

BHS APPLIED ARTS DEPARTMENT



Welcome!

**Applied Arts Presentation
February 1, 2011**

BHS APPLIED ARTS DEPARTMENT



Mission Statement

The Applied Arts program advocates life-long-learning through skill based education that provides students with the specialized expertise that will enable them to successfully compete in the workforce of today while equipping them with the problem solving skills to achieve their future potential.



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Teacher Goals

- Flexible, differentiated instruction.
- Connecting classroom instruction to authentic real-world applications.
- Facilitate the integration of technology via cross curriculum projects.
- Provide leadership for the effective use of technology at a district level.

Student Goals

- Engaged in the utilization of tools used by professionals in their field of study.
- Visually literate and visual communicators.
- Develop problem solving skills and become intrinsically motivated.

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About our courses...



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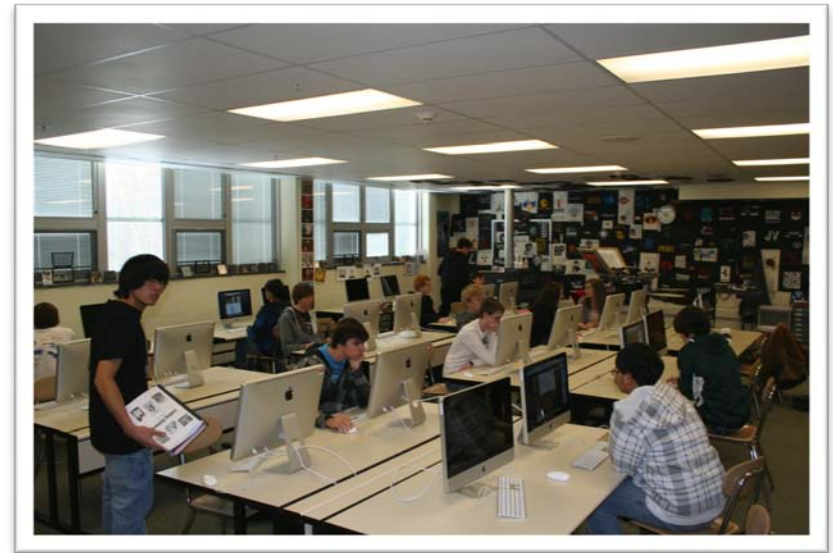


Brian Mathien

Student Presenters: Chris Daleen & Carl Ewing

GRAPHIC ARTS

The process and art of combining text and graphics while communicating an effective message in the design of logos, graphics, brochures, newsletters, posters, signs, and any other type of visual communication.



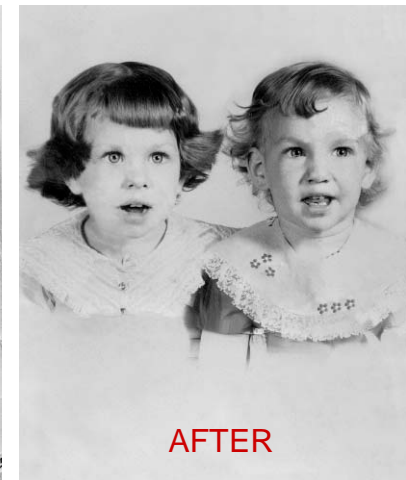
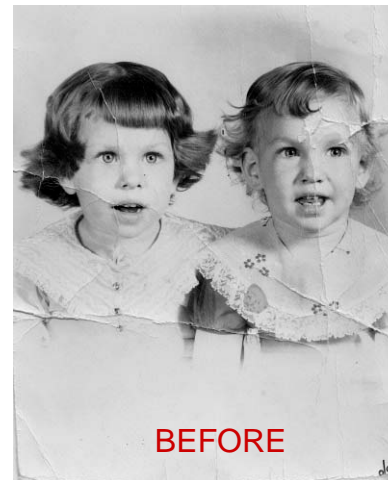
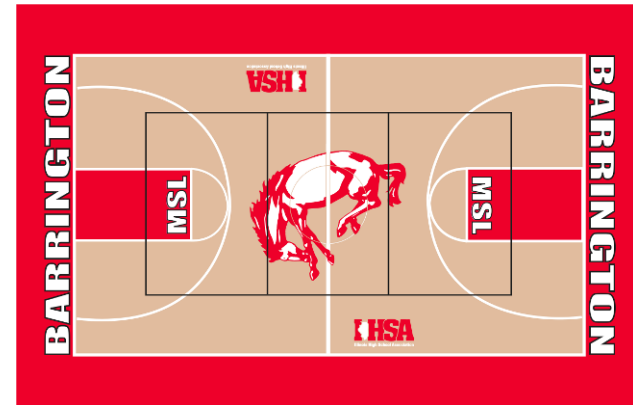
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Students will learn terminology and vocabulary used in the **graphic arts** and printing production industry.

