

Shea Tillman, IDSA, AIGA Associate Professor/Tenured

Graduate Faculty Appointed at Auburn University: 08.2005 Director of L*unchBox Study Abroad Program: St-Etienne, France

Auburn University Senate: 2008-2011

Auburn University Senate Rules Committee: 2011-2013 Auburn University Curriculum Committee: 2014-2017

School of Industrial and Graphic Design Auburn University

207 Wallace Hall Auburn University, Alabama 334.844.2381 tillmts@auburn.edu

Educational Background

Master of Arts - Design 08.1999

The Ohio State University - Columbus, Ohio

Thesis Abstract: Researched and compared user perceptions of on-screen product representation modes.

Bachelor of Industrial Design 08.1994 **Auburn University - Auburn, Alabama**

Studio Prize: Fall 1992, Winter 1994, Summer 1994 Design Emphasis '94 Furniture Competition Finalist.

Teaching Background

Associate Professor 10.2010 to present

Auburn University School of Industrial and Graphic Design - Auburn, Alabama

Teach fourth-year advanced product design studios and second-year design foundations, as well as lecture courses in design history. Research and teaching interests include product DNA and brand definition, user research methods, and design for healthcare.

Assistant Professor 08.2005 to 09.2010

Auburn University Department of Industrial Design - Auburn, Alabama

Taught third-year packaging and graphics studio as well as product re-design studio, photography, and applied design research.

Visiting Instructor 09.2000 to 06.2001

The Ohio State University Department of Design – Columbus, Ohio

Taught second-year sketching and visualization course to industrial design students.

Professional Background

Design and Innovation Consultant 07.2006 to 05.2013

Warren Innovation, Inc. – Auburn, Alabama

Designed and developed a series of minimally invasive neurosurgical medical instruments in collaboration with Dr. Lee Warren of Auburn Neurosurgery.

Senior Industrial Designer 09.2003 to 08.2005

Concept Center International - Techtronic Industries, Anderson, South Carolina

Expanded responsibilities included leading the definition, development and implementation of the product DNA for Ryobi brand power tools and outdoor products. Worked with the Vice President of Industrial Design and Concept Development to establish and integrate a user research initiative within the design department.

Industrial Designer 08.2001 to 08.2003

Concept Center International – Techtronic Industries, Anderson, South Carolina

Responsibilities included working within an international design team to develop new products for the Ryobi, Ridgid, Craftsman, and Homelite brands. This included close collaboration with internal marketing groups to create presentations for external retail buyers including Sears and The Home Depot.

User Researcher 10.1999 to 02.2001

SonicRim - Columbus, Ohio

Researched and presented user experiences surrounding products and services. This involved developing generative and evaluative research tools and focus group studies with clients that included Dow, IDEO, Kodak, Steelcase and Thomson Consumer Electronics.

Industrial Designer 10.1994 to 09.1997

Cooper Lighting - Americus, Georgia

Designed and developed lighting concepts within a manufacturing-oriented, cost-driven design department. Refined and pre-engineered concepts using 3-D modeling. Designed a series of fixtures aimed at better positioning Cooper for entry into the emerging DIY market.

Courses Currently Teaching

INDD1310 Synthesis of Drawing Summer

Teaching an introduction to perspective drawing for incoming students in the Foundations program.

INDD2210 3D Industrial Design Principles Spring

Team-teaching 2nd year foundations studio focused on structure, form, and production. Formalizing and documenting of the study sequence to serve as a guide for the teaching of design principles by faculty.

INDD2230 History of Industrial Design I Spring

Developing and expanding the design history course to include designers and design visionaries from the 20th Century. Integrating assignments that enhance oral presentation and discussion of design history and context.

INDD6010 History of Industrial Design II Spring

Developing graduate course in design history that focuses students on applying historic research toward individual thesis programs.

INDD4110 Advanced Product Design Fall

Leading fourth-year collaborative studios with corporate sponsors and the building industry, as well as healthcare professionals. This studio implements systems thinking in design to develop useful products for demanding, complex contexts.

Courses Taught Previously

INDD3110 Exhibit and Packaging Design

Developed and implemented an emphasis on creative sub-branding and a business expansion framework as a springboard for design in the fall design studio.

