

North Clackamas School District 12

SABIN-SHELLENBERG

PROFESSIONAL TECHNICAL CENTER

50 YEARS OF EXCELLENCE THROUGH APPLICATION



2023-2024 COURSE CATALOG

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Every effort is made to ensure the accuracy of the information in this catalog at the time of publication. However, information and course offerings may change due to unforeseen circumstances.

Take Charge of YOUR Future at Sabin-Schellenberg Professional Technical Center where students learn... "Excellence through Application"

Professionalism Matters at SSC



OUR VISION:

The Sabin-Schellenberg Professional Technical Center vision "Excellence through Application" is evident in all our programs. Students learn industry level skills and knowledge within a selected career area, then apply them using software, equipment and activities that mirror those in the world of work. Additionally, students in all programs practice and improve their professionalism skills such as productivity, teamwork, problem solving, and communication. Students may explore multiple career pathways by participating in a different program each semester or year, or students may choose to build skills and knowledge in one specific area of interest by taking a series of increasingly complex courses within one program of study.

OUR MISSION:

Educating passionate leaders through creative and relevant professional experiences

WE BELIEVE:

- All students can be successful
- Students need and want to be challenged
- Students need relevance to engage in their learning
- Sabin-Schellenberg helps students find themselves
- Students need a safe environment to learn
- Hands-on, performance-based learning fosters success for diverse learners
- Building today's and tomorrow's leaders is important work
- Sabin-Schellenberg can prepare each and every student to be career and college ready
- Career and Technical Education builds thriving communities

WE OFFER:

- Quality instruction in 17 career programs
- Meaningful and sequential focused programs of study
- An opportunity to earn college and high school credit at the same time in our programs
- Custom-designed career training that meets the needs and standards of business, industry and today's labor force
- Internships: available in some programs at advanced levels

College and Career-Ready with Oregon Pathways

Sabin-Schellenberg Professional Technical Center is learning that works. Sabin-Schellenberg Center offers career and technical education courses that prepare students for both college and career by enabling students to explore career interests, develop technical skills, grow academically and gain the real-world experience they need to prepare for high-skill, high-demand, high-wage careers. SSC programs offer opportunities to reinforce students' abilities to use critical creative thinking skills, solve problems, work in teams, oversee projects, be responsible for outcomes, and strengthen and advance their technical skills.

SSC courses listed in this Course Catalog are organized into six distinct Career Pathways which provide context for academic, technical, and career learning for students:

Agriculture, Food & Natural Resources

Arts, Information & Communications

Business & Management

Health Sciences

Human Resources

Industrial & Engineering Systems

At SSC students discover their interests and passions. SSC empowers students to choose the education pathway that can lead to success in high school, college, and their chosen career.

“Sabin-Schellenberg Professional Technical Center’s Career and Technical Education opportunities are available to all students, including federal protected classes and do not discriminate on any basis including but not limited to, an individual’s perceived or actual race, color, religion, sex, sexual orientation, gender identity, national or ethnic origin, marital status, age, mental or physical disability, pregnancy, familial or economic status. Lack of English language skills will not be a barrier to admission and participation in Career & Technical Education programs at Sabin-Schellenberg Center. For inquiries regarding discrimination or the Americans with Disabilities Act (ADA), contact Sabin-Schellenberg Title IX and Title II coordinator: Ajai Huja (503-353-5941 hujaa@nclack.k12.or.us) or Section 504 coordinator: Lindsay Kane (503-353-5949 kanel@nclack.k12.or.us) 14211 SE Johnson Rd., Milwaukie, OR, 97267.”

Course Prerequisites

Advancement into upper level courses is based on demonstration of proficiency in identified technical skills and application of industry safety and sanitation protocols. Prerequisites listed in this catalog using a course name (for example: "Prerequisites: Animal Science 1") require that the student must have demonstrated proficiency in the technical skills, drawn from Oregon Skill Sets, that have been identified for that course by industry advisors and SSC instructors.

Advanced College Credit

Did you know that you can earn college credit while in high school?

Check with your instructor regarding application for college credit from one of the regional community colleges. Information will be sent out in October to SSC students eligible for college credit.

SSC entered into agreements with:

- Clackamas Community College
- Lane Community College
- Linn-Benton Community College
- Mount Hood Community College
- Portland Community College

To apply for Advanced College Credit:

- Visit the Sabin-Schellenberg Center website for information and registration instructions: <https://sites.google.com/nclack.k12.or.us/college-credit/home>. Complete the application and register for the ACC course within the stated deadlines. (Autumn, winter or spring).

Internships

Internships are for 11th and 12th grade students who, are placed at a school or community work site based on the instructor's recommendation. The internships are for at least one grading period, but may vary based on the work site needs and the student. Students sign an agreement that lists expectations and provide their own transportation to and from work sites. Internship sites may require a criminal background check, drug screening and/or vaccinations/immunizations prior to placement.

Credit for Proficiency

Students can receive credits in core academic subjects, e.g. science or language arts when enrolled in SSC courses, demonstrating knowledge of an approved subject area. They will be required to submit a body of work documenting their learning experience and demonstrating their level of proficiency. Students will receive credit and AF grade for demonstrating their knowledge and skills and for reflecting on their learning. A final presentation may be required.

Courses with approved mastery credits are marked with a "CFP".

Student Leadership Organizations

Sabin-Schellenberg Center students may participate in organized leadership opportunities. **Membership fees may apply.**

ACE Mentor

ACE Mentor program gives high school students an exciting and informative way to learn about career possibilities in Architecture, Construction and Engineering. Students work in collaborative teams under the mentorship of experienced professionals. The program's mission is to enlighten and increase the awareness of high school students to career opportunities in architecture and engineering and related areas of the design and construction industry through mentoring; and to provide scholarship opportunities for students in an inclusive manner reflective of the diverse school population.

DECA

DECA is an international student leadership association for students interested in marketing, management, restaurant management and entrepreneurship. Participation in DECA builds self-confidence, problem-solving skills and professionalism. Students can explore careers in business, finance, entrepreneurship, hospitality and tourism, sports marketing, restaurant and quick serve restaurant management, food marketing and marketing sales and service. Students adopt the association's four core values of social intelligence, civic consciousness, leadership development and vocational understanding. DECA members participate in community service, conferences and competitions.

FFA

The National FFA Organization is dedicated to making a positive difference in the lives of students by developing their potential for premier leadership, personal growth and career success through agricultural education. The North Clackamas FFA and Sabin-Schellenberg FFA Chapters engage students in real world learning activities ranging from exhibiting livestock to competing in a variety of leadership Career Development Events. The student-run organization strives to develop the whole student by encouraging participation in hands-on classroom learning, community service activities and completion of a Supervised Agricultural Experience project. Emphasized activities include but are not limited to:

- Agri-Science Research Projects
- Agricultural Sales
- Forestry Management
- Job Interview Skills
- Public Speaking
- Agribusiness Management

Robotics Club

Students interested in science, technology and robotics are welcome to join our Robotics Team. Students work in teams to build and program a robot to perform specific tasks against a field of other competitors. Design components or mechanisms, project management, programming, teamwork, cooperation and strategic thinking skills are learned. Students may qualify for college scholarships.

Future Natural Resource Leaders

Future Natural Resource Leaders (FNRL) is a student-run leadership organization that is responsible for the Forestry program's intra curricular activities. Officers are elected and regular meetings are held using parliamentary procedures. Activities include forestry competitions, field trips and fund raisers.

Scrub Club

Scrub Club is a student-run leadership program for Health Sciences level 1 students. Every month students gather to explore a variety of careers in the medical field. Guest speaker health care professionals share their career experiences and provide hands-on activities for students from the Health Services program. Scrub Club emphasizes career opportunities, expectations, and professional qualities that are essential for success in the medical field.

SkillsUSA

SkillsUSA is a national nonprofit leadership organization serving middle, high school and college students who are preparing for careers in trade, technical, and skilled service occupations. This partnership of students, teachers and industry representatives work together to ensure America has a skilled work force. It helps each student excel.

SSC Programs that participate in SkillsUSA include:

- Automotive Service Technology
- Cosmetology
- Culinary Arts
- Electronics Technology
- Law Enforcement
- Manufacturing & Engineering

Agriculture

Pg #	Course #	Course Name	Grade	Frequency	Length	Credit
10	180011910	Animal Science 1	9-12	2 Per/Every other day	Year	2.0
10	181011910	Animal Science 2*	10-12	2 Per/Every other day	Year	2.0
10	183041910	Animal Science 3*	11-12	2 Per/Every other day	Year	2.0
11	180021910	Adv Ag Research*	12	2 Per/Every other day	Year	2.0
11	181481920	Ag Intern*	11-12	Varies	Semester	Varies

Architecture & Design

Pg #	Course #	Course Name	Grade	Frequency	Length	Credit
38	211021910	Architecture & Design 1	9-12	2 Per/Every other day	Year	2.0
38	211031910	Architecture & Design 2*	10-12	2 Per/Every other day	Year	2.0
38	211032910	Architecture & Design 3*	11-12	2 Per/Every other day	Year	2.0
38	211034910	Architecture & Design 4*	12	2 Per/Every other day	Year	2.0

Automotive Service Technology

Pg #	Course #	Course Name	Grade	Frequency	Length	Credit
39	201031910	Automotive Service Technology 1	9-12	1 Per/Every other day	Year	1.0
39	201041910	Automotive Service Technology 2*	10-12	2 Per/Every other day	Year	2.0
39	201061910	Automotive Service Technology 3*	11-12	2 Per/Every other day	Year	2.0
40	201032920	Auto Upkeep	10-12	1 Per/Every other day	Semester	0.5
39	201071910	Diesel Technology & Maintenance*	11-12	2 Per/Every other day	Year	2.0
40	201042910	ASE Student Certification*	12	2 Per/Every other day	Year	2.0

