

Cedar Grove School District

Cedar Grove, NJ

2017 | Grade 9-12

Design



Revised 2017

Approved by the Cedar Grove Board of Education

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Design

Course Description

This course provides the students with a unique approach exploring several areas of design. Architectural design, interior design, and consumer product design will be introduced. Traditional design methods will be used as well as various computer design applications. In architectural design, students will become familiar with design principles, they will learn how to read a ruler and an architectural scale, and they will learn to use drafting equipment. In interior design, students will be exposed to color, its meaning, and its influence on our mood. They will also be introduced to the various design styles, such as modern, country. Students will then be introduced to fashion and product design and examine the difference between fibers and fabrics, textiles and how they originated in New Jersey, and clothing and society. Then, through an exploration of basic advertising, students will then gain an understanding on how what we wear tells others about who we are. Activities based in real-world design scenarios will be done both individually as well as within collaborative situations.

This curriculum was written in accordance with the
2014 NEW JERSEY STUDENT LEARNING STANDARDS FOR
VISUAL AND PERFORMING ARTS,
the
the 2014 NEW JERSEY STUDENT LEARNING STANDARDS
FOR 21ST CENTURY LIFE AND CAREERS,
and the
2014 NEW JERSEY STUDENT LEARNING STANDARDS FOR
SOCIAL STUDIES.

Design

Unit 1 – Basic Design

Course Objective(s)	Student Objectives
Interpret and implement design principles	<ul style="list-style-type: none">• Define design• Describe the design loop steps• Identify the problem, make a design brief, research and investigate, brainstorm, choose a solution, design sketch,• develop a prototype, test and evaluate
Understand and utilize design equipment	<ul style="list-style-type: none">• Interpret measurement using a ruler• Determine how to read and use an architectural scale• Identify a T-square and understand its application• Identify a triangle and understand its application• Demonstrate how to mount paper to a drawing board
2014 New Jersey Student Learning Standards for Visual and Performing Arts	
1.1.12.D.1 Distinguish innovative applications of the elements of art and principles of design in visual artworks from diverse cultural perspectives and identify specific cross-cultural themes.	
1.3.12.D.1 Synthesize the elements of art and principles of design in an original portfolio of two- and three-dimensional artworks that reflects personal style and a high degree of technical proficiency and expressivity	
1.3.12.D.4 Analyze the syntax and compositional and stylistic principles of two- and three-dimensional artworks in multiple art media (including computer-assisted artwork), and interpret themes and symbols suggested by the artworks	
2014 New Jersey Student Learning Standards for 21st Century Life and Careers: Architecture & Construction Cluster	
9.3.12.AC.6 Read, interpret and use technical drawings, documents and specifications to plan a project.	
9.3.12.AC-DES.6 Apply the techniques and skills of modern drafting, design, engineering and construction to projects.	
9.3.12.AC-DES.7 Employ appropriate representational media to communicate concepts and project design.	
2014 New Jersey Student Learning Standards for 21st Century Life and Careers: Arts, A/V Technology & Communications Career Cluster	
9.3.12.AR-VIS.2 Analyze how the application of visual arts elements and principles of design communicate and express ideas.	
9.3.12.AR-VIS.3 Analyze and create two and three-dimensional visual art forms using various media	

Design

Unit 2 – Applications of Basic Design

Course Objective(s)	Student Objectives
Assess and draw divergent design elevations	<ul style="list-style-type: none"> • Measure an object and then: <ul style="list-style-type: none"> ▪ Illustrate top view ▪ Illustrate front view ▪ Illustrate side view ▪ Draw these to scale on drafting paper
Understand the importance of measurement and scaling that measurement to make a representation	<ul style="list-style-type: none"> • Measure the area of the classroom and its contents • Select an appropriate scale to represent the drawing, • using the architectural scale • Duplicate classroom to scale on drafting paper
Comprehend and illustrate various design layouts	<ul style="list-style-type: none"> • Relate linear measurement to living space • Comprehend room size as it relates to design layouts • Sketch and design a "dream" home • Draw and then construct a model of first floor of the "dream" home design

2014 New Jersey Student Learning Standards for Visual and Performing Arts

1.1.12.D.1 Distinguish innovative applications of the elements of art and principles of design in visual artworks from diverse cultural perspectives and identify specific cross-cultural themes.

1.3.12.D.1 Synthesize the elements of art and principles of design in an original portfolio of two- and three-dimensional artworks that reflects personal style and a high degree of technical proficiency and expressivity

1.3.12.D.2 Produce an original body of artwork in one or more art mediums that demonstrates mastery of visual literacy, methods, techniques, and cultural understanding.