Will become familiar with the many steps included in the **design and production** process.

Adobe Design Suite: Photoshop, Illustrator, Indesign



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Students will develop skills in ***silkscreen production*** including prepress, screen preparation, and production.

Students will be able to take skills, which have developed through software assignments and apply this knowledge to ***real-life applications***.



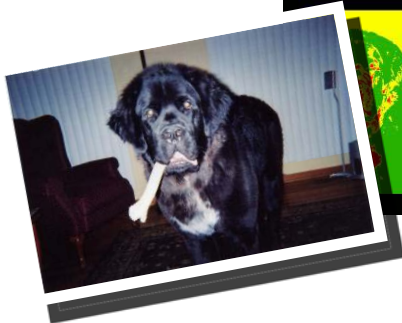
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More Student Work...

and...

Projects for BHS & the community
Graphic Productions Club



FRONT



BACK



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Teacher: Karuna Parmar

Student Presenter: Courtney Harrison

Architectural / CADD Interiors



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Architectural / CADD Interiors

- Interior Design w/ some CADD & Architecture emphasis; Year-long course
 - ❖ Design Principles & Design Elements combined with Architecture Fundamentals
- This course familiarizes students with interior design uses of architectural and CADD software, 3D modeling, and CADD rendering techniques for presentations.
- Highly recommended for students interested in careers related to architecture and/or interior design.



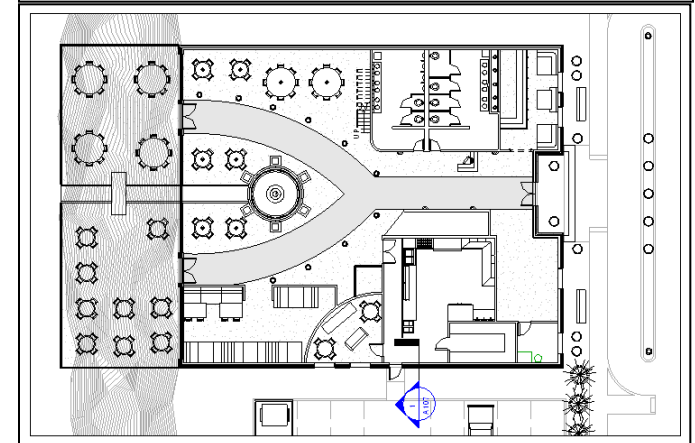
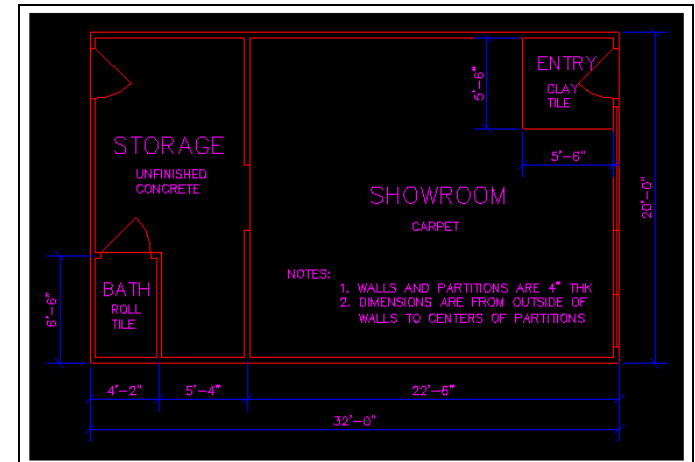
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Architectural/CADD Interiors

• Topics students work on...

