Gym.

"The key to happy productive designers: Teaching your team to critique". Braden Kowitz.

Just Design: Socially Conscious Design for Critical Causes. Christopher Simmons. 978-1-60061-971-7

Dynamics in Document Design. Karen A. Schriver. 0-471-30636-3

*The Form Book. Borries Schwesinger. 978-0-500-51508-2**

"Want to help someone? Shut up and listen!" TED talk by Ernesto Sirolli.

"What do graphic designers need to know?" AIGA.

Design Revolution: 100 Products that Empower People. Emily Pilloton. 978-1-933045-95-5

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