

# Toy Design

## Department Goals

The Toy Design Department prepares diverse students through a high-quality curriculum, taught by experienced faculty, to develop the marketable skills necessary for professional success as a designer in the toy industry or related fields. Students in the Toy Design Department will:

- Develop their individual expression and an entrepreneurial attitude, which results in unique, creative, innovative concepts and designs.
- Gain industry knowledge by learning the key areas of design and different categories recognized within the industry.
- Learn the necessary technical design skills used in the industry, including concepting, drawing, model-making, and computer skills.
- Develop their professionalism by practicing strong work ethics, as well as effective communication and presentation skills.
- Build mentoring relationships with guidance by professionals through corporate sponsorships, industry critiques, and internship programs.
- Learn to design with intent by understanding a designer's role as it relates to marketing and engineering.

# Toy Design

		Fall	Spring	Degree Requirements
<b>Sophomore Year</b>				
TOYD200/201	Toy Design I/II	3.0	3.0	
TOYD220/221	Drawing I/II	2.0	2.0	
TOYD230	2D Visualization	2.0	—	
TOYD231	3D Visualization I	—	2.0	
TOYD240/241	Model Making I/II	2.0	2.0	
TOYD250/251	Methods & Materials of Production I/II	2.0	2.0	
TOYD261	Conceptual Problem Solving & Brainstorming	—	2.0	
SSCI211	Child Psychology	3.0	—	<i>Descriptions for courses listed in grey boxes are located in the Liberal Arts and Sciences section.</i>
ENGL202	Sophomore English	3.0	—	
ILML 200	Integrated Learning Lecture	—	3.0	
Total Credits per Semester		17.0	16.0	
<b>Junior Year</b>				
TOYD300/301	Toy Design III/IV	4.0	4.0	
TOYD320/321	Drawing III/IV	2.0	2.0	
TOYD330/331	3D Visualization II/III	2.0	2.0	
TOYD340	Model Making III	3.0	—	
TOYD455	Portfolio Development	—	2.0	
*ILMS300	Integrated Learning Studio	2.0	—	
MATH 136	Math for Artists and Designers	—	3.0	
AHCS236	History of Toys	—	3.0	
AHCS220	Contemporary Perspectives in Art and Design	3.0	—	
Total Credits per Semester		16.0	16.0	
<b>Senior Year</b>				
TOYD400/401	Toy Design V/VI	4.0	4.0	
**TOYD415	Career Development	2.0	—	
TOYD420/421	Drawing V/VI	2.0	2.0	
TOYD425	Games and Game Theory	2.0	—	
TOYD430	Package Design	—	2.0	
TOYD450	Toy Industry Practices	2.0	—	
LIBS454	Business Practices	—	2.0	
NSCI308	Juvenile Anatomy and Ergonomics	3.0	—	
	Advanced Topics in English or Liberal Studies Elective	—	3.0	
AHCS 310	Art History Elective	3.0	—	
*LIBS 440	Senior Liberal Studies Capstone	—	3.0	
Total Credits per Semester		18.0	16.0	

\*These courses may be taken either in the fall or the spring semester

\*\*Note: TOYD415, Career Development: Though the coursework portion of this class is offered during the fall semester, students are encouraged to participate in an industry internship during the summer between junior and senior years.

## Course Descriptions

### Toy Design I/II

TOYD200/201 3 credits  
In these courses, students develop an understanding of the creative process of toy design. Emphasis is placed on developing toys which engage children in what is referred to in the toy industry as a “play patterns.” Students apply skills in drawing, model making, and fabrication to create original toys which engage children in imaginative play and shape developmental skills and decision-making, socialization and creativity. The students learn to conduct market research and analysis to insure that their designs are appropriate for the category of toys they are designing. Using various fabrication techniques, students will translate their idea into 3D models, and present the final products to faculty and visiting toy industry professionals.

*Lab Fee - Toy Design I/II - \$50.00*

### Drawing I

TOYD220 2 credits  
The purpose of this class is for students to become fully articulate in a new drawing language called Visual Communication. To communicate effectively, a designer needs to have at their disposal a broad range of drawing tools with perspective being the foundation. Students spend the semester becoming familiar with the principals of perspective and more importantly, they learn the useful particulars and shortcuts pertaining to sketching.

