14th annual!

Toy Product Design

a project based adventure in product design
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 sold.
Toy Product Design

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

problem definition ➔ research ➔ ideation ➔ prototype ➔ refine

test/feedback
Design Process

6 ideas / team

Idea Presentations
Feb 15

6 models / team

Sketch Model Expo
March 8

2 models / team

Design Consultation
April 4

1 final prototype

PLAYsentations
May 2
Toy Product Design PLAYsentations

Wednesday May 2nd 6:00pm
Coffman Theatre
Design Process

“Choco Gun” 2014

“Color DJ” 2009
Chozmo

drawing never looked so good 🌈
Chozmo
Color DJ / Audio Jack
Color DJ / Audio Jack
Design Assignment #1

Design a 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 - Maker Culture
2015 - Playgrounds
2016 - STEM
2017 - Summer/Winter Holidays
2018 - January 25th!

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**Illumicubes**
An illuminating board game similar to Go/Othello. Players capture colors by surrounding the opponent.
Toy Product Design 2013

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**Stack Track**
A vertical marble run composed of solid wood blocks with a variety of internal marble grooves joined together with connector tubes.
In licensing process with MindWare
Toy Product Design 2012

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**Echo**
A handheld electronic instrument that plays notes based on sensing distance from a hand or other object. It has recording and playback functionality.
Toy Product Design 2013

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**Chozmo**
A chocolate extrusion gun with a hopper, auger, and hot melt chamber. Using easy melt chocolate pellets, users can create 2D and 3D chocolate structures.
Toy Product Design 2014
Required Reading?
Required Reading?
Logistics - Locations

**Lectures:**
Monday & Wednesday
5:00 - 6:30 pm
Rapson 56

**Labs:**
Thursday
6-9 pm
Rapson 56
(later Rapson Hall courtyard)

be on time
Logistics - Syllabus

14 teams of 5-6

Lab Instructors

4 Units

Back heavy

Grading

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

Play Tests
Marcy Open School
Wednesday 3-430
feb 14, mar 21, apr 11

Survey Forms

#umntoy
Assignment (part one)

Statement of your thoughts on design and/or play

submit to canvas!

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 56

6-9pm

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

Speak with at least 4 lab instructors + me
lab is required to be placed into a team

Mugshots!
Assignment (part three)

look under your chair
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