1.3.12.D.4 Analyze the syntax and compositional and stylistic principles of two- and three-dimensional artworks in multiple art media (including computer-assisted artwork), and interpret themes and symbols suggested by the artworks

1.3.12.D.5 Identify the styles and artistic processes used in the creation of culturally and historically diverse two- and three-dimensional artworks, and emulate those styles by creating an original body of work.

2014 New Jersey Student Learning Standards for 21st Century Life and Careers: Architecture & Construction Cluster

9.3.12.AC.2 Use architecture and construction skills to create and manage a project.

9.3.12.AC.6 Read, interpret and use technical drawings, documents and specifications to plan a project.

9.3.12.AC-DES.6 Apply the techniques and skills of modern drafting, design, engineering and construction to projects.

9.3.12.AC-DES.7 Employ appropriate representational media to communicate concepts and project design.

2014 New Jersey Student Learning Standards for 21st Century Life and Careers: Arts, A/V Technology & Communications Career Cluster

9.3.12.AR-VIS.2 Analyze how the application of visual arts elements and principles of design communicate and express ideas.

9.3.12.AR-VIS.3 Analyze and create two and three-dimensional visual art forms using various media

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Unit 3 – Interior Design

Course Objective(s)	Student Objectives
Develop an understanding of color	<ul style="list-style-type: none">• Interpret colors and their meanings• Discriminate between moods in relationship to color• Classify colors into primary and secondary
Differentiate between various design styles	<ul style="list-style-type: none">• Identify styles such as early American, modern and contemporary• Distinguish differences in design styles• Explain what materials and furniture would be associated with each design style (ex. Country-plaid, oak furniture, etc.)
Describe and distinguish between materials used in a home	<ul style="list-style-type: none">• Explain the differences between the following building materials: tile (ceramic, marble, granite), wood (hardwood, laminate), carpet (Berber, commercial, residential) etc.• Choose appropriate materials for specific rooms
Characterize the differences of paint	<ul style="list-style-type: none">• Distinguish differences in quality of paint products• Recognize differences between the paint finishes available
Apply knowledge of color and materials	<ul style="list-style-type: none">• Paint first floor of constructed model• Choose a decorating style• Furnish model with appropriate choices from the decorating style

2014 New Jersey Student Learning Standards for Visual and Performing Arts

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1.3.12.D.1 Synthesize the elements of art and principles of design in an original portfolio of two- and three-dimensional artworks that reflects personal style and a high degree of technical proficiency and expressivity.

1.3.12.D.2 Produce an original body of artwork in one or more art mediums that demonstrates mastery of visual literacy, methods, techniques, and cultural understanding.

1.3.12.D.4 Analyze the syntax and compositional and stylistic principles of two- and three-dimensional artworks in multiple art media (including computer-assisted artwork), and interpret themes and symbols suggested by the artworks.

1.3.12.D.5 Identify the styles and artistic processes used in the creation of culturally and historically diverse two- and three-dimensional artworks, and emulate those styles by creating an original body of work.

1.4.12.A.1 Use contextual clues to differentiate between unique and common properties and to discern the cultural implications of works of dance, music, theatre, and visual art.

2014 New Jersey Student Learning Standards for 21st Century Life and Careers: Architecture & Construction Career Cluster

9.3.12.AC-CST.7 Compare and contrast the building systems and components required for a construction project.

9.3.12.AC-DES.2 Use effective communication skills and strategies (listening, speaking, reading, writing and graphic communications) to work with clients and colleagues
9.3.12.AC-DES.5 Identify the diversity of needs, values and social patterns in project design, including accessibility standards.
9.3.12.AC-DES.6 Apply the techniques and skills of modern drafting, design, engineering and construction to projects.
9.3.12.AC-DES.7 Employ appropriate representational media to communicate concepts and project design.
2014 New Jersey Student Learning Standards for 21st Century Life and Careers: Arts, A/v Technology & Communications Career Cluster
9.3.12.AR-VIS.2 Analyze how the application of visual arts elements and principles of design communicate and express ideas.
9.3.12.AR-VIS.3 Analyze and create two and three-dimensional visual art forms using various media.

Design

Unit 4 – Fashion Design

Course Objective(s)	Student Objectives
Interpret clothing uses and its influences on society	<ul style="list-style-type: none">Recognize the influence of design on clothing and societyTrace the changes in designs throughout the ages, from 1900 to present
Research and discuss the history of textiles in New Jersey	<ul style="list-style-type: none">Relate the history of Paterson, NJ to the textile industryRelate the Industrial Revolution to New Jersey's history
Evaluate the differences between fibers and fabrics	<ul style="list-style-type: none">Distinguish between natural and man-made fibersDifferentiate between fabric characteristics
Describe what influences fashion changes over time.	<ul style="list-style-type: none">Relate social icons and their influence on fashion trendsDescribe how technology has improved fabric development
Develop an appreciation of world fashion.	<ul style="list-style-type: none">Identify fashions from around the worldDesign a poster illustrating fashion from a country of their choosing.