INDD3130 Photography for Industrial Design

Implemented a shift towards 'object-oriented' photography allowing industrial design students to better orient imaging skills toward model documentation and portfolio application.

INDD3210 Product Design

Led product design studio each spring with third-year students. Focus is on application of research and design methodologies learned in the fall, while developing a product redesign. Work with industry professionals and students to create solutions for business.

INDD3110 Materials and Technology

Taught manufacturing materials and processes to third year students each spring.

INDD7660 Industrial Design Methodology (Applied Design Research)

Graduate course focused on exploring user research methods through user-focused research projects.

Research, Industry Projects, and Outreach Initiatives

Research on the IBM Corporate Design Program Fall 2015-present

Archival research of work of industrial and graphic designers on staff at IBM from the 1960's-90's. Organized AU lectures by former IBM designers John Stram and Tom Hardy in 2016-17, and research conducted for writing bios on Ken White, Tom Bluhm and John Anderson. (\$3,200 seed funding awarded)

Studio+Health Fall 2014-2017

Auburn University, Alabama

Founded and lead a fourth-year advanced product design studio in developing concepts for improving experiences for patients and work efficiencies for healthcare professionals. Explorations have included: work that surrounds the patient room, shifting healthcare to the home, and revising UAB's BME portfolio.

$\textbf{Studio+Build with The Center for Construction Innovation and Collaboration} \ \ \textbf{Fall} \ \ 2012-2013 \\ \textbf{Auburn University, Alabama}$

Lead and managed a fourth-year studio teaming industrial design, building science, architecture and industrial systems engineering students on designing new innovative products and systems for the jobsite. Industry partners included Werner, Knaack and Leica Geosystems. (\$60K generated)

Assistive Technologies Studio Spring 2008 and 2009 **Auburn University, Alabama**

Co-founded, lead, and managed an interdisciplinary collaborative third-year studio project with the Department of Special Education, Rehabilitation, Counseling/School Psychology in the College of Education.

GenY Mobile Ecosystem Study Spring 2009

Design Research Collaboration with User Experience Group at Microsoft

In an effort to better understand the ecosystem which mobile devices support, this study is focused on "getting to know" Gen Y (Millennial) college students and what they aspire to within their mobile lifestyles. (\$10K funding generated)

Patient-Centered Pre-design: Improving healthcare experiences 06-12.2009

As an outgrowth from the Vital Care Pharmacy project, this research and design initiative is focused on integrating user research and participatory visioning methods into the architectural pre-design process.

Collaborative Studio with Eastman 08.12.2008-12.15.2008

Led and managed a third-year studio project with Eastman to develop 32 merchandizing concepts for enhancing the retail experience manufactured with Eastman's Spectar $^{\text{TM}}$ co-polyester sheet. (\$25K funding generated)

Collaborative Studio with Emerson Tool Company 01.08.2007-05.01.2007

Led sixteen 3rd-year students in collaborative effort with Emerson design team. Researched, designed, and developed concepts for bringing a cordless wet/dry vacuum cleaner into the home market. (\$25K funding generated)

Collaborative Studio Project with Microplane™ 01.09.2006-05.01.2006

Researched and documented user perceptions of current kitchen tools and their uses, and developed multiple concepts to expand both their kitchen line and their personal care category. (\$25K funding generated)

Articles and Papers

Tillman, Shea (2019)

Collaboration Models for Teaching Design within Specialized Contexts.

International Conference on Applied Human Factors and Ergonomics (AHFE) in Washington, DC. July 28, 2019.

Luccarelli, Martin, Shea Tillman, Rusty Lay, Anne-Marie Grundmeier, and Sabine Högsdal (2019)

Sustainable Design Education for Elementary Schools: Interdisciplinary Development of New Educational Models through Design Thinking. The International Journal of Design Education, Volume 13, Issue 1.

Eberhardt, Alan, and Shea Tillman. (2017)

Industrial Design for a Master of Engineering Project Course in Medical Device DevelopmentPoster presentation for SB3C 2017 Summer Biomechanics, Bioengineering & Biotransport Conference
Presented June 21-24. 2017 in Tuscon, Arizona.

Eberhardt, Alan, Brandon Kirkland and Shea Tillman. (2017)

A "Project Course" Series on Design and Commercialization - Year 1 Results

ASME Journal of Biomechanical Engineering - Education Edition. July 2017.