Broadcasting & Social Media

Pg #	Course #	Course Name	Grade	Frequency	Length	Credit
14	110514920	Radio Broadcasting	9-12	1 Per/Every other day	Semester	0.5
14	110515920	Sports Broadcasting	9-12	1 Per/Every other day	Semester	0.5
16	111013920	Journalism	9-12	1 Per/Every other day	Semester	0.5
16	111012910	Advanced Journalism*	10-12	1 Per/Every other day	Year	1.0
15	110511910	Broadcasting & Social Media 1	10-12	1 Per/Every day	Year	2.0
15	110512910	Broadcasting & Social Media 2*	11-12	1 Per/Every day	Year	2.0
15	110513910	Broadcasting & Social Media 3*	12	1 Per/Every day	Year	2.0

Building Construction

Pg #	Course #	Course Name	Grade	Frequency	Length	Credit
41	020725910	Geometry in Construction	9-12	2 Per/Every other day	Year	2.0
41	170041910	Building Construction 1	9-12	1 Per/Every other day	Year	1.0
41	170042910	Building Construction 2*	10-12	2 Per/Every other day	Year	2.0
42	170043910	Building Construction 3*	11-12	2 Per/Every other day	Year	2.0
42	170491410	Building Construction 4*	12	2 Per/Every other day	Year	2.0

Business & Management/Sports Marketing

Pg #	Course #	Course Name	Grade	Frequency	Length	Credit
21	121041910	Accounting 1	10-12	1 Per/Every other day	Year	1.0
21	121042910	Accounting 2*	11-12	1 Per/Every other day	Year	1.0
22	121641910	Business & Management 1	9-12	1 Per/Every other day	Year	1.0
22	121661910	Business & Management 2*	10-12	1 Per/Every day	Year	2.0
24	120521910	Sports & Entertainment Marketing 1	9-12	1 Per/Every other day	Year	1.0
24	120522910	Sports & Entertainment Marketing 2*	10-12	1 Per/Every other day	Year	1.0
22	121991920	Business & Mgmt Intern*	11-12	1 Per/Every other day	Semester	0.5
23	120523910	Adv Bus/Mgmt Projects*	11-12	1 Per/Every day	Year	2.0
23	120531910	Entrepreneurship: Business Incubator (EBI)*	11-12	1 Per/Every other day	Year	1.0

Cosmetology

Pg #	Course #	Course Name	Grade	Frequency	Length	Credit
31	191491920	Cosmetology Concepts	9-12	1 Per/Every other day	Semester	0.5
31	191041910	Cosmetology 1	10-12	2 Per/Every other day	Year	2.0
31	191491910	Cosmetology 2*	11-12	2 Per/Every other day	Year	2.0
31	191492910	Cosmetology 3*	12	2 Per/Every other day	Year	2.0

Culinary Arts

Pg #	Course #	Course Name	Grade	Frequency	Length	Credit
25	160531920	Intro: Culinary	9-10	1 Per/Every other day	Semester	0.5
25	160532920	Intro: Culinary JS	11-12	1 Per/Every other day	Semester	0.5
25	160011910	Culinary Arts 1*	10-12	2 Per/Every other day	Year	2.0
26	160571910	Culinary Arts 2*	11-12	2 Per/Every other day	Year	2.0
26	160521910	Culinary Arts 3*	12	2 Per/Every other day	Year	2.0
26	160522920	Culinary Intern*	11-12	Varies	Semester	Varies

Digital Design

Pg #	Course #	Course Name	Grade	Frequency	Length	Credit
17	102021920	2D Animation	9-12	1 Per/Every other day	Semester	0.5

*Prerequisite required for this course

Digital Design

17	111551910	Graphic Design 1	9-12	1 Per/Every other day	Year	1.0
17	111552910	Graphic Design 2*	10-12	2 Per/Every other day	Year	2.0
18	111553910	Graphic Design 3*	11-12	2 Per/Every other day	Year	2.0
18	111541920	Advanced Studio Intern*	11-12	Varies	Semester	Varies

Education

Pg #	Course #	Course Name	Grade	Frequency	Length	Credit
32	191531920	Survey of Children, Youth & Families	9-12	1 Per/Every other day	Semester	0.5
32	190511910	Working w/Children & Youth	10-12	1 Per/Every day	Year	2.0
32	190521910	Child & Family Services Practicum*	11-12	2 Per/Every other day	Year	2.0
33	191521910	Elementary Education Practicum*	11-12	2 Per/Every other day	Year	2.0
33	191512910	Middle & High School Practicum*	11-12	2 Per/Every other day	Year	2.0
34	190981910	Ed Intern: Child & Family Services*	12	2 Per/Every other day	Year	2.0
34	191981910	Ed Intern: Elementary Education*	12	2 Per/Every other day	Year	2.0
34	191982910	Ed Intern: Middle & High School*	12	2 Per/Every other day	Year	2.0

Electronics Technology

Pg #	Course #	Course Name	Grade	Frequency	Length	Credit
42	171011920	Intro: Electronics Technology	9-12	1 Per/Every other day	Semester	0.5
42	171012910	Exploring Electronics	9-12	1 Per/Every other day	Year	1.0
43	171061910	Electronics Technology 1*	10-12	1 Per/Every day	Year	2.0
43	171491910	Electronics Technology 2*	11-12	1 Per/Every day	Year	2.0
43	171492910	Electronics Technology 3*	12	1 Per/Every day	Year	2.0

Fire Science

Pg #	Course #	Course Name	Grade	Frequency	Length	Credit
35	151521910	Fire Protection 1	11-12	2 Per/Every other day	Year	2.0
35	151522910	Fire Protection 2*	12	2 Per/Every other day	Year	2.0

Forestry & Natural Resources

Pg #	Course #	Course Name	Grade	Frequency	Length	Credit
12	185021910	Forestry 1	10-12	2 Per/Every other day	Year	2.0
12	185041910	Forestry 2*	11-12	2 Per/Every other day	Year	2.0
12	185042910	Forestry 3*	12	2 Per/Every other day	Year	2.0

Health Services

Pg #	Course #	Course Name	Grade	Frequency	Length	Credit
28	140012910	Survey of Health Sciences	9-10	1 Per/Every other day	Year	1.0
28	140011920	Health Care Trends	10-12	1 Per/Every other day	Semester	0.5
28	140021910	Health Sciences 1	11-12	1 Per/Every day	Year	2.0
29	149992910	Health Sciences 2: Seminar*	12	2 Per/Every other day	Year	2.0
29	149991910	Health Sciences 2: Internship*	12	2 Per/Every day	Year	4.0

Law Enforcement

Pg #	Course #	Course Name	Grade	Frequency	Length	Credit
36	150011910	Law Enforcement 1	10-12	1 Per/Every other day	Year	1.0
36	152021910	Law Enforcement 2*	11-12	2 Per/Every other day	Year	2.0
36	150531910	Law Enforcement 3*	12	2 Per/Every other day	Year	2.0
36	150532920	CSI	11-12	1Per/Every other day	Semester	0.5



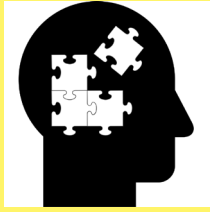



Manufacturing & Engineering

Pg #	Course #	Course Name	Grade	Frequency	Length	Credit
44	132031920	Survey of Manufacturing & Engineering	9-12	1 Per/Every other day	Semester	0.5
44	210091910	Engineering Robotics 1	9-12	1 Per/Every other day	Year	1.0
44	210092910	Engineering Robotics 2*	10-12	1 Per/Every other day	Year	1.0
44	132032910	Manufacturing & Engineering 1	9-12	2 Per/Every other day	Year	2.0
47	132022910	Manufacturing & Engineering 2 : Fab/Weld*	10-12	2 Per/Every other day	Year	2.0
47	132073910	Manufacturing & Engineering 3 : Fab/Weld*	11-12	2 Per/Every other day	Year	2.0
48	132074910	Manufacturing & Engineering 4: Fab/Weld*	12	2 Per/Every other day	Year	2.0
48	132081910	Manufacturing & Engineering: Welder Qualification*	11-12	2 Per/Every other day	Year	2.0
45	211062910	Manufacturing & Engineering 2: Machining*	10-12	2 Per/Every other day	Year	2.0
45	132043910	Manufacturing & Engineering 3: Machining*	11-12	2 Per/Every other day	Year	2.0
46	132044910	Manufacturing & Engineering 4: Machining*	12	2 Per/Every other day	Year	2.0
48	132481920	Manufacturing & Engineering Intern*	11-12	Varies	Semester	Varies

Programming & Coding

Pg #	Course #	Course Name	Grade	Frequency	Length	Credit
19	101601920	Intro to Programming & Coding	9-11	1 Per/Every other day	Semester	0.5
19	101561910	Programming & Coding 1	9-12	1 Per/Every other day	Year	1.0
19	101562910	Programming & Coding 2*	10-12	1 Per/Every day	Year	2.0

Sabin-Schellenberg Programs

Agriculture/Food & Natural Resources 	<ul style="list-style-type: none"> • Agriculture • Forestry
Arts, Information & Communications 	<ul style="list-style-type: none"> • Broadcasting & Social Media • Digital Design • Programming & Coding
Business & Management 	<ul style="list-style-type: none"> • Business & Management • Sports & Entertainment Marketing • Culinary Arts
Health Sciences 	<ul style="list-style-type: none"> • Health Services
Human Resources 	<ul style="list-style-type: none"> • Cosmetology • Education • Fire Science • Law Enforcement
Industrial & Engineering Systems 	<ul style="list-style-type: none"> • Architecture & Design • Automotive Service Technology • Building Construction • Electronics Technology • Manufacturing & Engineering



AGRICULTURE, FOOD & NATURAL RESOURCES

If you enjoy...