- ❖ Architectural styles, floor plan sketches, interpreting blueprints, CAD drawings & renderings
- ❖ Analysis of residential traffic patterns, universal design needs, physical & psychological needs analysis, and lighting
- ❖ Creative 3D furniture design & modeling
- ❖ Creative color wheel, design boards
- ❖ Realistic client-based design projects of interior residential spaces that include budget planning, spatial planning, and client analysis along with application of the design elements and principles.



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Mary Ellen Peterson
Student Presenter: JP Mease



New at BHS

Globally Recognized Certifications for Students!



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Information Processing 1 & 2

- **IC3 Certification**
- **MS Word Certification**



Computer Applications 1-3

- **MS Excel Certification**
- **MS PowerPoint Certification**
- **MS Access Certification**



Digital Web Design

- **Adobe Certification**



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Why Certify?

“Certiport certifications are valuable, professional credentials — no matter where you are in your career or education. IC³, Microsoft Office Specialist, Microsoft Certified Application Specialist, and Adobe Certified Associate certifications are **globally recognized** standards for **digital literacy and desktop computing proficiency.**”

<http://www.certiport.com>

Information Processing



Computer Applications



Digital Web Design



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How can Students Certify?

- Students take Information Processing, Computer Applications, and Digital Web Design.
- Students will be allowed to work at their own pace to obtain as many certificates as they want.
- Curriculum designed to prepare students for certification exams.
- Certification exams may be repeated.

Information Processing



Computer Applications



Digital Web Design



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Paul Zurek

Student Presenters: Alejandro Aguina & Reuben Galijatovic-Schmidt

Digital Arts



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DIGITAL ARTS

- **Hands-on** course introduces software used for producing artwork and video.
 - Adobe Illustrator CS5
 - Adobe Photoshop CS5
 - Adobe Bridge CS5
 - iMovie
- Development of skills necessary to transform ordinary images into *eye-catching graphics*
- Incorporation of other forms of technology. (scanners, cameras, photo databases)
- Individual projects are assigned to allow students to work at their own pace.
- Allows students freedom to be creative and think outside the box.

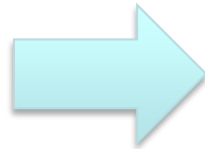
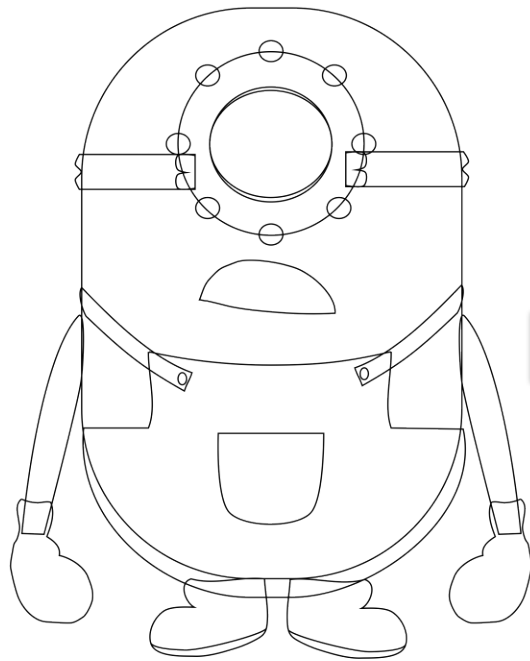
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Teachers: Karuna Parmar,
Tom Bredemeier
Paul Zurek

Student Presenters: Paul Meesala & Erika Pauley

Project Lead the Way Courses:

- Introduction to Engineering Design
 - Principles of Engineering
- Digital Electronics (*New for Fall 2011*)



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Project Lead the Way

www.pltw.org

- PLTW, a national non-profit organization, created to address the nation's need for more leaders in **Science, Technology, Engineering & Mathematics (STEM)**.
- Basically, to **increase an awareness & awaken interest for engineering / STEM** career fields amongst high school students and to reduce the attrition rate in engineering & technology-related majors!
- PLTW offers a **"standards based"** rigorous, relevant curriculum with a dynamic, interactive learning environment to produce more successful, confident and interested students.
- PLTW courses are **well-recognized by colleges & universities** and offer an advantage to our PLTW students over non-PLTW students
- Colleges offer **credit and scholarship** money for successfully completing PLTW courses!