2014 New Jersey Student Learning Standards for Visual and Performing Arts

1.2.12.A.1 Determine how dance, music, theatre, and visual art have influenced world cultures throughout history.
1.2.12.A.2 Justify the impact of innovations in the arts (e.g., the availability of music online) on societal norms and habits of mind in various historical eras.
1.1.12.D.1 Distinguish innovative applications of the elements of art and principles of design in visual artworks from diverse cultural perspectives and identify specific cross-cultural themes.
1.3.12.D.1 Synthesize the elements of art and principles of design in an original portfolio of two- and three-dimensional artworks that reflects personal style and a high degree of technical proficiency and expressivity.
1.3.12.D.2 Produce an original body of artwork in one or more art mediums that demonstrates mastery of visual literacy, methods, techniques, and cultural understanding.
1.3.12.D.4 Analyze the syntax and compositional and stylistic principles of two- and three-dimensional artworks in multiple art media (including computer-assisted artwork), and interpret themes and symbols suggested by the artworks.
1.3.12.D.5 Identify the styles and artistic processes used in the creation of culturally and historically diverse two- and three-dimensional artworks, and emulate those styles by creating an original body of work.
1.4.12.A.1 Use contextual clues to differentiate between unique and common properties and to discern the cultural implications of works of dance, music, theatre, and visual art.
1.4.12.B.3 Determine the role of art and art-making in a global society by analyzing the influence of technology on the visual, performing, and multimedia arts for consumers, creators, and performers around the world.

2014 New Jersey Student Learning Standards for 21st Century Life and Careers: Arts, A/V Technology & Communications Career Cluster

9.3.12.AR-VIS.2 Analyze how the application of visual arts elements and principles of design communicate and

express ideas.
9.3.12.AR-VIS.3 Analyze and create two and three-dimensional visual art forms using various media.
2014 New Jersey Student Learning Standards for Technology
8.1.12.C.1 Develop an innovative solution to a real world problem or issue in collaboration with peers and experts, and present ideas for feedback through social media or in an online community.
8.1.12.E.1 Produce a position statement about a real world problem by developing a systematic plan of investigation with peers and experts synthesizing information from multiple source
2014 New Jersey Student Learning Standards for Social Studies
6.1.12.C.6.b Determine how supply and demand influenced price and output during the Industrial Revolution.
6.1.12.D.6.a Assess the impact of technological innovation and immigration on the development of agriculture, industry, and urban culture during the late 19th century in New Jersey (i.e., Paterson Silk Strike 1913) and the United States.

Design

Unit 5 – Product Design

Course Objective(s)	Student Objectives
Investigate the design stages when creating a new product	<ul style="list-style-type: none">• Conceptualize the development of a new product• Summarize the effects of product development on people and society• Rationalize the need for new products or product revisions
Analyze the various target markets and assess their economic impact	<ul style="list-style-type: none">• Evaluate products according to age, gender, race, price, etc.
Describe and implement selling strategies	<ul style="list-style-type: none">• Recognize the different marketing techniques (emotion, guilt, etc.)
Explain and cite examples of price points	<ul style="list-style-type: none">• Relate a product's features to its price• Distinguish differences between entry level and high end products
Construct a model of a product utilizing target market, selling strategies, and price points	<ul style="list-style-type: none">• Combine all selling techniques and strategies to construct a product package• Construct and decorate a product• Create a marketing strategy to sell the product• Plan and execute a fifteen-minute presentation on the product and its usefulness
Explore the differing life cycles of a product	<ul style="list-style-type: none">• Explain the steps in the life cycle of a product: design, manufacture, and recycling

2014 New Jersey Student Learning Standards for Visual and Performing Arts

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1.1.12.D.1 Distinguish innovative applications of the elements of art and principles of design in visual artworks from diverse cultural perspectives and identify specific cross-cultural themes.
1.3.12.D.1 Synthesize the elements of art and principles of design in an original portfolio of two- and three-dimensional artworks that reflects personal style and a high degree of technical proficiency and expressivity.
1.3.12.D.2 Produce an original body of artwork in one or more art mediums that demonstrates mastery of visual literacy, methods, techniques, and cultural understanding.
1.3.12.D.4 Analyze the syntax and compositional and stylistic principles of two- and three-dimensional artworks in multiple art media (including computer-assisted artwork), and interpret themes and symbols suggested by the artworks.
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2014 New Jersey Student Learning Standards for 21st Century Life and Careers: Arts, A/V Technology & Communications Career Cluster

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**2014 New Jersey Student Learning Standards for 21st Century Life and Careers:
Marketing Career Cluster**

9.3.MK.8 Obtain, develop, maintain and improve a product or service mix in response to market opportunities.

