

S.T.E.M. German

At North County High School

S.T.E.M. Rocks and so does German!

Why take German as your S.T.E.M. language?

- German is the language of science, engineering, architects and inventors and will pair well with your future profession
- German is unique and will set you apart from your peers
- Many colleges and universities offer dual programs in areas of science/engineering and German
- German speaking countries offer grants and scholarships for study and travel

German Companies with Branches in the US

ThyssenKrupp

Volkswagen

Carl Zeiss IMT Corp

Gustav Meyer
Fineblanking

Hellman Worldwide
Logistics

Liebherr Gear
Technology

Lufthansa German
Airlines

T-Mobile

The German program at North County is truly a one of a kind program. Since being taken over 9 years ago by lead teacher Katrina Griffin, the program has grown to one of the consistently largest in the state, even expanding down to Lindale Middle School. The German teachers and students are very excited to be a part of S.T.E.M. German is recognized worldwide as THE language of science and engineering, which is why many universities offer dual study programs that incorporate and blend German with science, technology, engineering and math courses through study abroad experiences, internships and university courses in the US and abroad.

The NCHS German program is able to infuse S.T.E.M. principles at all levels in a variety of ways. Students use traditional technologies such as computers and web based activities, document cameras, Smartboards, Senteo clickers

and iPods, as well as web based animation programs, and the ALICE animation program. Students at all levels are make videos and use appropriate editing tools. As students' grasp of the German Language increases, they delve more into learning about specific S.T.E.M. topics in the target language. In German III students learn about environmental science and renewable energy, with a focus on cutting edge technologies developed and used in Germany. This unit is aligned directly with the AP Environmental Science class that many students will take in their junior year. Students have completed models of energy efficient homes, debated about environmental problems in the community and completed personal energy audits of their homes, all in German.

Students have also completed science fair projects on German language themes and presented information on impor-



tant German inventors and scientists to beginning German students. Students researched and presented information on the Berlin Wall, and even built a replica wall in school to celebrate the 20 year anniversary of its fall.

This summer for the first time ever, a student completed his S.T.E.M. Summer Bridge while in Germany! Zack Hood studied German architecture in Germany, which blended old and new design styles. He met with an architect who helped him apply his designs to an historic building in need of renovations and repurposing in Baltimore. Look for it at the next S.T.E.M. Gala!

S.T.E.M. Students in Europe



In June 2010 current S.T.E.M. juniors Nicole Jackson, Matt Rager, and Zack Hood traveled to Germany, Austria, and the Czech Republic, with S.T.E.M. German teacher Ms. Griffin. Students enjoyed seeing and experiencing many of the things they learned about in class. A highlight of the trip was a

visit to the Deutsches Museum, in Munich, the largest museum of technology in the world! Everyone was impressed with the interactive exhibits on nanotechnology, the ocean, and the comprehensive collection of aircraft and machines from hang gliders to spaceships. We cant wait to return!

New in the German Classroom 2010-2011– iPods!

The NCHS German classroom joins Severna Park Middle and AVID at NCHS as one of the elite programs to pilot iPod usage in the classroom. Depending on course level, students will use the iPod touches to listen to



Ms. Griffin with Alex Hrybyk, former student and APP designer

music and radio shows, access online dictionaries and study guides. communicate with German students in other parts of the country and the

world. Students will also use a variety of apps to help enhance and strengthen their language abilities. Some of the apps used will even be designed by former NCHS German student Alex Hrybyk. Alex recently graduated from Drexel University in Philadelphia with a degree in Engineering. If S.T.E.M. had existed when Alex was in school he would have been a model student. He continued his study of German at Drexel and will present his masters thesis this summer in The Netherlands, truly integrating S.T.E.M. with international components. We are excited to have

him aboard as we launch our iPod pilot program, bringing student learning and teaching full circle!

Cool Videos!!!

Not convinced that German is a useful language for S.T.E.M.? Check out these videos!

One of these is being built in Philadelphia!
http://www.woehr.de/en/projekte/budapest_m730/index.htm

Watch this one until the end. It takes place in Vienna, you won't understand much, but it is incredible! <http://www.youtube.com/watch?v=RobaJKGMMiE>

It is never too early to think about your future!

MANY UNIVERSITIES AND COLLEGES OFFER DUAL MAJORS IN S.T.E.M. AREAS AND GERMAN!

Many universities and colleges offer dual major programs allowing students to graduate with 2 degrees in 4 or 5 years. In a dual degree program, the 2 disciplines are woven together, as opposed to a double major program, in which one can still earn 2 degrees, but the disciplines are largely separated. Here are a few of the many schools that offer dual majors in the German and S.T.E.M. areas!

