

**ITT Technical Institute**  
**CD320T**  
**Basic Design Theory and Methods**  
**Onsite Course**

**SYLLABUS**

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**Credit hours:** 4

**Contact/Instructional hours:** 60 (36 Theory Hours, 24 Lab Hours)

**Prerequisite(s) and/or Corequisite(s):**

Prerequisites: CD140T Rapid Visualization

**Course Description:**

This course is a study of the principles and elements of basic design which leads to the successful execution of form. Students demonstrate the uses of design as a creative and practical problem-solving and analytical tool.

# Syllabus: Basic Design Theory and Methods

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Instructor:	_____
Office hours:	_____
Class hours:	_____

## Major Instructional Areas

- The Design Process
- Problem Solving with Design Methodology
- Two-Dimensional Design Forms
- Gestalt Principles
- Perceptual Design Principles
- Visual Communications
- Typographic Design
- Portfolio

## Course Objectives

1. Analyze the design process in technical and graphic design.
2. Use graphic programs on the computer to create visuals.
3. Evaluate the use of visual communication theories in graphic design compositions.
4. Utilize two-dimensional design elements.
5. Utilize the principles of color in visual communication.
6. Evaluate the use of color in a graphic design.
7. Discuss the use of typography in a graphic design.
8. Utilize Gestalt theories as they apply to in a graphic composition.
9. Use visual communication to give meaning to a graphic design.
10. Apply comprehensive use of the principles of visual communication in the creation of visual designs.
11. Create a package design using design principles.
12. Select visual designs to be included in a portfolio.

## SCANS Objectives

SCANS is an acronym for Secretary's Commission on Achieving Necessary Skills. The committee, created by the National Secretary of Labor in the early 1990s, created a list of skills and competencies that the committee feels are necessary for employees to function in a high-tech job market.

1. Utilize a systematic problem-solving process to analyze and solve a problem.
2. Employ computers to acquire, organize, analyze, and communicate information.
3. Apply and adapt new knowledge and skills in both familiar and changing situations.
4. Demonstrate creative thinking processes by generating new ideas or original combination of ideas.

## Course Outline

Note: All graded activities are listed below in the pattern of <Unit Number>, <Assignment Number>. For example, Lab 2.1 refers to 1st lab activity in Unit 2.

Unit	Activities
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<b>Unit</b>	<b>Activities</b>
1 The Design Process	<ul style="list-style-type: none"> <li>• Content Covered:</li> <li><i>Basic Design Theory and Methods:</i> <ul style="list-style-type: none"> <li>○ Chapter 1, "Design Theory," pp. 2-61</li> <li>○ Chapter 2, "Introduction to Graphic Design," pp. 62-86.</li> </ul> </li> <li>• Lab: 1.1</li> <li>• Unit Project: 1.1</li> </ul>
2 Photoshop Essentials	<ul style="list-style-type: none"> <li>• Read from <i>Basic Design Theory and Methods:</i> <ul style="list-style-type: none"> <li>○ Chapter 3, "Photoshop Essentials," pp. 88-129</li> </ul> </li> <li>• Lab: 2.1</li> <li>• Unit Project: 2.1</li> </ul>
3 Illustrator Essentials	<ul style="list-style-type: none"> <li>• Read from <i>Basic Design Theory and Methods:</i> <ul style="list-style-type: none"> <li>○ Chapter 4, "Illustrator Essentials," pp. 130-173</li> </ul> </li> <li>• Lab: 3.1</li> <li>• Unit Project: 3.1</li> </ul>
4 Digital Imaging	<ul style="list-style-type: none"> <li>• Read from <i>Basic Design Theory and Methods:</i> <ul style="list-style-type: none"> <li>○ Chapter 5, "Digital Imaging," pp. 174-209</li> <li>○ Chapter 6, "Color," pp. 210-223</li> </ul> </li> <li>• Quiz: 4.1</li> <li>• Labs: 4.1, 4.2</li> <li>• Unit Project: 4.1</li> </ul>
5 Digital Illustration	<ul style="list-style-type: none"> <li>• Read from <i>Basic Design Theory and Methods:</i> <ul style="list-style-type: none"> <li>○ Chapter 7, "Digital Illustration," pp. 224-269</li> </ul> </li> <li>• Labs: 5.1, 5.2</li> <li>• Unit Project: 5.1</li> </ul>
6 Poster Design	<ul style="list-style-type: none"> <li>• Read from <i>Basic Design Theory and Methods:</i> <ul style="list-style-type: none"> <li>○ Chapter 8, "Poster Design," pp. 270-301</li> </ul> </li> <li>• Quiz: 6.1</li> <li>• Lab: 6.1</li> <li>• Unit Project: 6.1</li> </ul>
7 Logo Design	<ul style="list-style-type: none"> <li>• Read from <i>Basic Design Theory and Methods:</i> <ul style="list-style-type: none"> <li>○ Chapter 9, "Logo Design," pp. 302-329</li> </ul> </li> <li>• Lab: 7.1</li> <li>• Unit Project: 7.1</li> </ul>
8 Advertising Design	<ul style="list-style-type: none"> <li>• Read from <i>Basic Design Theory and Methods:</i> <ul style="list-style-type: none"> <li>○ Chapter 10, "Advertising Design," pp. 330-359</li> </ul> </li> <li>• Lab: 8.1</li> <li>• Unit Project: 8.1</li> </ul>
9 Magazine Design	<ul style="list-style-type: none"> <li>• Read from <i>Basic Design Theory and Methods:</i> <ul style="list-style-type: none"> <li>○ Chapter 11, "Magazine Design," pp. 360-389</li> </ul> </li> <li>• Lab: 9.1</li> <li>• Unit Project: 9.1</li> <li>• Course Project: Start</li> </ul>
10 Packaging Design	<ul style="list-style-type: none"> <li>• Read from <i>Basic Design Theory and Methods:</i> <ul style="list-style-type: none"> <li>○ Chapter 12, "Packaging Design," pp. 390-417</li> </ul> </li> </ul>