- Working outdoors with plants, animals, or nature
- Helping others understand and enjoy their natural surroundings
- Learning about and managing our forests, parks, and wildlife
- Growing plants or animals to supply people with food
- Observing, investigating, analyzing, or solving problems related to plants, animals or nature

Agriculture, Food & Natural Resources

HIGH WAGE HIGH DEMAND CAREERS

Agriculture Educator
Animal Nutritionist
Crop Production Agronomist
Farm & Ranch Manager
Zoologist
Veterinarian
Wildlife Biologist

Tree Trimmer & Pruner
Arborist
Forester
Logging Equipment Operator
Environmental Scientist
Conservation Scientist





AGRICULTURE

Animal Science 1

180011910

Grades:	9, 10, 11, 12
Frequency:	2 periods -- every other day
Course Length:	Year
Credits:	2
Fee:	\$15

Introduces the management of farm animals including recognizing animal behaviors, feeding, recognizing signs of health issues and identifying breeds. Plant science as it relates to food and landscaping is studied. Agriculture classes are taught on a 10 acre school farm that includes barns, livestock, greenhouses, an orchard and pastures. Animals and facilities are used extensively in instructional activities. Participation in the FFA organization provides students with leadership and career skills such as communication, teamwork and positive attitudes and introduces Supervised Agricultural Experience projects. A safety contract and outdoor clothing are required.

Animal Science 2

181011910

Grades:	10, 11, 12
Frequency:	2 periods -- every other day
Course Length:	Year
Credits:	2
Fee:	\$15
Prerequisite:	Animal Science 1

Focuses on animal care and veterinary practice skills such as restraining animals, giving injections, and feeding animals. Biological systems, comparative anatomy, laboratory procedures, soil and plant sciences are also learned. Record keeping, sales and agribusiness management skills are included in the curriculum. Participation in FFA Career Development Events is encouraged. Supervised Agriculture Experience projects reinforce career skills. A safety contract and outdoor clothing are required.

Animal Science 3

183041910

Grades:	11, 12
Frequency:	2 periods -- every other day
Course Length:	Year
Credits:	2
Fee:	\$15
Prerequisite:	Animal Science 2
College Credit:	Yes
CFP:	Science

Develops a deeper understanding of food, animal and plant production cycles. Students study and conduct research in animal food and nutrition, genetics and reproduction, biotechnology, and animal health. Students present a portfolio of Technical Skills to business and industry representatives. Safety contract and outdoor clothing are required. Credit for proficiency requires completion of Animal Science 3 and Adv. Ag Research.



Animal Science has given great academic and real-life growth opportunities, and it has made me feel more prepared for a career surrounding agriculture and animals.

-- Shayla CHS, 11 --



AGRICULTURE



Ag Intern

181481920

Grades:	11, 12
Frequency:	Varies
Course Length:	Semester
Credits:	Varies
Prerequisite:	Animal Science 1 and instructor approval

Students apply teamwork, communication, problem solving, time management, employment foundations, and career development. Students may apply for internship opportunities at the school farm or off site. Requires instructor recommendation, interview and approval. Requires instructor recommendation, interview and approval.

“

The best part about this class is that the diverse curriculum creates future scientists, agriculturists, teachers, entrepreneurs, business leaders, and premier professionals in many career fields. Personally, my participation in this class and in the FFA has made me a better leader and taught me many career skills that I will use to become a veterinarian.

-- Isabelle CHS 12 --

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Advanced Agricultural Research 180021910

Grades:	12
Frequency:	2 periods -- every other day
Course Length:	Year
Credits:	2
Fee:	\$15
Prerequisite:	Animal Science 3 or instructor approval
College Credit:	Yes
CFP:	Science

Students learn business management skills and computer applications used in the agriculture industry: decision making, goal setting, budgeting, financial analysis, sales, marketing, and research. Safety contract and outdoor clothing are required. Credit for proficiency requires completion of Animal Science 3 and Adv. Ag Research.



FORESTRY & NATURAL RESOURCES

Forestry 1

185021910

Grades:	10, 11, 12
Frequency:	2 periods -- every other day
Course Length:	Year
Credits:	2
Fee:	\$15
College Credit:	Yes

Introduces a wide range of natural resources careers. Course instruction includes how to climb trees, operate forestry related tools and equipment, including chainsaws, identify tree species, use navigation tools and read maps. Students discover the importance of balancing economic, social and environmental needs with finite natural resources. Students may participate in log rolling, axe throwing, crosscut saw, and navigation competitions. Leadership opportunities through the Future Natural Resource Leaders (FNRL) and the FFA include debate, community service, and public speaking. Coursework takes place in a classroom, outdoors, and off-site. Outdoor clothing is required.



Forestry 2

185041910

Grades:	11, 12
Frequency:	2 periods -- every other day
Course Length:	Year
Credits:	2
Fee:	\$15
Prerequisite:	Forestry 1

Continues to develop skills learned in Forestry 1, with added emphasis on theory and scientific principles. The majority of class instruction is outdoors and hands-on. Students learn from and work with natural resources and forestry industry professionals, both on and off campus. Students participate in the Sabin-Schellenberg Future Natural Resource Leaders and FFA with an emphasis on leadership and career skills. Outdoor clothing is required.

Forestry 3

185042910

Grades:	12
Frequency:	2 periods -- every other day
Course Length:	Year
Credits:	2
Fee:	\$15
Prerequisite:	Forestry 2
Internship:	Yes

Advanced Forestry 3 students demonstrate learning in a supervised simulated work environment, applying previously learned techniques. Working with industry professionals, students engage in self-directed projects. Students participate as leaders in the Sabin-Schellenberg Future Natural Resource Leadership organization and FFA, focused on premier leadership, personal growth and career success. Outdoor clothing is required.

Forestry showed me a lot about myself and taught me many valuable career skills in my three years with the program, all while I made some of the best memories of my life.

--Austin MHS 12--

ARTS, INFORMATION & COMMUNICATIONS

Do you like...

- Expressing ideas and feelings visually, verbally, musically, or physically
- Speaking or performing in front of others
- Creating through use of multiple platforms
- Using your imagination or creativity for work
- Interested in music, theater, creative design, photography, writing, and/or video production

Arts,
Information &
Communications

HIGH WAGE
HIGH DEMAND
CAREERS

Producer & Director
Public Relations Specialist
Technical Writer
Multimedia Artist

Art Director
Animator
Graphic Designer
Web Developer

Computer Programmer
Software Developer
Game Developer
App Developer





BROADCASTING & SOCIAL MEDIA

Radio Broadcasting

110514920

Grades:	9, 10, 11, 12
Frequency:	1 period -- every other day
Course Length:	Semester
Credits:	0.5

Students produce their own radio show and broadcast over the internet. As producers, they plan their own format, choose their own music, decide their listener base, and plan how they will make a profit running their own radio show. Students use Garageband and iTunes to create their own commercials for radio while learning how to promote their station. Students will create personal podcasts. Team projects include producing an old time radio show where character voices are created. Successful completion of this course will prepare students for Broadcasting & Social Media 1.

Sports Broadcasting

110515920

Grades:	9, 10, 11, 12
Frequency:	1 period -- every other day
Course Length:	Semester
Credits:	0.5

Working in teams, students learn play-by-play announcing using NFL Madden and NBA2K on a Playstation. Students cover home sporting events with digital cameras and learn to edit and produce a sportscast. Students will create their own sports show broadcast live out of the KNCB television studio with sports packages created by fellow sportscasters. Successful completion of this course will prepare students for Broadcasting & Social Media 1.

“

I realize how much I have grown as a leader. I had to step up and take charge on a couple projects and take responsibility for issues and any mishaps that may have happened. Now with the many projects I have been a part of, leadership has been something I have continued to grow over the years and I plan on being a leader throughout the rest of my life.

--~~Jack~~ CHS 12 --

”





BROADCASTING & SOCIAL MEDIA

Broadcasting & Social Media 1 110511910

Grades:	10, 11, 12
Frequency:	1 period -- every day
Course Length:	Year
Credits:	2
Prerequisite:	Theater, Radio or Sports Broadcasting is recommended

This entry-level course offers students the opportunity to learn the basics of virtual reality while engaging with Oculus 2 headsets. Social media engages students into better understanding the world around them. The course gives students training to produce music videos, produce live soap opera pilots in the television station, and gain experience as radio news reporters for the broadcasting station. Student learn 3-D animation techniques.



Broadcasting & Social Media 2 110512910

Grades:	11, 12
Frequency:	1 period -- every day
Course Length:	Year
Credits:	2
Prerequisite:	Broadcasting & Social Media 1
College Credit:	Yes

Students become independent producers working with DSLR cameras, 360 cameras and audio equipment to produce films, tackle major documentaries and television shows while learning about social media and the impact on society. Virtual Reality becomes more of a focus with use of state-of-the-art equipment preparing students for careers in communications, the media and broadcasting. Projects air on the district cable television channel, YouTube channel and are submitted into national competitions for scholarships and awards.

Broadcasting & Social Media 3 110513910

Grades:	12
Frequency:	1 period -- every day
Course Length:	Year
Credits:	2
Prerequisite:	Broadcasting & Social Media 2
College Credit:	Yes
Internship:	Yes

Students become producers as Levels 2 and 3 work together in making a feature-length film, tackle video projects for various companies, non-profits and others. Using our green screen, students produce their own video projects, preparing them for college and careers in media. Internships are available during second semester.