### Drawing II

TOYD221 2 credits  
This second semester course is an introduction to the theory and practice of sketching, drawing, and rendering techniques as applied to toy product. Focus is on rapid vis sketching as well as marker rendering, which enable the designer to convey information about surface characteristics such as color, texture and material.

### 2D Visualization

TOYD230 2 credits  
In this course students acquire the skills necessary to take a concept from a rough sketch to a refined set of technical illustrations. Students will learn to produce illustrations accurately that will convey their design intent and serve as a blueprint when creating a prototype model. The students are introduced to the basic drawing tools in Adobe

Illustrator. The skills learned during this course will continue to be utilized throughout the remainder of the Toy Design studio courses.

### 3D Visualization I

TOYD231 2 credits  
This class examines the computer as a means to construct and render an idea via 3D-modeling, and then to output that information for computer aided rapid prototyping. It introduces Computer Aided Design (CAD) programs as toy design tools. Students start with Rhino, a 3D-modeling program that emphasizes the 3D construction and surface rendering of ideas and output to the rapid prototyping machine.

### Model Making I

TOYD240 2 credits  
This course teaches the basics of sculpting licensed characters from 2-D turnaround drawings. Students then learn to make molds of the sculpted figures, to cast them in resin, and then to paint the cast figures.

*Lab Fee - \$245.00*

### Model Making II

TOYD241 2 credits  
This course introduces students to plastic fabrication and prototyping concepts through the use of various methods.

*Lab Fee - \$100.00*

### Methods and Materials of Production I

TOYD250 2 credits  
Materials used for manufacturing within the industry are important because they determine the durability and safety of toys, toy use by consumers, and the methods and costs of production. Each of these issues must be considered in order to successfully design and market a toy. This course focuses on different manufacturing processes as well as the understanding and use of materials used in toy design.

### Methods and Materials of Production II

TOYD251 2 credits  
This second-semester course explores more advanced manufacturing processes and materials. Discussion focuses on the fundamentals of plastic components and on design, exploring the possibilities and limitations associated with plastic toy components.

### Conceptual Problem Solving and Brainstorming

TOYD261 2 credits  
Brainstorming is an essential part of the toy design process; therefore, this class emphasizes creativity through brainstorming techniques. Additional focus is on cobbling up quick toy ideas, given a specific design category.

### Toy Design III/IV

TOYD300/301 4 credits  
In these courses, students will expand on and apply principles they have learned in Toy Design I and II to create original toys which can be expanded to become a toy brand with line extensions. Students will utilize analog and digital drawing skills, technology including digital design software for rapid proto-typing, and explore methods of fabrication using a variety of materials. Students will learn the most effective methods of presenting their toy concepts visually, demonstrating new features digitally when it is the most effective way of communicating play patterns and function. Corporate sponsored projects may occur during either semester, but regardless, critiques will include visiting toy industry professionals.

### Drawing III

TOYD320 2 credits  
Students focus on the full understanding of material indication in monochromatic values. Topics covered include concept sketching, composition, layout, perspective drawing, using sketching as a design tool, and understanding and rendering reflective forms.

### Drawing IV

TOYD321 2 credits  
This course introduces the computer as a digital tool, building upon sketching and rendering techniques learned in previous drawing classes.

### 3D Visualization II

TOYD330 2 credits  
A more advanced version of Technical Illustration II, this course continues the use of Rhino, the 3D modeling program used in the construction of prototyping models. By using Computer Aided Design (CAD) programs (the same as in the toy industry) students learn advanced modeling and prototyping techniques. Students will be

introduced to Studio MAX for several styles of rendering and basic animation skills. This course combines instruction on the computer with guidance in the standard requirements for the production of 3D models through output to the rapid prototyping machine.

