

# Toy Design

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## **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

<b>Sophomore Year</b>		<b>Fall</b>	<b>Spring</b>	<b>Degree Requirements</b>
TOYD200/201	Toy Design I/II	3.0	3.0	<i>Descriptions for courses listed in grey boxes are located in the Liberal Arts and Sciences section.</i>
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	—	
ENGL202	Sophomore English	3.0	—	
MATH136	Math for Artists and Designers	—	3.0	
Total Credits per Semester		17.0	16.0	
<b>Junior Year</b>		<b>Fall</b>	<b>Spring</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	—	
	Advanced Topics in English or Liberal Studies Elective	—	3.0	
AHCS236	History of Toys	—	3.0	
AHCS220	Contemporary Art Survey	3.0	—	
Total Credits per Semester		16.0	16.0	
<b>Senior Year</b>		<b>Fall</b>	<b>Spring</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	—	
*ILML400	Integrated Learning Lecture	—	3.0	
	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.

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## 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 machines, including vacuum forming, milling, and the lathe.

*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.

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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

**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*

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, L/N 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.

**Joe Allard**

*Senior Lecturer*

Cal State University Northridge, (Art & Film) Owner/Designer Design Devil; Sr. Designer at Applause Toys Sr. Colorist, Marvel Comics. Clients include: Hasbro, Mattel, Disney, Sideshow Collectibles.

**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.

**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.

**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**

*Lecturer*

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.

**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.

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## Department Faculty

### Edward "Ted" Mayer

*Senior Lecturer*

BS, Art Center College of Design (Industrial Design), Royal Society of Arts, London. Harrow Technical College, London. Principal Designer, Toy Quest; Contract Designer, Playmates; Franklin Mint/Teleflora; Director, Galoob Toys: V.P. Design, L.J.N. Toys; Senior Product Manager, Mattel Toys. 20' Los Angeles. Award of merit, "Queens Medal," illustration.

### Adam Ostegard

*Senior Lecturer*

Cuyamaca College  
Product Manager, Disney; Senior Designer, Applause Toys & Dakin Inc. Character Artist and Toy Designer for Disney Global Toys.

### 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 conceptualizing, developing, designing and manufacturing premiums, toys, children's articles, housewares, and leisure products for Mattel, Lakeside Games, Schaper, Thermos, and Strotzman 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 Coll. of Design, BA (Architecture) Univ. of Oklahoma Coll. of Design. Independent designer with a firm servicing clients including Microsoft, Mattel, LEGO, Applause.

### T. Mark Taylor

*Adjunct Professor*

Senior Lecturer, MFA CSULA, BFA Art Center College of Design. Created He-Man (Masters of the Universe) for Mattel Toys. Other designs include Teenage Mutant Ninja Turtles, Men in Black, Starship Troopers, Micro Machines, Attack Pack, King Kong, and Collectable Hot Wheels for Playmates, Galoob, Tomy, Lanard, and Mattel. Early career experience includes eight years as Combat Illustrator, U.S. Naval Undersea Warfare Center.

### 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.

### 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.