“

**I love being a cameraman.
To be able to shape an
idea. To have the power to
shape an image - it fills me
with power!**

-- Mauricio CHS 12 --

”



BROADCASTING & SOCIAL MEDIA

Journalism

111013920

Grades:	9, 10, 11, 12
Frequency:	1 period -- every other day
Course Length:	Semester
Credits:	0.5

Students are active journalists in this class, uncovering and reporting on stories that have meaning to them. This class is for those who love writing to learn how to communicate through interviews with newsmakers. Basic journalism skills enable students to understand how important an independent press truly is for a democracy. By working in teams and then as individuals, journalists will gain new skills in writing, asking questions, setting up interviews, and how that will translate into providing new information via our on-line news source, *The Compass*. Those interested in photojournalism, sports, or video news reports will also have opportunities to learn new techniques. Class may be repeated for credit.



“

I was really interested in journalism and writing. I took AP English and wanted to tell my story.

-- Alexandria A. CHS 12--

”

Advanced Journalism

111012910

Grades:	10, 11, 12
Frequency:	1 period -- every other day
Course Length:	Year
Credits:	1
Prerequisite:	Journalism or instructor approval
College Credit:	Yes

Students take on the leadership positions of the district's online newspaper, *The Compass*. Students in this class will become the editors of areas of the newspaper and will become members of the editorial board. Each student will learn more about student rights and responsibilities, the First Amendment, the Student Press Law Center, and ethics in journalism. Students will work independently and should expect to work outside of class while meeting deadlines. Class may be repeated for credit.



DIGITAL DESIGN

2D Animation

102021920

Grades:	9, 10, 11, 12
Frequency:	1 period -- every other day
Course Length:	Semester
Credits:	0.5

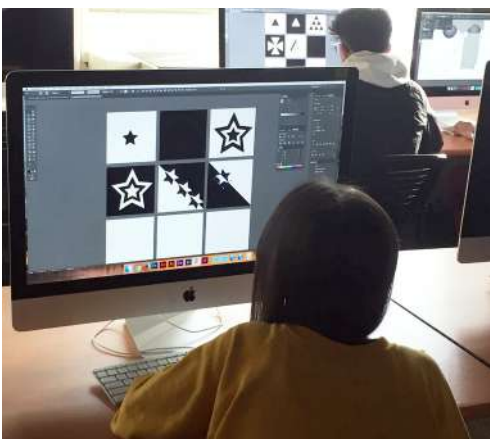
2D Animation is a course for storytellers and artists of all levels. Through digital art and design we explore the same animation techniques used by professional animators. Make a character walk, a ball bounce and more using Adobe Animate. Students will learn how to apply tweens, use panning effects, create scene transitions, and rig a character. For their final project, students develop storyboards, backgrounds, and characters as they build their own animated short film. 2D Animation students learn the tools they need to bring images and stories to life, and expand their understanding of design, digital illustration, and visual communication.

Graphic Design 1

111551910

Grades:	9, 10, 11, 12
Frequency:	1 period -- every other day
Course Length:	Year
Credits:	1
Prerequisite:	Art is recommended
College Credit:	Yes

Create visual solutions to communication problems. Students learn and use Adobe Illustrator, InDesign and Photoshop to create graphic layouts, posters, logos, signage, and a variety of other projects. Process is emphasized in this course through the exploration of a variety of design challenges replicating a design based work environment.



Graphic Design 2

111552910

Grades:	10, 11, 12
Frequency:	2 periods -- every other day
Course Length:	Year
Credits:	2
Prerequisite:	Graphic Design 1
College Credit:	Yes

Students continue to explore the field of digital & graphic design by working on a combination of independent and team based projects. They will develop skills in different types of design applications using vector and pixel based formats to develop various products such as stickers, textiles, 3-D printing and web applications. Students will work with real clients and have the opportunity to interact with and receive feedback from practicing design professionals.

“After participating in this program I love working with all of the Adobe programs (Photoshop, Illustrator, InDesign, and Lightroom). With the guidance of this program I have decided that this is what I want to do for my career. My education in the graphic design program helped solidify my passion for the digital arts while also preparing me with the skills to work well with others, problem solve, and meet deadlines.

-- Malia CHS 12--



DIGITAL DESIGN

Graphic Design 3

111553910

Grades:	11, 12
Frequency:	2 periods -- every other day
Course Length:	Year
Credits:	2
Prerequisite:	Graphic Design 2

Students continue to expand knowledge and skills developed in prior Digital Design classes while producing a web-based digital portfolio of quality projects and prototypes. They will take a leadership role in the Digital Design program by managing design and development teams working on real projects for clients. This year-long course will culminate with a self-determined design project that incorporates Illustrator, Photoshop and InDesign in their digital portfolio.



“

I always wanted to create artwork digitally but had no idea where to start. Adobe Illustrator and Photoshop is hands down the best software to learn. You'll meet amazing clients that will use your artwork outside of school. My advice is to always ask questions of your client so that you can gain a better vision of what your artwork will be.

-- Ivan CHS 12 --

”

Advanced Studio Intern

111541920

Grades:	11, 12
Frequency:	Varies
Course Length:	Semester
Credits:	Varies
Prerequisite:	Graphic Design 2 or 3 and instructor approval

Advanced students may apply for an internship position in the Graphic Design Advanced Studio. Teamwork, communication, problem-solving and productivity are applied in building employment and career foundations. Interns are expected to interact with clients and complete projects on time as part of a student-based enterprise that provides design services within the school, the district and surrounding community. Intern design work will become part of an online portfolio for future use in career and college applications. *Requires instructor recommendation and approval.*



PROGRAMMING & CODING

Intro to Programming & Coding 101601920

Grades:	9, 10, 11
Frequency:	1 period -- every other day
Course Length:	Semester
Credits:	0.5

Start with block-based programming through Code.org, MIT Scratch and MIT App Inventor to create apps, animation and games. Learn how to make computers work together, how to use the design process, logic and debugging and how these skills relate to careers in video game, app and web development and information technology.

Programming & Coding 1 101561910

Grades:	9, 10, 11, 12
Frequency:	1 period -- every other day
Course Length:	Year
Credits:	1

Students in Programming & Coding 1 learn the computer programming language Python through CodeHS and apply it to problem solving with computers. Start with learning commands that translate into code, then move on to writing code. Explore careers that use programming or coding. Having background knowledge in block coding, commands and terminology is helpful, but not required.

Programming & Coding 2 101562910

Grades:	10, 11, 12
Frequency:	1 period -- every day
Course Length:	Year
Credits:	2
Prerequisite:	Programming & Coding 1
College Credit:	Yes

Programming and Coding 2 focuses on further developing computational thinking skills through the medium of Android™ App Development for mobile platforms. The course utilizes industry-standard tools such as Android Studio, Java™ programming language, XML, and device emulators. Students collaborate to create original solutions to problems of their own choosing by designing and implementing user interfaces and Web-based databases. This course aligns with the AP CS A course; students will be prepared to take the AP Computer Science A Exam. This curriculum prepares students for many cutting-edge technology based careers, including video game development, app development, web development, and information technology. Transferrable skills developed in this course include the use of the design process, logic, debugging, and client-based communication. Related content areas include electrical engineering, digital animation, and computer aided design.



“Whenever I do coding assignments, they don’t seem like work. You don’t even realize you’re learning until you see how far you’ve come.”

-- Josh MHS 12 --

BUSINESS & MANAGEMENT

If you enjoy...

- Planning and running the activities of an organization
- Working in structured environments with clear guidelines or rules
- Doing detail work with numbers or words in an organized and efficient manner
- Persuading or convincing others of your point of view
- Leading others to accomplish goals of the organization
- Marketing products or ideas to others
- Planning meals and finding interesting ways to prepare or cook food

Business & Management

HIGH WAGE HIGH DEMAND CAREERS

Accountant
Advertising Agent
Buyer
Entrepreneur
Market Research Analyst
Marketing & Sales Manager
Publicist
Sales Representative

Food Service Manager
Purchasing Manager
Food Science Technician
Chef & Head Cook
Meeting, Convention, Event Planner





BUSINESS & MANAGEMENT

Accounting 1

121041910

Grades:	10, 11, 12
Frequency:	1 period -- every other day
Course Length:	Year
Credits:	1
College Credit:	Yes

An introduction to accounting, the language of business. Students learn how to record daily business transactions and how to prepare and analyze financial statements to determine if a business has a net income or a net loss. Students also learn about the stock market, how to use credit wisely and discover how to make sound personal financial decisions. All class work is completed online using accounting software. Recommended for students who plan to major in Business.

Accounting 2

121042910

Grades:	11, 12
Frequency:	1 period -- every other day
Course Length:	Year
Credits:	1
Prerequisite:	Accounting 1
College Credit:	Yes

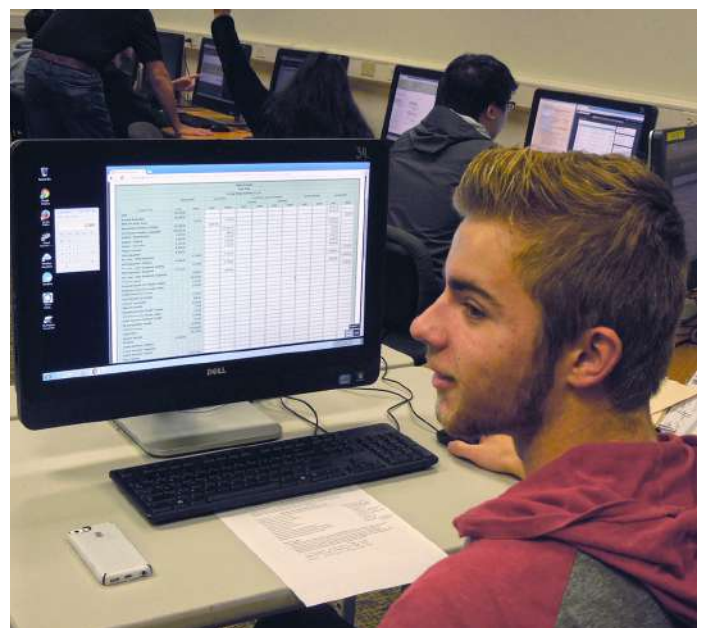
Focuses on corporate accounting for a departmentalized business. Students expand their knowledge of accounting concepts and apply them to various situations including inventory, depreciation and recording bad debts. Students learn about stocks and bonds and how to use cost accounting to determine the cost of developing a new product. All class work is completed online using accounting software.