### 3D Visualization III

TOYD331 2 credits  
This is an advanced computer lab course that allows students continue to develop their 3D modeling skills with Rhino and learn more advanced modeling techniques. Students will continue to develop their Studio MAX skills with more advanced rendering and animation skills. The course will introduce Adobe After Effects as a means to create more compelling digital video presentations with animation, titles, sound effects, and transitions. Content focuses on the advanced use of computer programs to output models for on-going projects. Students apply acquired learning to improve toy design projects for use in their portfolios.

### Model Making III

TOYD340 3 credits  
This course focuses on advanced model making skills and techniques involving the lathe and milling machine with an emphasis on the issues and problems related to the projects developed in Toy Design III. Also included is an emphasis on advanced sculpting, molding, casting techniques, and building articulated armatures for action figures.

*Lab fee - \$150.00*

### Portfolio Development

TOYD455 2 credits  
This course concentrates on the organization and presentation of the student's portfolio. Additional attention is given to interviewing skills and techniques. Students will also develop a promo sheet and resume. All work will be presented in both analog and digital formats.

### Toy Design V/VI

TOYD400/401 4 credits  
These courses are advanced level courses in which students continue in their development of conceptual, technical, and creative skills and methodologies relating to toy design. Emphasis is placed on identifying future trends and technology and integrating them into the toy design process.

## Course Descriptions

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Students will have been exposed to the unique and different categories of toys and children's products and how those products are part of larger brands and entertainment properties. Corporate-sponsored projects may occur during either semester, but regardless, critiques will include visiting toy industry professionals. The students will have had the opportunity to participate in summer internships where they gained "real world" experience, and will be able to apply that learning as well as their classroom experience to design and prepare their senior show. It will showcase their talents, and is held at the end of the semester.

### Career Development

**TOYD415** 2 credits  
This class is the follow-up to the summer internship that the students participated in with a toy company. A formal presentation of the students' job duties and company profiles are required. In addition, the course will cover interviewing skills, research and targeting potential job prospects, and preparation of oral and written communications.

### Drawing V

**TOYD420** 2 credits  
Understanding of form and material indication from the previous semester is now executed in full color. The course starts with the application of color to backgrounds and other simple elements used in concept sketching. By the end of the course, students are rendering at photo-realistic levels using the computer as a digital tool. Students learn how to render a toy of their own design in full color at a professional level.

### Drawing VI

**TOYD421** 2 credits  
This is an advanced computer lab course that allows students to apply their knowledge from prior drawing classes to on-going projects in an effort to build their portfolios.

### Games and Game Theory

**TOYD425** 2 credits  
This course focuses on game theory from a behavioral science perspective, and applies that perspective to an understanding of a variety of games. The course includes a historical and cross-cultural emphasis. Students create an original game.

### Package Design

**TOYD430** 2 credits  
Package design focuses on creating three-dimensional solutions to solve a variety of packaging and retail problems. In addition to marketing issues, package design addresses a variety of storage and safety concerns. The students address these issues as well as the graphic treatment of the package.

### Toy Industry Practices

**TOYD450** 2 credits  
This course provides an introduction to marketing and product management within the toy industry. Discussion focuses on the four guiding principals of brand management: product, packaging, placement, and promotion. Various topics include consumer behavior, market research, product design, pricing, retail sales, merchandising, advertising, and promotions.

### Independent Study

**TOYD999** 1-6 credits  
Independent studies provide an opportunity for students to work closely and collaboratively with faculty on assignments that extend the scope of their current interests, or expand their expertise. Applications for independent study projects are reviewed and approved by the department chair based on proposals submitted by interested students.

### Special Topics:3D Visualization IV

**TOYD 460** 2.0 credits  
This elective class is designed as an advanced computer class for senior Toy Design students where they will explore open-ended projects of their own design, building on skills from prior classes in Technical Illustration III and IV. Students will explore advanced techniques of design with Rhino using the software itself as well as specialized plug-ins such as T-Splines for modeling and V-Ray for rendering. The class will also cover techniques and strategies for post processing of renderings in Photoshop, allowing students to work faster and smarter in a professional production environment

## Department Faculty

### Bill Eckert

*Professor*  
MFA, BA (Art), San Diego State Univ. Nationally exhibited realist painter and muralist. Works shown at San Diego Fine Arts Museum; Los Angeles Municipal Art Gallery; 20 Warren Street, N.Y. Professional activities include consulting for Rupert Murdoch, Marvin Davis, Ted Fields, and Dick Clark, and managing projects for Intertec, a lighting research and development company.

