TO: High School Leadership Team

FROM: Logan Hamilton

RE: **ADVERTISING DESIGN 1 SEMESTER**

DATE: Oct 5, 2011

Rationale:

The purpose for this course proposal is to increase opportunities and skills for students wanting to pursue careers in graphic design. Many students have not only asked "Can I take graphic design 1 twice?" but also asked what opportunities are available for them to work in an art vocation in the summer and post high school. Graphic design II will provide students with advanced computer and advertising design skills. Students can use these skills to pursue either a summer job at a local t-shirt/ graphic design business, or to further prepare themselves for a college education in art. This course will provide advertising services to the school in the form of curriculum projects. Services may include, brochure design, banners, t-shirts, and other vinyl/ printed media. There is also the opportunity to work cooperatively with the district professional in charge of the new magazine publication. Students often have difficulty finding jobs at local design shops because many employers do not have the time to train students within a summer. Having a class such as this will give the students the ability to walk into a design job with industry standard skills. As the graphic design 1 course has been very successful I believe graphic design 2 will be just as successful.

Costs:

District Additional Cost- $500-$600 for consumable supplies

Student Costs: None unless students choose to print medias for personal use.

Other Considerations:

Prerequisites: Grades 10-12 Graphic Design 1

Course Description:

05163A000 Advertising Design

Advertising Design courses relate and apply creative expression and design principles to the field of advertising and commercial art. The courses offer practical experiences in generating original ideas, executing layouts, and preparing artwork for reproduction. Advertising Design courses may also provide a historical and contemporary view of art as students learn to critique work.

Advertising Design Syllabus

Evaluation:

Test / Quizzes	25%
Lab Projects	50%
Homework	12.5%
Professionalism (Participation)	12.5%

Tentative Course Schedule:

UNIT 1: Print Media
Magazines, Playbills, Business Cards

UNIT 2: Corporate Design
Logo design, company profile, product design, packaging

UNIT 3: Vinyl Graphics
Banners, vehicle graphics, widow graphics

UNIT 4: Practical Applications
Creating print and graphic projects in real life applications for the school.

TO: High School Leadership Team

FROM: Logan Hamilton

RE: **ART PORTFOLIO**

DATE: Oct 5, 2011

Rationale:

The purpose for this course proposal is to increase opportunities and skills for students wanting to pursue art in college. Each year I have on average 4-5 students who could benefit from having designated one on one time with me o build their portfolio for college entry and scholarships. I have tried building portfolios with students during art club and after school but it has been unsuccessful. Students are often too busy with extras curricular and other course loads that they find it difficult to also juggle building a portfolio. I would like to build a curriculum that is aligned with college portfolio standards so when students complete my class they have a competitive collection of art. Students will have in school time to prepare for a post high school education and they will also experience what it is like to prepare a focused body of work and display it. This is a need that must be met. 4-5 students pursuing art post high school is a large number and they need the attention in order to be successful.

Costs:

District Additional Cost- $400 for consumable supplies

Student Costs: $60 for a portfolio

Other Considerations:

Prerequisites: Teachers recommendation/approval

Course Description:

05170A000 Art Portfolio
Art Portfolio courses offer students the opportunity to create a professional body of work that reflects their personal style and talent. Students are often encouraged to display their work publicly.

Advertising Design Syllabus

Evaluation:

Test / Quizzes	30%
Lab Projects	30%
Display the artwork	20%
Participation	20%

Tentative Course Schedule:

Each unit will be designed around the students chosen theme. Each material/unit is designed to meet the standard portfolio application requirements. (In other words, the types of media/art, colleges like to see proficiency in)

UNIT 1: Graphite

UNIT 2: Ink

UNIT 3: Conte'

UNIT 4: Pastel

UNIT 4: Figure Drawing

TO: High School Leadership Team

FROM: Kyle Bess

RE: **CONSTRUCTION TRADES II PROPOSAL**

DATE: Oct 6, 2011

Rationale:

The purpose for this course proposal is to increase the skill set and opportunities for employment in the construction trades area. Geneseo High School currently offers a one-semester building trades class that meets 50 minutes per day. Upon receiving input from local business leaders in the construction field a need for greater instructional opportunities has been identified. Construction Trades II will meet this need by allowing for more time on the jobsite as well as twice as many meeting times throughout the year.

Costs:

Student Costs: Students will be required to purchase their own personal tool for Construction Trades II. As the tools are the property of the individual, students are required to maintain their equipment in working order. Students will be responsible for all costs associated with transportation to and from the jobsite if off grounds.

District Additional Costs: The customer will pay for all projects in whole. Costs will be figured as material plus 10%. This 10% would go towards new tools needed for class as well as any unforeseen expenditures. There is no planned additional cost to the district outside of the current budget.