“

I took Accounting 1 & 2 because I have a passion for math. Thanks to Mr. Nott, the best teacher by far, he helped me land my first job at an accounting firm. He's helped me so much in planning for my future in accounting and this class is definitely worth it for both practical skills and future careers.

-- Jennifer CHS 12 --

”





BUSINESS & MANAGEMENT

Business & Management 1

121641910

Grades:	9, 10, 11, 12
Frequency:	1 period -- every other day
Course Length:	Year
Credits:	1
College Credit:	Yes

Introduces the career area of business and Bizmart management. Students apply business skills as employees in the SSC Student Store. All aspects of retail management are explored and applied: retail operations, retail marketing, customer service, cash handling/cashiering and business communication. Students begin to understand professional standards and how projects are managed, products developed, quality assured, and business risk handled. Proficiency in professional standards is required to continue to Level 2. Students may join DECA, a professional association for students interested in business and marketing. Students must have a valid Oregon Food Handler's Card.

“

I love the business program because it has taken me to so many new places, allowed me to meet so many new people, and grown my confidence, leadership, and professionalism skills.

-- Jennifer MHS 11 --

”



Business & Management 2

121661910

Grades:	10, 11, 12
Frequency:	1 period -- every day
Course Length:	Year
Credits:	2
Prerequisite:	Business & Management 1, Proficiency in professional standards
College Credit:	Yes

Students manage a department, create strategic plans, conduct marketing research, develop promotions, order and maintain inventory and complete financial analysis. Business ownership is explored through management of the SSC Student Store, writing business plans and DECA events. Students develop their own management style and apply skills in retail and entrepreneur environment. Teamwork, communication, problem solving and productivity are professional standards applied in a management role. Participation in DECA, a professional organization for students interested in business and marketing, provides students with leadership opportunities and career skills. Students must have a valid Oregon Food Handler's Card.

Business & Management Intern

121991920

Grades:	11, 12
Frequency:	1 period -- every other day
Course Length:	Semester
Credits:	0.5
Prerequisite:	Business & Management 2 and instructor approval
College Credit:	Yes
Internship:	Yes

Advanced students may apply for internship opportunities in student run businesses on campus. Teamwork, communication, problem solving, productivity and professional standards are applied in a supervisory role in a student run business. Students apply human resources management skills including training, supervising/monitoring and evaluating Level 1 students with the support of an experienced industry professional technical assistant. Participation in DECA, a professional association for students interested in business and marketing, provides students with leadership opportunities and career skills. Students are responsible for maintaining a valid Oregon Food Handler's card. *Requires instructor recommendation, interview and approval*



BUSINESS & MANAGEMENT

“

Advanced is so student-led. There isn't a specific curriculum that you're going off of, it's like college and I have to figure it out myself. I'm working on a school based enterprise project about the operations, distribution and marketing sides of the student store.

-- Abby G. CHS 12--

”

Advanced Business/ Management Projects

120523910

Grades:	11, 12
Frequency:	1 period -- every day
Course Length:	Year
Credits:	2
Prerequisite:	Business & Management 2 and instructor approval
College Credit:	Yes
CFP:	Language Arts

This course is designed for DECA officers and active DECA members to expand their knowledge and understanding of business and management through individualized curriculum. Students work individually and on teams applying standard business practices, policies and procedures, writing professional business reports, and developing business presentations using advanced DECA project guidelines. Students often collaborate with local businesses on their student projects. Students will demonstrate professional standards through DECA activities and competitions including Virtual Business Challenge, and School Based Enterprise competition as well as State and International Career-Development Conferences. *Requires instructor recommendation, interview and approval.*

Entrepreneurship: Business Incubator (EBI)

120531910

Grades:	11, 12
Frequency:	1 period -- every other day
Course Length:	Year
Credits:	1
Prerequisite:	Upper level SSC course experience and instructor approval

This course is open to juniors and seniors who are in any upper level class within SSC programs. This class is for students who are self-starters and have a business idea they would like to develop. Students will learn how to develop a business plan, conduct market research and are provided the support necessary to nurture the development of an idea into a business. Business incubation is a unique and flexible way for students to work cooperatively in the business development process. Includes coaching from the instructor and industry mentors, giving and receiving feedback from class participants and visiting professionals in the field. *Requires SSC instructor recommendation, application and approval.*





SPORTS & ENTERTAINMENT MARKETING

Sports & Entertainment Marketing 1

120521910

Grades:	9, 10, 11, 12
Frequency:	1 period -- every other day
Course Length:	Year
Credits:	1

Introduces basic marketing concepts using sports and entertainment examples. This entry level marketing course explores how companies use sports and/or entertainment to market their products and services, and how entertainment companies, teams, leagues, and events market themselves. Main topics include: promotions, advertising, sponsorship, branding and product licensing, verbal and visual communications in sports and entertainment careers such as Marketing Coordinator, Sports Agent, and Sporting Goods Merchandiser. Students acquire business presentation skills that assist with college coursework.

Sports & Entertainment Marketing 2

120522910

Grades:	10, 11, 12
Frequency:	1 period -- every other day
Course Length:	Year
Credits:	1
Prerequisite:	Sports & Entertainment Marketing 1
College Credit:	Yes

Focuses on applying marketing concepts learned in Sports & Entertainment Marketing 1. This course allows students to experience what it would be like to work in a variety of sports and entertainment related jobs such as Athletic Directors, Event Promoter, Facilities Coordinator, Advertising and Sales, or Agent. Main topics include: sports management principles, ticket sales and promotion, sponsorship and endorsement, game/event operations, and marketing plans. Students will also participate in a Virtual Business simulation of owning and operating a stadium. Presentation skills are refined by producing business reports requiring research, writing, and formatting.

“

Doing the simulations is fun. You learn about what you need to do to run a successful sports franchise, like knowing about concessions, sponsorships, parking, all the stuff that make fans happy, and you have to make a profit.

--Mason B. CHS 10--

”





CULINARY ARTS

Intro to Culinary Arts

160531920

Grades:	9, 10
Frequency:	1 period -- every other day
Course Length:	Semester
Credits:	0.5
Fee:	\$25 (\$15 if student has Oregon Food Handler's Card)

Introduces the basic cooking skills used in food industry careers as well as everyday life. Students will obtain an Oregon Food Handler's Card in this course. The Oregon Food Handler's Card is required to take additional Culinary Arts courses. Students learn basic baking skills, culinary vocabulary, recipe conversions, restaurant concepts and menu planning. Other topics taught in this course include: Food safety and sanitation, proper use of commercial kitchen equipment, knife skills and knife safety, and basic nutritional food consumption concepts.

Intro to Culinary Arts for Juniors/Seniors

160532920

This Intro Culinary course (described above) is for Juniors and Seniors.



Culinary Arts 1

160011910

Grades:	10, 11, 12
Frequency:	2 periods -- every other day
Course Length:	Year
Credits:	2
Fee:	\$30
Prerequisite:	Intro to Culinary Arts, Oregon Food Handler's Card
College Credit:	Yes

Students will begin to build a foundation of culinary skills and knowledge by focusing on eight specific culinary units including cooking methods, sauces and plate composition, advanced baking and patisserie, garde manger, hotel and restaurant management, dining room service, nutrition, international cuisine, and catering. Within these units students will practice fundamental skills such as safety and sanitation, knife skills, weights and measures. Students learn high level skills such as costing, laminate doughs, meat fabrication and processing. Students explore many different career opportunities and develop employability skills by practising professionalism and interacting with industry professionals. This class is articulated with Lane Community College allowing students to earn advanced college credits as well as Career Related Learning Experience required for graduation.

I love the leadership possibilities, I am passionate about baking and I enjoy competition, and participating in SkillsUSA helped me improve my communication, teamwork and leadership skills.... to be put in an environment where you have to compete as well as learn and meet new people helps you develop a better lifestyle in the long run.

-- MaKenna, MHS 12 --



CULINARY ARTS

Culinary Arts 2

160571910

Grades:	11, 12
Frequency:	2 periods -- every other day
Course Length:	Year
Credits:	2
Fee:	\$30
Prerequisite:	Culinary Arts 1, Oregon Food Handler's Card
Internship:	Yes

Students build on the fundamentals of food production, meat fabrication, menu development, professionalism, time management and safety and sanitation in a full service deli/diner and catering company open daily for breakfast and lunch. Students will rotate through the six stations in Verte Deli learning customer service and point of sale systems; desserts and pastries, food preparation, produce daily lunch specials, and work multiple stations cooking hot food from scratch to-order. Students will also learn high volume food production and presentation as they cater events in the school district and around the community. Students will be exposed to guest speakers from industry and postsecondary education and field trips as they explore careers in the food and hospitality industry. Students are required to maintain a valid Oregon Food Handler's Card.

