Introducing "8th Period" :: Middle School After School Camps

What are they? After school camps designed to explore potential Career and Technical Education (CTE) programs at Newberg High School including CAD, culinary arts, pre-engineering, agriculture, horticulture, and ecology. Middle school students often do not get to explore these areas before they are asked to select high school electives. These camps are designed to make students aware of NHS CTE programs and engage them with community partners for a relevant and formative experience.



Who are they for? All 6th-8th grade students from Chehalem Valley and Mountain View Middle Schools.

When are they? Students will meet from 3:15 to 5:15pm on Tuesdays and Thursdays for the dates listed for each camp. Each camp runs for six weeks. Students will also participate in a Showcase of their work in February (sessions 1-3) or June (sessions 4-6)

Where are they? Newberg High School, room H101. Transportation and a snack are even provided! **Why me?** Do you enjoy hands-on learning? Are you creative? Do you enjoy working in teams? These camps are *perfect* for you . . . and they are completely **FREE**!!!

How do I register? Go to the Newberg School District website, or visit http://goo.gl/a9jH5N

Session	Title	Dates	Teacher	Community Partner(s)
1	Restore Hess Creek (Fall Season)	9/16 - 10/23	Shirley Holden (MVMS)	City of Newberg, GYWC
2	Create Your Own Business	10/28 - 12/11	Mike Alpert (MVMS)	TBD
3	Product Design and 3D Printing	1/13 - 2/19	Bryan Long (MVMS)	A-Dec, Climax
4	Six Weeks of Code	3/3 - 4/16	Erin Mahony (NHS)	CodeMonkeys
5	Crowd-Fund Your Idea	4/21 - 5/28	Mike Alpert (MVMS)	TBD
6	Restore Hess Creek (Spring Season)	4/21 - 5/28	Shirley Holden (MVMS)	City of Newberg, GYWC

Session 1 :: Restore Hess Creek (Fall Season) :: A look at local ecology focusing on a stream ecosystem in need of restoration. We will investigate the current state of the local ecosystem and work on a plan to transform it into a healthy riparian environment. We will partner with the City of Newberg and the Greater Yamhill Watershed Council to restore an area of Hess Creek. Our work will include understanding what a healthy stream is and how it functions, ways that we can improve the health of the ecosystem, developing a plan to restore the area, carrying out the work to make this plan a reality, and comparing the restored stream area to it's original condition.

Session 2 :: Create Your Own Business :: Create a business plan and proposal that identifies and meets a local, unmet need. Work through the complete start-up cycle, including market analysis, financial forecasting, and "the pitch." Collaborate with a local business and understand the science behind producing and sourcing a product. Make a final presentation to seasoned business professionals and learn the fundamentals of entrepreneurship.

Session 3:: **Product Design and 3D Printing**:: From creative brainstorming to initial design prototypes to full-scale manufacturing, the industrial design cycle includes many phases. Students will partner with a community organization to engage in this design cycle. Students will use a CAD tool design a product to meet a need, create a prototype on a 3-D printer, then experience the full-scale manufacturing process.

Session 4 :: Six Weeks of Code :: For the after school session beginning in February we will be doing "Six Weeks of Code." This six week program consists of three parts: First, up to 24 students spend 2-3 weeks learning to code. Next, they will be assigned a problem/project that mimics something similar to our community partner. They will work together in teams to brainstorm and come up with a solution. Finally they will evaluate each other's products and choose which one to present to our community partner.

Session 5 :: **Crowd-Fund Your Idea** :: Ever had a brilliant idea that you just knew would catch on? Create a crowd-funding marketing campaign for a new product or service. Tell your story in a way that inspires others to participate and donate. Partner with vendors to create unique merchandise that will help increase funds and create a "buzz" around your idea. Launch a live online campaign and see how the online world responds!

Session 6 :: **Restore Hess Creek (Spring Season)** :: Our focus will return the the restored area of Hess Creek in order to evaluate the changes put into place in the first session. Our work will focus on understanding the characteristics of a healthy stream ecosystem, studying changes in the floodplain of the stream, monitoring the health of the stream and the surrounding riparian area, and any continuing work to help improve the health of the stream ecosystem.