### Dan Garr

*Senior Lecturer*  
BA (International Relations) UC Davis. President of Hot Buttered Elves, Inc. Clients include Disney, Warner Bros., Hit Entertainment, Dreamworks, and Marvel. Extensive special effects for "Forever Young," "Heart and Souls," "Leprechaun," and "Titanic." Invented and patented Wallables.

### Gary Geraths

*Professor*  
MFA (Drawing and Painting) Claremont Graduate Univ., BFA (Drawing and Painting) CSU Long Beach. Figurative draughtsman, representational painter, and courtroom artist. Exhibitions include Western Front Gallery, Vancouver, BC; and Frye Museum of Art, Seattle, WA. Professional activities include teaching/consulting for Disney, Mattel, and Sony. Author/Illustrator of Drawing Animals (Gainsway Press).

### Jeannie Hardie

*Lecturer*  
MA (Writing and Film) Regent University. BA (English Literature) Oral Roberts University. Creative Director Deadline Creative. Toy, game, and licensing consultant. Previously Senior Design Manager, Mattel Games & Puzzles. Licensed product lines for Yu-Gi-Oh, Harry Potter, Batman, Looney Tunes, Justice League, and Sponge Bob.

### Deborah Ryan

*Chair*  
BS Magna Cum Laude (Design) University of Cincinnati College of Art and Design, Architecture, and Art. Award-winning designer with extensive experience in designing toys, licensed products, apparel, dolls, feature plush, novelties, gifts, and other consumer products for Mattel, Disney, Applause, and Kenner Toys.

### Rebecca Salari Taylor

*Assistant Chair, Professor*  
MA, BA (Design) California State University, Los Angeles. Toy designer and digital artist. Past clients include Mattel Toys, Playmates Toys, Universal, Tomy Toys, Becca Design. Clients include Cunard Lines and Hilton Hotels. Director, LJM Toys R&D/packaging. Owner, Pacific Edge Design.

### Michael Albert

*Senior Lecturer*  
BFA (Design) Columbus College of Art & Design Texas A & M, (Aerospace Engineering) Owner/Designer Dream Themes; Owner/Designer, Innovation Design Concepts; Project Designer, Mattel Toys; Manager R & D, Planet Earth Entertainment; Sr. Animation Designer, Walt Disney Imagineering. Consultant with extensive conceptual design and engineering experience.

### Candace Correa

*Senior Lecturer*  
BA Colby College; MBA The Anderson School at UCLA; MA Latin American Studies at UCLA; Seasoned marketing professional with over 13 years experience in marketing, strategic planning and brand management. International Marketing, The Walt Disney Company; Multi-cultural Marketing, Sears; Global Product Marketing, Eastman Kodak Company; Product Manager, Mattel; CMO of her own product company.

## Department Faculty

### Virginia Hein

*Senior Lecturer*

MFA (Fine Art) CSULB. Independent artist and designer. Concept design of girls toys and accessories, preschool toys, plush, home décor, gifts and jewelry, painting and illustration. Formerly Staff Designer at Mattel Toys, Applause and Galoob Toys. Past projects include licensing product concepts for the Vatican Library.

### Candace Lavin

*Adjunct Assistant Professor*

BA (Graphic Design) CSU Northridge. “Dr. Toy” award winner. Professional experience includes environmental graphic design for Walt Disney Imagineering, product design of toys, collectibles, and specialty gifts for Applause, Warner Bros., and Disney.

### Lee Loetz

*Senior Lecturer*

BA UC Davis; studied at California Institute of the Arts Character Animation; Experienced Creative professional with over 15 years in the product and entertainment industry. The Walt Disney Company/Disney Consumer Products. Currently run my own design firm, Popfly Design.