Culinary Arts 3

160521910

Grades:	12
Frequency:	2 periods -- every other day
Course Length:	Year
Credits:	2
Fee:	\$30
Prerequisite:	Culinary Arts 2, Oregon Food Handler's Card
Internship:	Yes

In a management role, students are responsible for the training and supervision of Level 2 students as they progress through the various stations in the daily operation of Verte Deli. Level 3 students assist with special projects such as large scale catering events and the daily flow of kitchen operation as well as the development and completion of a senior project focused on community service and/or improving the educational experience of future students taking the class. Students are required to maintain a valid Oregon Food Handler's Card.

Culinary Intern

160522920

Grades:	11, 12
Frequency:	Varies
Course Length:	Semester
Credits:	Varies
Prerequisite:	Culinary Arts 1, Oregon Food Handler's Card and instructor approval
College Credit:	Yes
Internship:	Yes

Advanced students may apply for internship positions working in the on-campus Culinary Arts food service facilities. Teamwork, communication, problem-solving, and productivity are applied in building employment and career foundations. Students are required to maintain a valid Oregon Food Handler's Card.



“My parents are very proud that I took culinary and can show them how to cook different recipes and can cook at home for them.”

--Delores MHS 12 --

Health Sciences

HIGH WAGE HIGH DEMAND CAREERS

Dentist
Dental Hygienist
Pharmacist
Physician & Surgeon
Physician's Assistant
Registered Nurse
Nurse Practitioner
Veterinarian



HEALTH SCIENCES

If you are interested in...

- Reading and learning about medical problems
- Investigating or analyzing scientific questions
- Learning how the body works
- Preventing or correcting health related issues
- Using science to solve medical problems
- Teaching and working with people to take care of their health



HEALTH SERVICES

Survey of Health Sciences

140012910

Grades:	9, 10
Frequency:	1 period -- every other day
Course Length:	Year
Credits:	1
Fee:	\$20

Focuses on helping students decide if they want to pursue a career in the medical field. Units include history of healthcare, general overview of human body systems, introduction to vital signs, medical terminology, safety issues, medical asepsis, proper use of medical equipment and aging. Professionalism is emphasized. Students may not enroll in Survey of Health Sciences and Health Care Trends concurrently. Recommended prerequisite to Health Sciences 1.

Health Care Trends

140011920

Grades:	10, 11, 12
Frequency:	1 period -- every other day
Course Length:	Semester
Credits:	0.5
Fee:	\$10
College Credit:	Yes

Introduces students to the different aspects of health care careers and focuses on the medical field, ethics and professionalism, safety issues, Health Insurance Portability and Accountability Act (HIPAA), and communications. Guest speakers from the profession provide information on the latest trends in the field. Students may not enroll in Health Care Trends and another Health Services course concurrently.

Health Sciences 1

140021910

Grades:	11, 12
Frequency:	1 period -- every day
Course Length:	Year
Credits:	2
Fee:	\$20
Prerequisite:	Survey of Health Sciences recommended
College Credit:	Yes

Develops knowledge of medical terminology, human body structures and functions, microbes and diseases, and basic health care skills such as assessing vital signs (pulse, respiration, blood pressure). Build a knowledge base that supports all levels of further medical study. Health care professionals and guest speakers visit the classroom and share their journey and career pathway options.

Even if you're unsure about which SSC program you want to take, sign up for as many as you can. You will learn a lot, like in Health Service and even if you don't pursue it as your career, get the exposure. You may find your future calling.

-- Alycia CHS 12 --





HEALTH SERVICES

Health Sciences 2: Internships

149991910

Grades:	12
Frequency:	2 periods -- every day
Course Length:	Year
Credits:	4
Fee:	\$20
Prerequisite:	Health Sciences 1 and instructor approval
College Credit:	Yes
Internship:	Yes

The first eight weeks of this course focuses on patient care skills needed at internship sites (i.e. bathing, bed making, feeding, vital signs, etc.). Students further explore career choices in-depth. Students are assigned to locations in the community for specific clinical internship experiences based on their career choice: physical therapy, surgical technology, diagnostic imaging, dentistry, nursing, obstetrics, veterinary medicine, respiratory therapy at multiple health care sites. Students may have opportunities to complete industry certificates such as Certified Nursing Assistant 1, Pharmacy Tech. and/or EKG Tech. Actual cost of industry certifications will be the responsibility of the student. Additional immunizations, criminal background check and drug screen are required by internship sites.



Health Sciences 2: Seminar

149992910

Grades:	12
Frequency:	2 periods -- every other day
Course Length:	Year
Credits:	2
Fee:	\$20
Prerequisite:	Survey of Health Sciences or Health Sciences 1
College Credit:	Yes

This course focuses on health care skills: CPR and First Aid certification, care and prevention of injuries, and wellness. Students learn specific skills: measuring vital signs, administration of First Aid and CPR, AED use, splinting, taping and casting. Whole body wellness, the anatomy and physiology of injury, and injury rehabilitation methods are explored.

Overall, SSC has really made an impact on my future goals by not only helping me realize what those goals were, but also helping me figure out how I was going to achieve them.

-- Lyllian MHS 12--

Human Resources

HIGH WAGE HIGH DEMAND CAREERS

Hairstylist
Manicurist/ Pedicurist
Cosmetologist
Skincare Specialist

Special Education Teacher
Social Worker
Teacher
Play Therapist

Firefighter
Police Dispatcher
Fire Dispatcher
Ambulance Dispatcher

Correctional Officer & Jailer
Defense Attorney
Federal Law Enforcement
Patrol Officers
Probation Officer

HUMAN RESOURCES

Do you enjoy...

- Helping others learn new things or acquire information
- Providing help or services to others
- Exploring how children, teens or adults learn new information or skills
- Learning about the law and our legal system
- Studying or assisting in family relations, child care, or human development
- Understanding how society works together and solves problems
- Helping people when they are in crisis or under stress





COSMETOLOGY

Cosmetology Concepts

191491920

Grades:	9, 10, 11, 12
Frequency:	1 period -- every other day
Course Length:	Semester
Credits:	0.5
Fee:	\$15

Introduces the field of cosmetology by exploring nail technology, esthetics and hair design. Students learn color theory, nail care, nail art, thermal and long hair styling, esthetics and makeup techniques. Recommended prerequisite to Cosmetology 1.

Cosmetology 1

191041910

Grades:	10, 11, 12
Frequency:	2 periods -- every other day
Course Length:	Year
Credits:	2
Fee:	\$40
Prerequisite:	Cosmetology Concepts recommended

Focuses on basic instruction and hands-on training in hair design (haircutting, styling, coloring and highlighting), esthetics (skin care and makeup) and nail technology (manicures and pedicures). Course includes lectures, lab and clinic time. Students practice services on mannequin heads and classmates. Students will explore the cosmetology industry with these activities: guest speakers and presentations from industry professionals and beauty schools, Guest Days (students practice on a guest), and Theatrical Hair Day. *Students earn hours toward licensure that may transfer to local beauty schools.*



Cosmetology 2

191491910

Grades:	11, 12
Frequency:	2 periods -- every other day
Course Length:	Year
Credits:	2
Fee:	\$40
Prerequisite:	Cosmetology 1
College Credit:	Yes

Further develops the study of hair design and theory (coloring and permanent waving), esthetics and nail technology, practical application. Important management skills including client relationships, how to build a clientele, professional behavior, customer service, product knowledge and bookkeeping are introduced and practiced in a salon setting. Quarterly field trips are taken to local beauty schools. Industry professionals are periodically invited as guest speakers. The Salon is open to the public once a week. *Students earn hours toward licensure that may transfer to local beauty schools..*

Cosmetology 3

191492910

Grades:	12
Frequency:	2 periods -- every other day
Course Length:	Year
Credits:	2
Fee:	\$40
Prerequisite:	Cosmetology 2

This course is geared toward students who wish to pursue a career in Cosmetology. Students will refine skills and techniques learned in Cosmetology 2. Salon management skills and marketing are learned. Quarterly field trips are taken to local beauty schools. Students at this level have a larger responsibility in the management of the salon. The salon is open to the public once a week. *Students earn hours toward licensure that may transfer to local beauty schools.*

Confidence plays the biggest role in one's performance, and what you learn at SSC will give you confidence.

--Jennifer O. MHS 11 --



EDUCATION

Survey of Children, Youth, & Families

191531920

Grades:	9, 10, 11, 12
Frequency:	1 period -- every other day
Course Length:	Semester
Credits:	0.5

This course is for students interested in careers with children, youth, and families. Through hands-on activities such as caring for Reality Infants, investigating and creating toys, and developing story-based activities for kids, students explore childhood development and care-based careers.



“

I have always wanted to work with kids in some way, shape, or form but this class gave me a real eye-opener and now I can never think of doing any other career besides becoming a teacher or social worker.

-- Jason PHS 12 --

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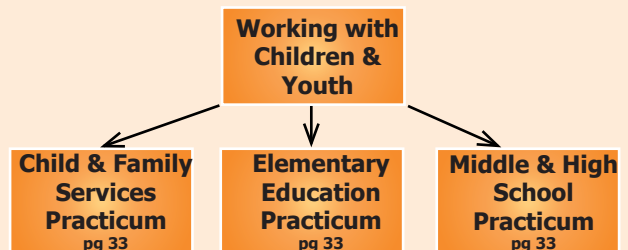
Working with Children & Youth

190511910

Grades:	10, 11, 12
Frequency:	1 period -- every day
Course Length:	Year
Credits:	2
College Credit:	Yes

Students assist in a lab preschool setting at the Early Learning Center with 3, 4 and 5 year olds while exploring human development, professionalism, guiding behavior, health and safety, learning environments and preschool curriculum. These concepts support working with children and youth, birth through adolescence. Students have an opportunity to receive certification for an Oregon Food Handler's Card. This course offers certification in the Oregon Registry for Childcare and Education at step 7. This course is the prerequisite to Practicum level classes. Preschool, Practicum, and Internship placements are subject to district and state guidelines for employees including immunizations, criminal background checks, and/or drug screening.