Unit	Activities
	<ul style="list-style-type: none"> <li>• Quiz: 10.1</li> </ul>
11 Course Review and Course Project	<ul style="list-style-type: none"> <li>• Course Review</li> <li>• Course Project: Submit</li> </ul>

## Instructional Methods

The Basic Design Theory and Methods curriculum is designed to encourage a variety of teaching strategies that support the course objectives while fostering higher cognitive skills. Course delivery utilizes an assortment of media and delivery tools in the classroom.

The course is comprised of both theory and laboratory components.

The material being taught in Basic Design Theory and Methods is fundamental to success in all future design-based courses within the Computer Aided Drafting Program. It is therefore imperative for you to come to each class session prepared for the theory portion of the lesson by having read the assigned passages. All quizzes, laboratory projects, and unit projects must be completed to ensure full comprehension of the subject matter.

A Course Project is also assigned as part of the course work in Basic Design Theory and Methods. Ample time will be given to the understanding and completion of the project work in accordance with the schedule provided in the course outline and in the unit plans.

Each lab assignment in Basic Design Theory and Methods has been structured to allow utilization of the institution's laboratory computers to complete the task. This should give you sufficient time to understand and practice the requisite skills that will prove beneficial later in the program.

Assignments have been chosen to allow you to explore the design process, graphic software, and basic principles of graphic design.

This course is the first in a series of design courses within the Computer Aided Drafting program. You should prepare all projects in this course with the intention of using the images as part of a portfolio.

## Instructional Materials and References

### Student Textbook Package

- Sessions.edu. (2007). Basic Design Theory and Methods (Custom 1st ed.). Boston, MA: Pearson Custom
- Sessions.edu. (2007). Images for Design Theory Courses CD (Custom 1st ed.). Boston, MA: Pearson Custom

### Other Required Resources

In addition to the student textbook package, the following are also required in this course:

- Paper, pens and paper
- Portable drafting boards
- Computer storage media

### References

## ITT Tech Virtual Library

Log on to the ITT Tech Virtual Library at <http://www.library.itt-tech.edu/> to access online books, journals, and other reference resources selected to support ITT Tech curricula.

### Books

You may click “Books” or use the “Search” function on the home page to find the following books.