### Marcus Maciel

*Lecturer*

BFA (Toy Design) Otis Senior Digital Designer, Digital D&D Support Group Mattel, co-manager Digital Training Center at Mattel. Previously worked in Hot Wheels Engineering group – modeled/reversed engineered Ferrari, Ford, Dodge, GM, Chrysler, Toyota, and Honda company vehicles.

### Joyce Mesch

*Lecturer*

Studied (Glass) California Coll. of Arts and Crafts. Extensive experience in the design and development of girls, infant and pre-school toys, feature plush, novelties, pet products and jewelry. Former Staff Designer at Fisher-Price, Senior Project Designer at Mattel, freelance graphic designer, and Art Director at *Discover* magazine.

### Hanjin Park

*Lecturer*

BA Otis. Toy Designer at Jakks Pacific Inc., in the Road Champs Group. Worked on Creepy Crawler, Fly Wheels 2.0, GX Racers, GX Skate, Laser Challenge, MXS, and seasonal items.

### Drew Plakos

*Senior Lecturer*

MBA, Univ. of St. Thomas, MN; BA (Industrial Arts), CSU LA. Owner InSight Out LLC. providing product development services to the toy and premium trades. Extensive experience concepting, developing, designing and manufacturing premiums, toys, children’s articles, housewares, and leisure products for Mattel, Lakeside Games, Schaper, Thermos, and Strotman Int'l.

### Norene Roxbury

*Senior Lecturer*

AA (Fashion Design) Fashion Inst. of Design and Merchandising. Freelance designer specializing in toy design, 3D prototyping, children and misses apparel, pattern making and illustrated presentations. Former creative manager at Applause working on licensed brands such as Children's Television Workshop, Warner Brothers, Disney, Hanna Barbera, and Paramount.

### Dave Schultze

*Senior Lecturer*

MS (Industrial Design) Art Center, BA (Architecture) Univ. of Oklahoma Coll. of Design. Independent designer with a firm servicing clients including Microsoft, Mattel, LEGO, Applause.

## Department Faculty

### Paul Winter

*Senior Lecturer*

BA (Journalism and Advertising) San Diego State Univ. Creative Director and Staff Copywriter, Mattel. Product lines include Games, Barbie, Hot Wheels, Disney, and Nickelodeon.

### Alton Takeyasu

BS Transportation Design, Art Center. Mattel Toys 1991 to present. Current title: Chief Designer, creative and entertainment for Mattel Wheels, Previously Sr. Director, Mattel Hot Wheels Design. In charge of Kid, Innovation and Entertainment. Previously Sr. Director, Mattel Inventor Relations. Previously Senior Director, Mattel Entertainment Design. In charge of all action figure and licensed entertainment-based properties and internally developed intellectual properties. Projects: Maniacs, Speed Racer Movie, Superman Returns, Toy Story, Bugs Life, Cars, Harry Potter, Sponge Bob, Max Steel creation team, HeMan, NBA, Street Sharks, Rock'em Sock'em, Ghostbusters, Star Wars, Robocop, MASK, Batman, Justice League, Hot Wheels Battle Force 5. Staff Designer at Kenner Toys Advanced Concept Design (1984-1991).

### Mark Trageser

BFA Industrial Design: Minor in sculpture Cleveland Institute of Art. Over fifteen years of toy design experience working with all major toy companies, entertainment studios, video game developers, international manufacturers, and others (Hasbro, Mattel, Jakks Pacific, P&G, Staples, Warner Brothers, Pixar, Disney, Activision, Kodak, and more) and has created numerous brands; MADnetics, Formula Fuelers, Knot Wud, and more. Is named on numerous patents. International lecturer on creativity and innovative design. Has eclectic background including: silversmith, robot builder, graphic designer, butcher, toy expert on "The Apprentice", sculptor, jeweler, furniture designer and much more. As an independent inventor and founder of Kram-Co Inc has won awards for product innovation in several fields.

### April Wilson

*Lecturer*

AA (Fashion Design) LA Trade Tech Coll. Freelance designer specializing in toy design, 3D prototyping, pattern making and illustrated presentations. Former Head Designer at Cal Toys working on licensed brands Warner Brothers, Disney, Hanna Barbera, and Paramount.