Upon successful completion of *Working with Children & Youth*, select one of three practicum experiences: *Child & Family Services, Elementary Education, or Middle & High School*.





EDUCATION

Child & Family Services Practicum

190521910

Grades:	11, 12
Frequency:	2 periods -- every other day
Course Length:	Year
Credits:	2
Prerequisite:	Working w/Children & Youth and instructor approval

Building on the experience gained in Working with Children and Youth, this course is a combination of time with a mentor in an early-childhood setting and classroom seminars at Sabin. Students will deepen their understanding of educational practices and careers working with children and families from birth to grade 3. May be repeated for credit. Preschool, practicum, and internship placements are subject to district and state guidelines for employees including immunizations, criminal background checks, and/or drug screening.

Elementary Education Practicum

191521910

Grades:	11, 12
Frequency:	2 periods -- every other day
Course Length:	Year
Credits:	2
Prerequisite:	Working w/Children & Youth and instructor approval

Building on the experience gained in the Working with Children and Youth course, this course is a combination of time with a mentor at elementary school and classroom seminars at Sabin. Students will deepen their understanding of educational practices and careers working with elementary-school-aged children. May be repeated for credit. Preschool, practicum, and internship placements are subject to district and state guidelines for employees including immunizations, criminal background checks, and/or drug screening.

Middle & High School Practicum

191512910

Grades:	11, 12
Frequency:	2 periods -- every other day
Course Length:	Year
Credits:	2
Prerequisite:	Working w/Children & Youth and instructor approval

Building on the experience gained in the Working with Children and Youth course, this course is a combination of time with a mentor at a middle or high school and classroom seminars at Sabin. Students will deepen their understanding of educational practices and careers working with adolescents. May be repeated for credit. Preschool, practicum, and internship placements are subject to district and state guidelines for employees including immunizations, criminal background checks, and/or drug screening.

“

I like the community that was built. Our class became a small family and I can't imagine my life without these people. I love working in a classroom setting and with kids.

--Hannah MHS 11 --

”





EDUCATION

Ed Intern

Child & Family Services	190981910
Elementary	191981910
Middle & High School	191982910

Grades:	12
Frequency:	2 periods -- every other day
Course Length:	Year
Credits:	2
Prerequisite:	Corresponding Practicum course and instructor approval
Internship:	Yes

Building on the experience gained in the practicum courses, students deepen their knowledge working with children, youth and families in educational programs. This experience requires students to work independently to set their own goals/learning outcomes, communicate with both mentor teacher and advisor, and gather evidence to demonstrate learning. Preschool, Practicum, and Internship placements are subject to district and state guidelines for employees including immunizations, criminal background checks, and/or drug screening.



“

I took this class because I wanted to experience something new and work with people. I'm considering teaching post-secondary. My advice to eighth graders thinking about trying the Education program at Sabin? DO IT!!! You won't regret it!

-- Carmen MHS 12 --

”



FIRE SCIENCE

151521910

Grades:	11, 12
Frequency:	2 periods -- every other day
Course Length:	Year
Credits:	2
Fee:	\$20
College Credit:	Yes

Introduces students to the world of firefighting: the history of fire science, safety and health, fire service communications, personal protective equipment, building construction and fire behavior, fire control, fire prevention and emergency medical care. Students will learn how to grab a hydrant, pull a hose, tie knots, and climb stairs. Students can earn Federal Emergency Management Agency (FEMA) certifications and certifications in First Aid and Cardiopulmonary Resuscitation. Students will learn about different careers in emergency services. Requires a safety contract and the ability to wear 50 lb Personal Protective Equipment (PPE).

“

Fire Science has allowed me to take the first steps into a career in the fire service. I have not only learned the essential skills of being a firefighter but what it takes to be a leader.

-- Josh CHS 12 --

”



Fire protection 2

151522910

Grades:	12
Frequency:	2 periods -- every other day
Course Length:	Year
Credits:	2
Fee:	\$20
Prerequisite:	Fire Protection 1

Students will take on leadership roles as company officials and further develop the skills learned through the Fire Protection 1 course. This course explores the tactics, strategies and hydraulics of the fire department. A career in the fire protection industry will be explored. Students will lead groups of Fire Protection 1 students and help develop their skills. Students can earn certifications from the Federal Emergency Management Agency (FEMA) and are re-certified in first aid and cardiopulmonary resuscitation. Requires a security contract and the ability to wear 50 lb Personal Protective Equipment (PPE).



LAW ENFORCEMENT

Law Enforcement 1

150011910

Grades:	10, 11, 12
Frequency:	1 period -- every other day
Course Length:	Year
Credits:	1

Introduces the justice system through classroom lectures and scenario-based exercises. Topics covered: U.S. Constitution, amendments and rulings, landmark criminal justice laws, police history, law enforcement issues, and the justice system from arrest through trial. Courtroom procedures and careers in the criminal justice system are also covered. Students are also introduced to defensive tactics, physical training and arrest techniques. Proficiency in three handcuffing techniques is required to advance to level 2.

Law Enforcement 2

152021910

Grades:	11, 12
Frequency:	2 periods -- every other day
Course Length:	Year
Credits:	2
Prerequisite:	Law Enforcement 1

Focuses on the development of basic patrol procedures, advanced defensive tactics, and multiple arrest techniques. Other areas of focus are patrol operations, investigation, special situations, exploring juvenile corrections, introduction to adult corrections, and private security. Proficiency in processing and diagramming a scene is required to advance to level 3.

Law Enforcement 3

150531910

Grades:	12
Frequency:	2 periods -- every other day
Course Length:	Year
Credits:	2
Prerequisite:	Law Enforcement 2

Advanced students examine and apply current trends in Crime Scene Investigation (CSI). Students learn how to document investigations in writing and the utilization of technical resources, philosophies, theories and concepts of prevention and apprehension, physical training and suppression of criminal activity.

Crime Scene Investigation

150532920

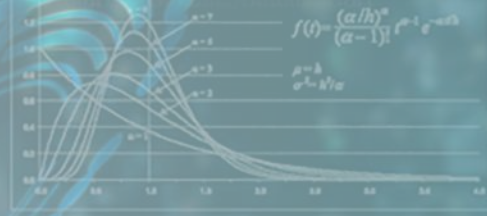
Grades:	11, 12
Frequency:	1 period -- every other day
Course Length:	Semester
Credits:	0.5
Fee:	\$30

Students examine and apply current trends in Crime Scene Investigation (CSI). Students learn how to document investigations in writing and the utilization of technical resources.



“A career in law enforcement is something I’m interested in and these classes have helped me greatly. I did not know how in-depth and how much training is required for law enforcement.”

-- Harrison, RPHS 12--



INDUSTRIAL & ENGINEERING SYSTEMS

Do you enjoy...

- Precision and accuracy
- Seeing how things work on the inside
- Making your own “new and improved” designs to solve problems
- Building, constructing or tinkering
- Working with tools, machines or technology
- Working with your hands to repair things

Industrial & Engineering Systems

HIGH WAGE
HIGH DEMAND
CAREERS

Architect

Civil, Industrial & Mechanical Engineer
Cartographer

Automotive Service Technician
Diesel Engine Specialist
Mechanic

Electrical & Electronics Engineer
Computer Programmer
Industrial Engineer

Mechanical Engineer
Computer-Controlled Machine Tool Operator
Machinist

Sheet Metal Worker
Structural Metal Fabricator & Fitter
Welder

Carpenter
Plumber/Pipefitter
Cement Mason





ARCHITECTURE & DESIGN

Architecture & Design 1

211021910

Grades:	9, 10, 11, 12
Frequency:	2 periods -- Every other day
Course Length:	Year
Credits:	2
College Credit:	Yes

Discover how hand drawing, 3D modeling and 3D printing are used by architects, engineers and other designers to conceptualize and document their new products (buildings, consumer products, bridges, etc). Skills in AutoCAD, Revit and Inventor are then applied to students' own design projects.

Architecture & Design 2

211031910

Grades:	10, 11, 12
Frequency:	2 periods -- Every other day
Course Length:	Year
Credits:	2
Prerequisite:	Architecture & Design 1
College Credit:	Yes

Expand proficiency in the use of industry software as well as gain an understanding of design and construction through large scale, challenging, complex and sophisticated architectural or engineering projects. Create working drawings, 3D models, computer-generated renderings and physical models of original designs.

Architecture & Design 3

211032910

Grades:	11,12
Frequency:	2 periods -- every other day
Course Length:	Year
Credits:	2
Prerequisite:	Architecture & Design 2

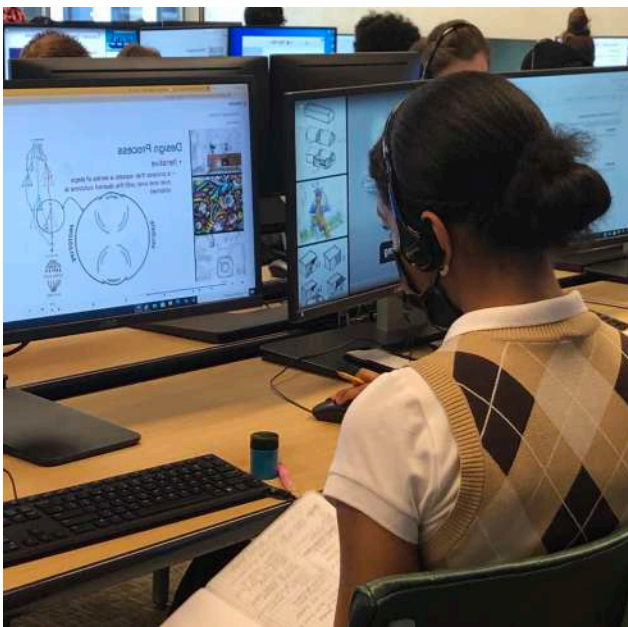
Explore advanced CAD tools and techniques (Revit3D or Inventor). Develop, visualize and present designs. Professionals from the Architecture, Industrial Design or Engineering fields mentor students.