Tillman, Shea (2016).

Random Path or Reputed Practice?

Innovation: quarterly Journal of the Industrial Designers Society of America - Winter 2016. Creative non-fiction of John Stram's portfolio presentation given at Auburn in April.

Tillman, Shea and W. Lee Warren, MD (2015).

Enhancing the Visibility and Working Space for Minimally Invasive Neurosurgical ProceduresThis is Research: Faculty Symposium 2015 poster presentation at Auburn University.

Tillman, Shea (2013).

Composing Collaborations: Multi-discipline integration within a design curriculum.

International Journal of Design Education - Volume 6, Issue 13

Virtual Presentation at the University of California Los Angeles in January 2012.

Tillman, Shea (2012).

Advancing the Teaching/Learning Outcomes of Design Foundations through the use of Pervasive Photography

Proceedings of 2012 IDSA National Education Symposium

Boston, Massachusetts

Tillman, Shea, Chris Arnold and Randy Bartlett (2010).

Co-Teaching in Parallel: Positive Impacts in Advancing Design Students and Faculty.

Industrial Designers Society of America National Conference

Presented August 4, 2010 at the IDSA National Education Symposium in Portland, Oregon.

W.S., Warren and Shea Tillman (2010).

A Square-to-Round Access Port Allows Superior Vision, Increased Working Space, and Short Incision Lengths for Minimally Invasive Neurosurgical Procedures.

The European Association of Neurosurgical Societies annual conference Displayed March 25-27, 2010 at Groningen, The Netherlands

Tillman, Shea and J. Chad Duncan (2009).

Guiding Interdisciplinary Design Collaborations in the Studio Classroom.

International Conference on Design Principles and Practices – Volume 3 Presented February 15, 2009 at Technische Universität, Berlin, Germany

Tillman, Shea and Marise Evans (2008).

Collaborative Workspaces: The Evolving Role of the Industrial Design Studio Space in Higher Education.

Proceedings of 2008 IDSA National Education Symposium

Presented September 8, 2008 at Arizona State University, Tempe, Arizona

Tillman, Shea (2008).

Creating the Professional, Collaborative, 'Great Good Place' in an Educational Design Studio.

Proceedings of 2008 Designing Designers 9th International Convention of University Courses in Design, Salone Internazionale del Mobile, Milan, Italy

Tillman, Shea and Marise Evans (2008).

Maximizing Creative Problem-Solving and Collaboration through the Physical Components of the Classroom.

Conference Proceedings of 4th International Conference on Technology, Knowledge & Society, Northeastern University, Boston, Massachusetts

Tillman, Shea (2008).

Designing Business: Injecting and Connecting Business Frameworks into Undergraduate Product Design Education.

International Journal on Design Principles and Practices - Volume 2 Presented on January 11, 2008 at University of Miami, Florida

Presentations and Workshops

The Human Factor: Studying People to Inform and Inspire Better Design. Invited lecture since Spring 2008: Department of Mechanical Engineering Samuel Ginn College of Engineering, Auburn University

This lecture is given each semester and focuses on the differences between "object-oriented" versus "human-centric" designing.

An Approach to User-Centered Design: People in the Middle. 10.11.2017 Reutlingen University, Reutlingen, Germany

Invited to present lecture to faculty and students at Reutlingen University, in Reutlingen, Germany.

Teaching Design within Unfamiliar Contexts: Assistance | Construction | Healthcare. 10.10.2016 Reutlingen University, Reutlingen, Germany

Invited to present lecture to faculty and students at Reutlingen University, in Reutlingen, Germany.

Industrial Design in Medical Product Development - 04.14.2016

Department of Biomedical Engineering at the University of Alabama – Birmingham.

Invited by Dr. Alan Eberhardt, professor of biomedical engineering.

OneView: BabyBoomers - 03.21.2016 École des Mines de Saint-Étienne, France.

Invited by Dr. David Delefosse, Directeur Adjoint, Directeur de la Recherche et de l'Innovation,

University Development of Prototypes to Compare and Facilitate LiDAR and EDM Technologies for Planar Construction Component Prefabrication 06.04.2013 HxGN Live, Las Vegas, Nevada

Invited to co-present with professor Paul Holley the Leica Geosystems concepts from the 2012 Studio+Build collaboration. Organized by Hexagon, a \$4B/year global provider of integrated design, measurement, and visualization technologies.