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Introduction to Engineering Design Curriculum

Unit 1: The Design Process

--Puzzle Cube Project

Unit 2: Design Solutions

--Mini Toy Train Project

Unit 3: Reverse Engineering

--Product Improvement by Design Project

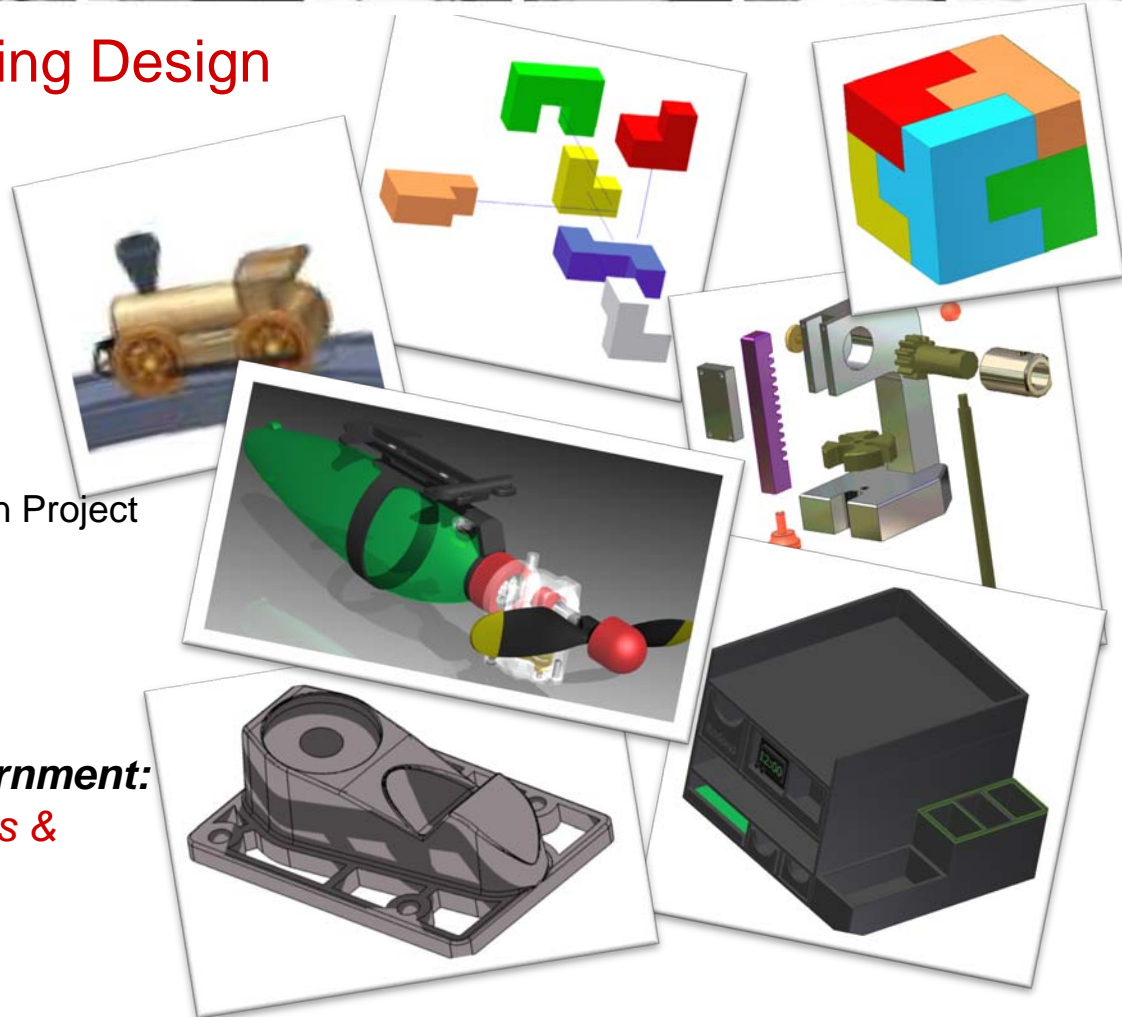
Unit 4: Design Problems

--Virtual Team Design Project

--Teaming up w/ Normal East High School, in Normal, IL

According to the Federal Government:

"We will need 15 million engineers & technology workers by 2020!"



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Principles of Engineering

- Survey of engineering class similar to that at the university level.
- Heavy emphasis on Applied Physics and Mathematics (Trigonometry).
- Focus on teamwork and problem solving in the real world.
- Many projects throughout the year, including (but not limited to)
 - ✓ Power generation (using solar, wind, and fuel cell technology)
 - ✓ Bridge building (statics)
 - ✓ Mechanical automation
 - ✓ Projectile launching
 - ✓ Destructive tensile testing to measure material stress and strain
 - ✓ Fluid hydraulics and pneumatics
 - ✓ Electricity and electronics
 - ✓ Logic and statistics

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Digital Electronics

- College level Electronics class.
- Automatic credit for Harper's Digital Electronics course.
- Focus on teamwork and problem solving in the real world.
- Many projects throughout the year, including (but not limited to)
 - Transistors and Integrated circuits
 - Logic gates and combinatorial logic
 - Programmable Logic Control (PLC) devices

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Teacher: Tom Bredemeier
Student Presenter: Taylor Arledge

Computer Science

- Animation and Game Design
- Robotics
- AP Computer Science
- Computer Programming Advanced Honors

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Animation and Game Design aka Computer Programming I

- ✓ 1st semester, stand-alone course
- ✓ designed to 'hook' kid's natural interests
- ✓ 'drag and drop' software (no programming code)
- ✓ almost all project based
- ✓ no prerequisite
- ✓ following 'recipes' to create animations and games
- ✓ semester final project is 'design your own game'

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Robotics aka Computer Programming II

- ✓ 2nd semester, stand-alone course
- ✓ designed to 'hook' kid's interests
- ✓ beginning to program in Java
- ✓ almost all project based
- ✓ no prerequisite
- ✓ focus on algorithmic thinking (problem solving)
- ✓ semester final project is 'design a battle robot'

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AP Computer Science

- ✓ full year, college level course
- ✓ no programming experience required
- ✓ programming in Java
- ✓ heavily project based
- ✓ focus on algorithmic thinking (problem solving)
- ✓ Geometry prerequisite (B or better)
- ✓ fast-paced, but fun class
- ✓ AP exam allows for college credit

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Computer Programming Advanced Honors

- ✓ designed for 'post AP' students, this class meets during one of the other computer science classes (stacked class).
- ✓ students can choose from a combination of three different course tracks:
 1. Continue on with advanced AP curriculum
 2. Become a TA for either the intro or AP class
 3. Research and develop a significant project of their own choosing (independent study).

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Jeff Doles

Student Presenters: Austin Czarnecki and John Bach

TV Production I – Advanced TV Production

Students enrolled in Studio Television *produce* virtually all of the videos featured on:

- 220 Youtube
- Channel 97
- 220 Facebook
- Jumbotron
- Athletic Banquets
- District Presentations
- HERE in Barrington
- Parent Night

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Student Accomplishments

- 24 Student TV Excellence Awards
- Best News Program CTEC
- Outstanding Technology Award 2007
- Chevy Commercial Contest Winners
- O.A.R. "This Town" Winning Video
- WGN Lip Dub Finalist
- South Dakota Film Festival Featured Film
- Fox High School Video of the Year

Student work featured on:

- WGN
- NBC
- NFL Films
- FOX News
- Chicagobears.com
- Chicagobulls.com

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[Video Link](#)

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Thank You!

**We appreciate your time,
thanks for listening...**