University of Maryland: www.urspumd.edu/international/german.html
 German & Engineering– Dual Program
 Highlights- 4th Year Fall Semester in Karlsruhe, Germany
 4th Year Spring Semester paid internship in Germany

University of Colorado, Boulder: gsll.colorado.edu/German/major/htm
 German for Engineers Certificate
 5 Year concurrent German B.A. & M.B.A

University of Kentucky: www.engr.uky.edu/programs/international/gep/
 German and Engineering Program
 Highlights- Calc III freshman course in Germany– students stay with families, learn global engineering practices, and tour German companies
 Work study in Germany– 1 semester paid internship
 Exchange with Karlsruhe University– work in a lab, research topics relating to major and take courses in the spring. See website for course selection.

University of Connecticut: www.engr.uconn.edu/EUROTECH
 German and Engineering– Dual Degree- B.S Engineering/ B.A. German
 Highlights- Students receive a salary during internships
 Students are eligible for scholarships while studying abroad

Penn State University– german.la.psu.edu/german/uggermengin.shtml
 German and Engineering
 Highlights– B.S. German Engineering
 Bachelor of Science in Applied German
 Study abroad and internship opportunities

Valparaiso University–www.valpo.edu/engineering/programs/viep/german/index.php
 International Engineering Program– German
 Highlights- Study abroad in Reutlingen, Germany and take engineering courses at the university

Lafayette College– engineering.lafayette.edu/majors/international-studies-engineering-2-2/
 International Studies and Engineering
 Study Abroad in Bremen, Germany

Other Program Opportunities

The Ohio State University– germanic.osu.edu
 German & International Business Major

University of Iowa– www.language.iastate.edu/lcp/germanengreq.html
 B.S. in Engineering with a Secondary Major option in German

Purdue University– india.fl.purdue.edu/German_FLL/Programs/index.html
 German courses for Science and Engineering, International Trade, and Business

Inside Story Headline



Caption describing picture or graphic.

Inside Story Headline

This story can fit 100-150 words.

The subject matter that appears in newsletters is virtually endless. You can include stories that focus on current technologies or innovations in your field.

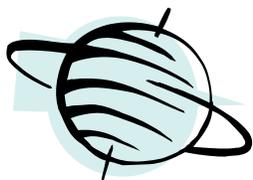
You may also want to note business or economic trends, or make predictions for your customers or clients.

If the newsletter is distributed internally, you might comment upon new procedures or improvements to the

business. Sales figures or earnings will show how your business is growing.

Some newsletters include a column that is updated every issue, for instance, an advice column, a book review, a letter from the president, or an editorial. You can also profile new employees or top customers or vendors.

“TO CATCH THE READER’S ATTENTION, PLACE AN INTERESTING SENTENCE OR QUOTE FROM THE STORY HERE.”



Caption describing picture or graphic.

This story can fit 75-125 words.

Selecting pictures or graphics is an important part of adding content to your newsletter.

Think about your article and ask yourself if the picture supports or enhances the message you’re trying to convey. Avoid selecting images that appear to be out of context.

Microsoft Publisher includes thousands of clip art images from which you can choose and import into your newsletter. There are also several tools you can use to draw shapes and sym-

bols.

Once you have chosen an image, place it close to the article. Be sure to place the caption of the image near the image.

At North County High School

Primary Business Address
Your Address Line 2
Your Address Line 3
Your Address Line 4
Phone: 555-555-5555
Fax: 555-555-5555
E-mail: someone@example.com



Your business tag line here.

WE'RE ON THE WEB!

EXAMPLE.COM

This would be a good place to insert a short paragraph about your organization. It might include the purpose of the organization, its mission, founding date, and a brief history. You could also include a brief list of the types of products, services, or programs your organization offers, the geographic area covered (for example, western U.S. or European markets), and a profile of the types of customers or members served.

It would also be useful to include a contact name for readers who want more information about the organization.

Back Page Story Headline

This story can fit 175-225 words.

If your newsletter is folded and mailed, this story will appear on the back. So, it's a good idea to make it



Caption describing picture or graphic.

easy to read at a glance.

A question and answer session is a good way to quickly capture the attention of readers. You can

either compile ques-

tions that you've received since the last edition or you can summarize some generic questions that are frequently asked about your organization.

A listing of names and titles of managers in your organization is a good way to give your newsletter a personal touch. If your organization is small, you may want to list the names of all employees.

If you have any prices of standard products or services, you can include a listing of those here. You may want to refer your readers to any other forms of communication that you've created for your organization.

You can also use this space to remind

readers to mark their calendars for a regular event, such as a breakfast meeting for vendors every third Tuesday of the month, or a biannual charity auction.

If space is available, this is a good place to insert a clip art image or some other graphic.