- Books> Selected Books on the Web> Jirousek, Charlotte. *Art, Design, and Visual Thinking: An Interactive Textbook*, 1995.
- NetLibrary> Brady, Philip. *Using Type Right: 121 No-nonsense Rules for Working with Type*. Lincolnwood, IL: NTC Contemporary, 1993.
- NetLibrary> Careers, No. 134. *Career as an Advertising Artist: Graphic Designer, Creative Director, Illustrator*. Chicago: Institute for Career Research, 2006.
- NetLibrary> Doyle, Michael E. *Color Drawing: Design Drawing Skills and Techniques for Architects, Landscape Architects, and Interior Designers*. New York: John Wiley & Sons, Inc., 1999.
- NetLibrary> Kurth, Steve. *The Hidden Power of Illustrator CS: Web Graphics Techniques*. San Francisco, CA: Sybex Books, 2004.
- NetLibrary> Lawson, Bryan. *How Designers Think: The Design Process Demystified*. Boston: Elsevier, 2005.
- NetLibrary> Onstott, Scott. *Enhancing CAD Drawings with Photoshop*. San Francisco, CA: Sybex Books, 2004.
- NetLibrary> Romaniello, Stephen. *Photoshop CS*. San Francisco, CA: Sybex Books, 2004.
- NetLibrary> Sassoon, Rosemary. *Computers and Typography 2*. Portland, OR: Intellect Books, 2002.
- Ebrary> Ghinea, Gheorghita and Sherry Y. Chen. *Digital Multimedia Perception and Design*. Hershey, PA: Idea Group Publishing, 2006.
- Ebrary> Hashimoto, Alan. *Visual Design Fundamentals: A Digital Approach*. Boston: Charles River Media, 2003.
- Ebrary> Honeywill, Paul and Daniel Carpenter. *Digital Magazine Design: With Case Studies*. Portland, OR: Intellect, Ltd., 2005.
- Ebrary> Massironi, Manfredo. *Psychology of Graphic Images: Seeing, Drawing, Communicating*. Mahwah, NJ: Lawrence Erlbaum Assoc., Inc., 2002.
- Ebrary> Smith, Ken, Jr., Sandra Moriarty, Gretchen Barbatsis, and Keith Kenney. *Handbook of Visual Communication: Theory, Methods and Media*. Mahwah, NJ: Lawrence Erlbaum Assoc., Inc., 2004.

### Periodicals

You may click “Periodicals” or use the “Search” function on the home page to find the following periodicals:

- ITT Tech Virtual Library> Main Menu> Periodicals
  - Animation Artist  
<http://animationartist.digitalmedianet.com/>
  - Computer Graphics World  
<http://www.cgw.com/ME2/Default.asp>
  - Digital Web Magazine  
<http://www.digital-web.com/>
  
- ITT Tech Virtual Library> Main Menu> Periodicals> Full-Text Electronic Journals
  - Afterimage
  - Computer Artist
  - Design Issues
  - Design Quarterly
  - Digital Creativity
  - HOW

### Reference Resources

You may click “Reference Resources” or use the “Search” function on the home page to find the following reference resources:

- ITT Tech Virtual Library> Main Menu> Reference Resources> Arts
- Art History Resources on the Web  
<http://witcombe.sbc.edu/ARTHLinks.html>
  - Artcyclopedia  
<http://www.artcyclopedia.com/>
  - ArtLex: A Visual Dictionary of Visual Art  
<http://www.artlex.com/>
  - Timeline of Art History  
<http://www.metmuseum.org/toah/splash.htm>

### Program Links

You may click “Program Links” or use the “Search” function on the home page to find the following program links:

ITT Tech Virtual Library> Main Menu> Program Links> Information Technology – Multimedia (ITM)> Professional Organizations

- Academy of Interactive Arts & Sciences
- ACM SIGGRAPH
- American Institute of Graphic Arts
- Association for Applied Interactive Multimedia
- Association of Computing Machinery
- Association for Multimedia Communications
- Association for Women in Computing
- Association of Information Technology Professionals
- Black Data Processing Associates
- Computer Professionals for Social Responsibility
- IEEE Computer Society
- Information Technology Association of America (ITAA)
- Project Management Institute

- SkillsUSA-VICA
- Women in Technology International (WITI)

### Learning Guides

You may click “Learning Guides” or use the “Search” function on the home page to find the following learning guides:

ITT Tech Virtual Library> Main Menu> Learning Guides

- Planet Photoshop
- Touch Typing

ITT Tech Virtual Library> Main Menu> Learning Guides> Student Research Guides

- Career Portfolios
- Cost of Living

### **Other References**

The following resources can be found **outside** of the ITT Tech Virtual Library, whether online or in hard copy.

