Toy Product Design
a project based adventure in product design
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Hand Popper Version 2, 2005
Hand Popper Version 3, 2005
Hand Popper Version 4, 2005
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STRING SHOOTER BLP, 2005
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let's look at some past projects
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Electro-plushies from 2008 are a set of large plush functional circuit components.
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Sho mi origami from 2009 projects origami instructions onto paper

Sho mi origami, 2009
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Spring Speeder from 2010 is a ride-on version of the classic pull-back toy car.
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Chomper from 2011 is an interactive toy chest that eats your toys to promote clean up time.
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Critter Chorus from 2010 is a music composing toy... now a full exhibit at the Works Museum.

CRITTER CHORUS, 2010
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marble snap
from 2012
is a set of connectors that allows you to turn your trash into toys

marble snap, 2012
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Stack Track, 2012

Stack Track from 2012 is a vertical marble run construction toy.
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echo
from 2013
is a hand held musical instrument that turns distance into notes
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illuminicubes
from 2013
is an
electronic
strategy-
based board
game of
capturing
color
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whoa!
it's almost time to start!
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Toy Product Design
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10th annual!

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Toy Design at UMN?

Introduction to Product Design

Art and Science

It is actually very challenging

It is actually a serious industry
Course Objectives

1. Experience a product design process

2. Become comfortable with fabrication and design techniques and tools

3. Gain insight into design for children and entertainment

4. Enhance Creativity
Quiz!

1. What is your name?
2. What is a toy?
3. What is a product?
4. What is design?
What is Design?

Act of producing a plan for a specific effect

The ultimate interdisciplinary subject
What is a Product?

Something that is produced by human or mechanical effort or by a natural process

Something manufactured usually for selling
What is a Toy?

A tangible item that functions as a tool for play.

Anything can be transformed into a toy.
What is a Toy Product?

A tangible item DESIGNED to function primarily for play.

Arts and media Products?

Fun to use / fun looking products?

A toy is in the mind of the user. A toy product is in the mind of the designer.
Toy Product Design (noun)

The art and science of producing a plan for an item used for play that is intended to be manufactured and possibly sold
Toy Product Design

- Product Design Process
- Play
- Basic Engineering
- Sketching and CAD
- Aesthetics
- Graphic Design
- Creativity Techniques
- Model Making
- User Experience
- Plastics
- Packaging
- Presentation Design
- Teamwork
Design Process

Research

Ideation

Detailed Design

Concept Refinement

Design for Production
Design Process
Toy Product Design PLAYsentations
Wednesday May 7th 7:00pm
Coffman Theatre
Design Process

Infection
Will you try to save the cell or take it over?

my vu, 2008

COLOR DJ

donald eng, 2009
Infection

Will you try to save the cell or take it over?
Infection

Will you try to save the cell or take it over?
Color DJ / Audio Jack
Color DJ / Audio Jack
LUX
toy product design, 2008

Tricky Tracks
toy product design, 2010

Cardigo
toy product design, 2009

HUEY
thinkgeek.com, 2010

Ashiato Animal Sandals
kiko, 2011

Skallops
kickstarter funded, 2011
Design Assignment #1

Design a new UMN TOY LAB Logo

In 10 minutes

With fingerpaint

Only using other people’s fingers

you can discover more about a person in an hour of play than in a year of conversation - plato
Theme

2005 - Developmentally Disabled
2006 - Dental Hygiene
2007 - Design for Brazil
2008 - Science and Engineering
2009 - Arts and Crafts
2010 - Outdoors
2011 - Interactive Creatures
2012 - Marbles
2013 - Creativity
2014 - January 30th!
Required Reading?
Required Reading?
Logistics - Locations

**Lectures:**
Monday & Wednesday
4:00 - 5:30 pm
Here in Rapson 45

**Labs:**
Thursday
6-9 pm
Rapson 56 ++
(typically courtyard)

be on time
Logistics - Syllabus

11-12 Teams of 6

Instructors

4 Units

Back heavy

Grading

product.design.umn.edu/courses/pdes3711
updates with photos/lectures
Logistics

Play Tests
@ minnesota children’s museum
Fridays 1/31, 2/21, 3/14, 4/11
5:30-7:30pm

Theme Intro
Jan 30 (2nd Lab)

Survey Forms

#umntoy
Assignment (part one)

Statement of your thoughts on design and/or play

submit to google form linked from email and on lecture webpage

https://docs.google.com/a/umn.edu/forms/d/1qVQkFoyCZfdGwSBZ7uVztznoGPjIPUsaf-gDPXRhq0/viewform

by 2pm Thursday

as a **limerick**

pay attention to rhythm and syllables

a limerick should not be **confusing**
it depends on the words you are **choosing**
it must be on **time**
it must be in **rhyme**
and the good ones are often **amusing**
Assignment (part two)

Meet and Greet!

Tomorrow during Lab

Rapson Room 37

6-9pm

Dividing the class to fit: Form A 6-7, Form B 7-8, Form C 8-9

Speak with at least 3 lab instructors + me
lab is required to be placed into a team

Mugshots!
Assignment (part three)

look under your desk
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