Studio+Build: Collaboration in the field 04.26.2013

Duncan of Jordanstone College of Art and Design, University of Dundee, Scotland

Invited by the Director of the Master of Design Services, Hazel White to share the processes and outcomes of the Studio+Build collaboration.

The Future of Design Education 03.21.2013

Biennale Internationale Design, Saint-Etienne, France

Invited to participate in panel discussion with professors David Delafosse of Ecole Nationale Supérieure des Mines de Saint-Etienne and John Boult of Brunel University as part of the bi-annual international design exposition in Saint-Etienne.

${\it Teaching Design Creativity: The Design Foundations Program at Auburn University 11.30.12} \\ {\it College of Design at North Carolina State University, Raleigh, North Carolina} \\$

Led presentation and roundtable discussion with faculty and administration in how to structure a framework for design foundations.

Lighting Fundamentals 09.18.2012

School of Design, Georgia Institute of Technology, Atlanta, Georgia

Invited lecture as a part of "enLIGHT," an IDSA outreach program sponsored by The Home Depot. Presented to IDSA members, students, and faculty at Georgia Institute of Technology.

Teaching Creative Problem-Solving: The Design Foundations Program at Auburn University 04.2011 Department of Design at the Institute of Technology, Carlow, Ireland

Invited lecture by associate professor Hilary Dempsey at Institute of Technology at Carlow, Ireland.

Improving People's Lives through New, Innovative Products. 03.2008-2009 Invited lecture: Department of Rehabilitation and Special Education College of Education, Auburn University

This lecture introduces the discipline and profession of industrial design and its role in the product development process.

Design DNA: Developing a Product Design Vocabulary 10.15.2007

Invited lecture: California State University, Long Beach

This lecture defined the building blocks of Design DNA, and illustrated how to design a product to fit within an existing brand language or product line.

Invited lecture: Department of Design, University of Illinois at Urbana-Champaign

This lecture focused on how repeating the design process through simulations and prototyping yields a continually more successful result.

Fueling Creativity through User Research 03.25.2007

Invited Lecture: Polytecnico di Milano - Milan, Italy

This lecture explored how to employ a variety of user research methods to inspire the creative process.

Leveraging Visual Noise 10.25.2006

Folio Conference: Hilton Midtown - New York, NY

This seminar underscored the importance of understanding graphic hierarchy, and how it works to create events with greater impact.

Connecting Brand to People 08.16.2006

EventDesign seminar - Atlanta, Georgia

This session illustrated how to better understand the aspirations surrounding a client's brand.

Awards and Honors

2013-2015 Bauhaus Professor

Endowed professorship honor awarded within the School of Industrial and Graphic Design at Auburn University.

2011 Student Government Association Outstanding Faculty Member Award

Chosen by the college's schools council for respect of peers and students, excellence in teaching, concern for students, availability to students, and involvement in the assignments.

2009 IDEA Silver - Stanton Burns

International Design Excellence Award sponsored by the IDSA and BusinessWeek

Led joint effort with studio student Stanton Burns as an outcome of the Assistive Technologies Studio.

2008 International Designer's Workstation Competition - 1st Honorable Mention Oporto Show Trade Fair of Design, Portugal

Led joint effort with graduate student Marise Evans as an outcome of the Collaborative Workspaces research.

2007 Outstanding Faculty Award / Department of Industrial Design

Chosen by the departmental student advisory council.

2004 IDEA Silver - Techtronic Industries

International Design Excellence Award sponsored by the IDSA and BusinessWeek

Collaboration on team developing Power Tool Design Strategy for Ridgid.

Professional Affiliations & Program Involvement

Industrial Designers Society of America (IDSA) 2000-present

Student Advisor - Auburn University Chapter 2005-2010

Work with student officers to organize annual events at Auburn.

Vice-Chair of Programming - Auburn 10.2005-10.2007

Worked with Atlanta Chapter Chair to organize events in coordination with Auburn area IDSA members.

American Institute of Graphic Arts (AIGA) - 07.2007-present

Professional organization aimed primarily at advancing the graphic design profession and education.