Other Considerations:

Prerequisites: Construction Trades I (a one semester course). This course will meet during the two periods allotted for Constructions Trades II (a two semester course).

Course Description:

This course provides learning experiences related to the erection, installation, maintenance, and repair of building structures and related utilities. Student technical skill experiences include instruction and activities in safety principles and practices, performing maintenance control functions, joining pipes, building water distribution lines and drains, installing and maintaining plumbing fixtures and systems, installing switch and outlet boxes, light fixtures, service entrances, roughing in and trimming out electrical devices and appliances, preparing foundations and footings, constructing residential chimneys and fireplaces, laying, jointing and pointing brick, and advanced building and construction methods and codes. All learning experiences are designed to allow the student to acquire job-entry skills and knowledge.

Construction Trades II
COURSE SYLLABUS

Instructional Materials

Will use the current text for Construction Trades I. No additional text needed.

Feirer, John L. Carpentry and Building Construction. 4th Ed. Peoria, IL: Glencoe, 1993. ISBN: 0-02-668278-8

Evaluation:

Test / Quizzes	40%
Lab Projects	40%
Homework	15%
Professionalism (Participation)	5%

Tentative Course Schedule:

UNIT 1: Roof Systems
- Trusses
- Sheeting
- Shingles
- Instructional Lab Project
- ***Examination I***

UNIT 2: Exterior Wall Coverings
- Weather Proofing
- Vinyl Siding
- Instructional Lab Project
- ***Examination II***

UNIT 3: Rough Openings
- Windows
- Doors
- Garage Doors
- Instructional Lab Project
- ***Examination III***

UNIT 4: Drywall and Plastering
- Installation of Drywall
- Taping
- Mudding
- Sanding
- Instructional Lab Project
- ***Examination IV***

UNIT 5: Painting

Cleaning Walls
Priming
Types of Paint and Coats
Instructional Lab Project
Examination V

UNIT 6: Flooring

Tile
Hardwood
Carpet
Instructional Lab Project
Examination VI

UNIT 7: Bathrooms and Kitchens

Cabinetry
Plumbing
Instructional Lab Project
Examination VII

Industrial Technology Education 788 / 988: Construction Skills I and II

Construction Skills I (I310)
This course provides experiences related to the erection, installation and maintenance of residential buildings and fixtures. Planned learning activities will allow students to become knowledgeable of fundamental principles and methods and to develop technical skills related to carpentry, building maintenance, and finished work. Instruction include safety principles and practices, recognition of standard lumber sizes, foundation layout methods, building concepts and procedures, local, sate and national codes, cost estimating and site plan and blueprint reading. This course includes home construction processes from hanging walls and ceilings through a finished home ready for the family to move-in. It meets for two class periods and requires personal transportation to the work site.

Construction Skills II (I410)
This course provides learning experiences related to the erection, installation, maintenance and repair of building structures and related utilities. Planned learning activities emphasize the development of more advance knowledge and skills than those provided in Construction skills I. Student technical skill experiences should include instruction and activities in safety principles and practices; performing maintenance control functions; installing switch and outlet boxes, light fixtures; roughing in and trimming out electrical devices and appliances; preparing foundations and footings; and advanced building and construction methods and codes. All learning experiences are designed to allow the student to acquire job entry skills and knowledge. This course includes home construction processes from hanging walls and ceilings through a finished home ready for the family to move-in. It meets for two class periods and requires personal transportation to the work site.

To: BLT High School

From: Fran Hirschfelder & Jon Obrecht

Re: *Essential Math Skills for Chemistry Students* **Course Proposal (1 year)** Physical Science

Rationale:
The purpose for this course is to provide students with the math skills necessary for a successful experience in general chemistry.

Course Description: This course would focus on the following topics:

I. Numbers and Their Properties
   A. Real Numbers
   B. Order of Operation
   C. Rounding Numbers

II. Numbers in Science
   A. Scientific Notation
   B. Significant Figures
   C. Accuracy and Precision
   D. Using the calculator

III. Ratios and Proportions
   A. Manipulation of formulas
   B. Graphing
   C. Using the computer as a graphing aid

IV. Units, Dimensions, Conversions
   A. Introduction to units
   B. SI units
      a. SI base units
      b. SI derived units
   C. Prefixes on units
   D. Unit conversions

V. Percents
   A. Estimating percents
   B. Calculating percents

VI. Simple Statistics
   A. Arithmetic Mean
   B. Percent Error

VII. Logarithms

con't

Prerequisites: Students advanced in science sequence, but not advanced in the math sequence.

Materials needed: None. Already have rulers, calculators, computers, graphical analysis program. There would be no additional costs.