#### Books

- Adobe Creative Team. *Adobe Photoshop CS3 Classroom in a Book*. Berkley, CA: Peachpit Press, 2007.
- Cagan, Jonathan and Craig Vogel. *Creating Breakthrough Products: Innovation from Product Planning to Program Approval*. London: Financial Times Prentice Hall Books, 2002.
- Kelby, Scott. *Photoshop Classic Effects: The Essential Effects Every User Needs to Know*. Berkley, CA: Peachpit Press, 2004.
- Kelley, Tom and Tom Peters. *The Art of Innovation: Lessons in Creativity from IDEO, America's Leading Design Firm*. New York: Random House, Inc., 2001.
- Lewis, Richard L. and James Luciana. *Digital Media: An Introduction*. Upper Saddle River, NJ: Prentice Hall, 2003.
- Ocepek, Louis. *Graphic Design: Vision, Process, Product*. Upper Saddle River, NJ: Prentice Hall, 2002.
- Ulrich, Karl and Steven Eppinger. *Product Design and Development*. 4<sup>th</sup> Edition. New York: McGraw-Hill, 2004.
- Wheeler, Susan and Gary Wheeler. *The Visual Design Primer*. Upper Saddle River, NJ: Prentice Hall, 2002.
- Williams, Robin. *The Non-Designer's Type Book*. 2<sup>nd</sup> Edition. Berkley, CA: Peachpit Press, 2005.
- Wong, Wucius. *Principles of Two-Dimensional Form*. New York: Van Nostrand Reinhold, 1988.

Periodicals

- Before & After  
<http://www.bamagazine.com>
- CMYK: Inspiring Visual Communication  
<http://www.cmykmag.com>
- Communication Arts  
<http://www.commarts.com/CA>
- Design and Publishing  
<http://www.graphic-design.com>
- Designer Today  
<http://www.designertoday.com>
- Fast Company  
<http://www.fastcompany.com>
- Layers Magazine  
<http://www.layersmagazine.com>
- National Association of Photoshop Professionals  
<http://www.photoshoper.com>
- Print Magazine: America's Graphic Design Magazine <http://www.printmag.com>
- Smashing Magazine  
<http://www.smashingmagazine.com>

Websites

- Photoshop Tutorials  
<http://www.absolutecross.com/tutorials/photoshop>
- Adobe Design Center  
<http://www.adobe.com/designcenter>
- Design Process  
<http://www.technologystudent.com/designpro/despro1.htm>
- CG Channel  
<http://www.cgchannel.com>
- Focus on Computer Graphics  
<http://www.cgfocus.com>
- Car Design for Automotive Designers, Engineers, and Enthusiasts  
<http://www.carbodydesign.com>
- Adobe Illustrator, Photoshop Tutorials & Lessons  
<http://www.khulsey.com/student.html>
- Illustrator Tutorials  
<http://www.ndesign-studio.com/resources/tutorials>
- 2D Design Notes  
<http://daphne.palomar.edu/design/dprocess.html>
- Tutorial Blog  
<http://tutorialblog.org/illustrator-tutorials/>
- Usability Engineering Team: Design Process  
<http://www.grc.nasa.gov/WWW/usability/processcss.html>

All links to Web references outside of the ITT Tech Virtual Library are always subject to change without prior notice.

## Course Evaluation and Grading

### Evaluation Criteria



The final grades will be based on the following categories:

<b>CATEGORY</b>	<b>WEIGHT</b>
Unit Projects	35
Quizzes	15
Labs	30
Course Project	20
<b>Total</b>	<b>100%</b>

### **Grade Conversion Table**

The final grades will be calculated from the percentages earned in the course, as follows:

A	90–100%	4.0
B+	85–89%	3.5
B	80–84%	3.0
C+	75–79%	2.5
C	70–74%	2.0
D+	65–69%	1.5
D	60–64%	1.0
F	<60%	0.0

*(End of Syllabus)*