9.3.MK.9 Communicate information about products, services, images and/or ideas to achieve a desired outcome.

9.3.MK-RES.3 Use information systems and tools to make marketing research decisions.

9.3.MK-MER.1 Plan, organize and lead merchandising staff to enhance selling and merchandising skills.

9.3.MK-MER.5 Determine and adjust prices to maximize return and meet customers' perceptions of value.

9.3.MK-MER.7 Communicate information about retail products, services, images and/or ideas.

**2014 New Jersey Student Learning Standards for 21st Century Life and Careers:
Manufacturing Career Cluster**

9.3.MN.1 Evaluate the nature and scope of the Manufacturing Career Cluster and the role of manufacturing in society and in the economy.

9.3.MN-PPD.5 Develop procedures to create products that meet customer needs.

Design

Unit 6 – Communication Design

Course Objective(s)	Student Objectives
Illustrate and design a magazine around a central theme incorporating the use of technology	<ul style="list-style-type: none"> Choose writing styles to match audience Structure content for target audience Recognize people as a target market
Interpret how a magazine has an effect on people and society	<ul style="list-style-type: none"> Determine the influence of writing on society Discuss how the written word has helped to shape human history Discuss the various parts of a magazine and what each must contain
Conceptualize a topic for a magazine based upon specific target audiences	<ul style="list-style-type: none"> Brainstorm target audiences based upon their own interests, talents and hobbies. Choose target audience that will be most interested in "purchasing" their magazine.
Illustrate ideas on paper	<ul style="list-style-type: none"> Design and layout on drawing paper a 20 page magazine that targets specific people and interests
Incorporate writing into the body of the magazine	<ul style="list-style-type: none"> Write articles according to magazine genre
Combine design layout and articles to create a magazine	<ul style="list-style-type: none"> Utilizing technology, compose a twenty-page magazine using the design layout and written articles
Summarize contents of magazine and present to class	<ul style="list-style-type: none"> Formulate a ten-minute oral presentation explaining their magazine and its appeal to a certain group of people

2014 New Jersey Student Learning Standards for Visual and Performing Arts

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1.4.12.B.3 Determine the role of art and art-making in a global society by analyzing the influence of technology on the visual, performing, and multimedia arts for consumers, creators, and performers around the world.

2014 New Jersey Student Learning Standards for 21st Century Life and Careers: Arts, A/V Technology & Communications Career Cluster

9.3.12.AR.1 Analyze the interdependence of the technical and artistic elements of various careers within the Arts, A/V Technology & Communications Career Cluster.
9.3.12.AR-JB.2 Demonstrate writing processes used in journalism and broadcasting.
9.3.12.AR-PRT.2 Demonstrate the production of various print, multimedia or digital media products.
9.3.12.AR-VIS.1 Describe the history and evolution of the visual arts and its role in and impact on society.
9.3.12.AR-VIS.2 Analyze how the application of visual arts elements and principles of design communicate and express ideas.
9.3.12.AR-VIS.3 Analyze and create two and three-dimensional visual art forms using various media.
2014 New Jersey Student Learning Standards for Technology
8.1.12.C.1 Develop an innovative solution to a real world problem or issue in collaboration with peers and experts, and present ideas for feedback through social media or in an online community.
8.1.12.E.1 Produce a position statement about a real world problem by developing a systematic plan of investigation with peers and experts synthesizing information from multiple sources.
8.2.12.A.1 Propose an innovation to meet future demands supported by an analysis of the potential full costs, benefits, trade-offs and risks, related to the use of the innovation.

Suggested Activities

- Lecture
- Class discussions
- Student presentations
- Debates
- Cooperative Learning structures
- Guided practice
- Performance assessments
- Projects
- Simulation and modeling activities
- Technology infusion
- Learning Styles activities
- Differentiated Instruction
- Research
- Architectural drafting
- Interior designing and decorating
- Building scale models of homes

Suggested Resources

Textbook:

- *Paint & Color*, Lowes Company

Supplementary Materials

- *Green Source*, McGraw Hill & Co.
- The Kellogg Brothers: Corn Flake Kings. A & E Videos.

Websites:

- <http://www.shawfloors.com>
- <http://www.historychannel.com>
- [http://www .discoverychannel.com](http://www.discoverychannel.com)