Grading:		
	Tests	40%
	Lab/Proj (participation)	30%
	Quizzes	20%
	Homework	10%

TO: High School Building Leadership Team

FROM: Jon Obrecht

RE: Introduction to Organic Chemistry – 1 year

DATE: October 4, 2011

Rationale:
The purpose of this course is to allow students interested in a chemistry major the opportunity to explore the world of organic chemistry. Organic chemistry is typically the second year chemistry course for biology, chemistry, zoology, botany, pre-med.

Content to be Taught: All Organic Families

Unit 1: Alkanes

Unit 2: Alkenes

Unit 3: Alkynes

Unit 4: Aromatic Compounds

Unit 5: Alcohols

Unit 6: Ethers

Unit 7: Aldehydes

Unit 8: Ketones

Unit 9: Carboxylic Acids

Unit 10: Esters

Unit 11: Amines

Unit 12: Amides

Prerequisite: Concurrent enrollment in or completion of physics

TO: (High School) Building Leadership Team

FROM: Greg Smith & Gary McDaniel

RE: ***Principles of Technology I COURSE PROPOSAL***

DATE: October 5, 2011

Principles of Technology I - (One Year)

Rationale:
The purpose for this course is to increase student knowledge in the areas of science, technology, engineering and math by utilizing the principals of VEX robotics and the Real World Design Challenge. This course will also give students the exposure to high tech jobs of the future and aligns with the "list of 21st Century skills" such as problem solving, synthesizing across content areas, dealing with information overload, basic debugging, basic understanding of usability concepts, and reflection.

VEX Education is dedicated to providing engaging and fun student experiences that enable individuals to reach their full potential while they develop the knowledge and skills vital to success in the 21st Century. Given today's global challenges compared to the rest of recorded history, there has never been an age with a greater need for new scientists, engineers and problem solving leaders. Recent breakthroughs in chemistry, medicine and physics have revealed a new set of challenges and created even greater opportunity for problem solving through technology. This underscores a dramatic challenge: there are not enough students choosing related paths to meet that global demand recognizing this dilemma, scores of governments and organizations are turning toward programs that integrate science, technology, engineering and mathematics (STEM) as a means to meaningfully engage and develop the next generation. VEX Education exists to help schools focus on practical, affordable and accessible ways of delivering dynamic hands-on STEM educational experiences to as many students as possible. Mixing the excitement and motivation associated with competition and real-world applications of mathematics and science concepts through the use of the engineering design process, we focus on addressing current educational and societal needs on many levels.

The study of robotics, by its very nature, captures all four legs of STEM very well while a competitive environment increases motivation and desire to succeed, thus creating classroom environments where both knowledge and skill development can flourish without having to compromise one for the other. Whether it's our classroom competition products, our classroom lab packages, one or more of our curriculum options, selections from our free education resources or some combination of them all, VEX Education continues to be a

world-leader in classroom robotics applications and stands poised to help schools meet the growing global demands of the 21st Century.
The Real World Design Challenge (RWDC) is an annual competition that provides high school students, grades 9-12, the opportunity to work on real world engineering challenges in a team environment. Each year, student teams will be asked to address a challenge that confronts our nation's leading industries. Students will utilize professional engineering software to develop their solutions and will also generate presentations that convincingly demonstrate the value of their solutions. The RWDC provides students with opportunities to apply the lessons of the classroom to the technical problems that are being faced in the workplace.

Costs:
Student Costs: Any personal project beyond class projects.

District Additional Costs: Classroom materials and curriculum $500-$2000

Other Considerations:
Strongly recommended math level: Geometry or higher

Course Description:
This course provides learning experiences related to the principles that underlie today's high technology: force, work, rate, resistance, energy, power, and force transformers. The course deals with these principles as they apply in each of the four systems that make up both the simplest and the most complex technological devices and equipment: mechanical systems, fluid systems, electrical systems, and thermal systems. Learning experiences are designed to allow students to acquire knowledge and skills which are transferable to postsecondary technical programs.

Principles of Technology I – COURSE SYLLABUS

Instructional Materials

Intelitek - $1295-$1995 with classroom license for programming software
Carnegie Mellon Robotics Academy - $499

Evaluation:

Test / Quizzes	40%
Lab Projects	40%
Homework	15%
Professionalism (Participation)	5%

Tentative Course Schedule:

UNIT 1: Introduction to Robotics & VEX

UNIT 2: Introduction to Pro/Engineering

UNIT 3: Microcontrollers and Transmitter Overview

UNIT 4: Speed, Power, Torque, and DC Motors

UNIT 5: Gears, Chains, and Sprockets

UNIT 6: Advanced Gears

UNIT 7: Motions

UNIT 8: Structure

UNIT 9: Drive train - Wheels

UNIT 10: Drive train – Tank Treads

UNIT 11: Rotating Joints

UNIT 12: Switches and Sensors

UNIT 13: Design

UNIT 14: Testing

UNIT 15: Competition