Architecture & Design 4

211034910

Grades:	12
Frequency:	2 periods -- every other day
Course Length:	Year
Credits:	2
Prerequisite:	Architecture & Design 3 or instructor approval

Take a deep dive into architectural design. Choose a building type (residential or commercial) you are interested in designing, and develop this building design from early sketches to final presentation models. Use skills developed in earlier courses to work independently on a complex project and collaborate with local professionals to develop a portfolio for application to Architecture school and/or a starting position in the CAD industry.



“

I have been taking the architecture and design class all four years. The class has helped me find my passion for CADD and has set me up with enough knowledge and skill to put me ahead going into college.

--Cody PHS 12 --

”



AUTOMOTIVE SERVICE TECH

Automotive Service Technology 1 201031910

Grades:	9, 10, 11, 12
Frequency:	1 period -- every other day
Course Length:	Year
Credits:	1
Fee:	\$40
College Credit:	Yes

Introduction to tools, shop equipment and vehicle lifts. Focuses on basic skills of automotive mechanics. Students learn the fundamental theories and systems of the internal combustion engine: electrical, fuel and ignition. Braking systems and preventive maintenance are covered. Safety is taught and tested in the classroom.

Automotive Service Technology 2 201041910

Grades:	10, 11, 12
Frequency:	2 periods -- every other day
Course Length:	Year
Credits:	2
Fee:	\$40
Prerequisite:	Auto Service Tech 1
College Credit:	Yes
Internship:	Yes

Continue to develop skills learned in AST 1: use of automotive tools, equipment and auto systems. Students will perform maintenance and repair of brakes, steering, suspension, electrical systems and drivability. Safety is taught and tested in the classroom.

Automotive Service Technology 3 201061910

Grades:	11, 12
Frequency:	2 periods -- every other day
Course Length:	Year
Credits:	2
Fee:	\$40
Prerequisite:	Auto Service Tech 2
College Credit:	Yes

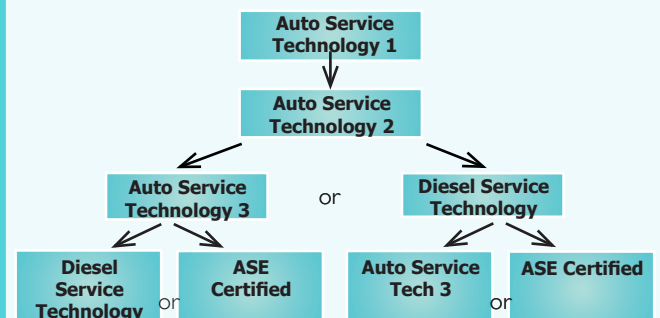
Further develops the skills learned in AST 1 and AST 2. Students perform vehicle light maintenance and repair for clients. Students become eligible to continue studies at automotive factory programs: Ford, Chrysler, Subaru, Honda, Toyota and others. Safety is taught and tested in the classroom. Students will be in a peer leadership role assisting Level 2 students with skill development.

Diesel Technology & Maintenance 201071910

Grades:	11, 12
Frequency:	2 periods -- every other day
Course Length:	Year
Credits:	2
Fee:	\$40
Prerequisite:	AST Level 2, Valid Driver's License recommended
College Credit:	Pending

This course is for the student who has two years of basic light maintenance and repair in Automotive Service Technology and is interested in expanding their knowledge in medium and heavy duty diesel technology and maintenance. Students will train in the repair and upkeep of the Freightliner diesel engine using Freightliner & Volvo trucks, industry scan tools and trainers for hands-on experience. Units of study include safety and shop skills, preventive maintenance and inspection, troubleshooting and repair in diesel engines, heavy duty tires and wheels, air brakes, steering and suspension, and starting and charging systems. Additionally, students can earn industry certificates in Freightliner Systems as well as ASE Medium-Heavy Trucks. May be repeated for credit.

Upon successful completion of *Automotive Service Technology level 2*, students choose one of two skills pathways to follow: *AST3* or *Diesel Service Technology*. Students who successfully complete *AST3* their 3rd year may choose from *ASE certification* or *Diesel Service Tech.* year 4. Students who successfully complete *Diesel Service Tech.* their 3rd year may choose from *AST3* or *ASE certification* year 4.





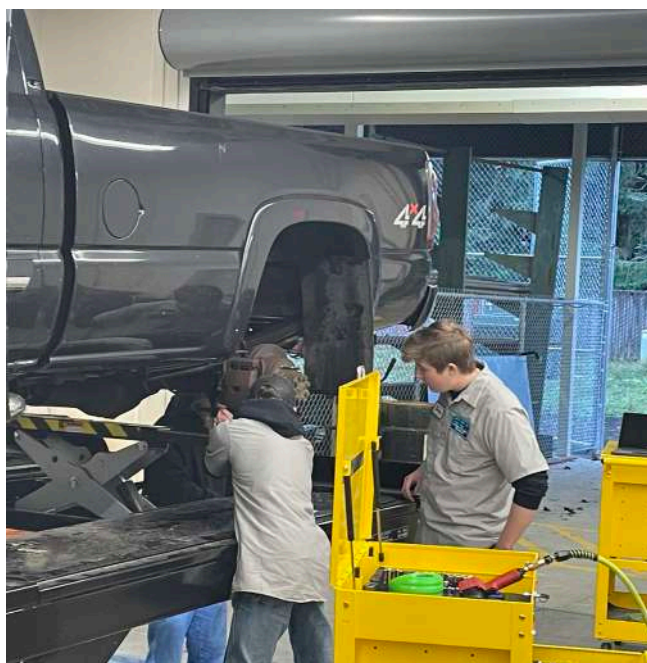
AUTOMOTIVE SERVICE TECH

Automotive Upkeep

201032920

Grades:	10, 11, 12
Frequency:	1 period -- every other day
Course Length:	Semester
Credits:	0.5
Fee:	\$20
College Credit:	Yes

Introduces automotive care and repair. Students learn how an automobile operates and how to buy an automobile. Students will also learn basic automotive maintenance in these areas: auto care & cleaning, fluid level check, electrical, lubrication, cooling, exhaust, ignition and fuel systems, suspension and steering systems, tires and transmission. Common problems and roadside emergencies will be covered



Automotive Service Excellence Student Certification

201042910

Grades:	12
Frequency:	2 periods -- every other day
Course Length:	Year
Credits:	2
Prerequisite:	AST Level 3, Application and Interview. Valid Driver's License Recommended
College Credit:	Pending

Automotive Service Excellence (ASE) Student Certification is the first step in building a career as a service professional in the automotive industry and provides the student with their first industry certification through the National Institute for Automotive Service Excellence. Students will work independently through a self-guided program to complete ASE skills and knowledge assignments in preparation for the Maintenance Light Repair Certification from ASE. Industry and program mentorship provided while students apply skills in-house and field placements. This certification opens up employment opportunities and advanced placement in college automotive programs. Additional certification opportunities may be available.

Do what you're passionate about. Once you come into Level 1 it's kind of difficult, but once you accept that it's something you want to do you'll love it. Level 1 is a lot about safety, but Level 2-3 you're out in the shop and hands on training.

-- Nathan G. CHS 11 --



BUILDING CONSTRUCTION

Geometry in Construction

020725910

Grades:	9, 10, 11, 12
Frequency:	2 periods -- every other day
Course Length:	Year
Credits:	2

This course is for the student who wants to learn math through a more hands-on approach. We make connections between geometry and construction through group and individual projects. This course is also for students with career interests in architecture, design, or construction. Examples of individual projects students have worked on include a 3/4" balsa townhouse model, mini-box, step stool, and storage chests. Larger group work has involved service projects in collaboration with Clackamas County Veterans Village and Camp Westwind. Taught by a math teacher and a construction teacher, students earn one Geometry credit and one CTE credit in Building Construction 1.

Building Construction 1

170041910

Grades:	9, 10, 11, 12
Frequency:	1 periods -- every other day
Course Length:	Year
Credits:	1

This is a Construction-only option for students interested in building, making and design without Geometry & Data Reasoning math credit. Learn to use tools and equipment while making projects such as a 3/4" balsa townhouse model, mini-box, step stool or storage chest. Explore career pathways in the architecture, construction and design while interacting with industry professionals on community service projects.

Building Construction 2

170042910

Grades:	10, 11, 12
Frequency:	2 periods -- every other day
Course Length:	Year
Credits:	2
Prerequisite:	Geometry in Construction or Building Constr. 1

Expand carpentry skills in a hands-on learning environment. This course is a multi-level class and is taught as a rotating curriculum between residential construction and systems, interior and finish carpentry, cabinetry, and furniture making. Individual projects can include cutting boards, bookshelves, and boxes. Group projects include cabin renovation at Camp Westwind.

“

It takes a lot of personal responsibility to be in this class. Be aware of your surroundings and stay safe and this class is a lot of fun. We sanded our tables and that was fun. The most challenging thing I'm proud of is that I've gotten to know my peers and work well with them.

-- Adilee H. RPHS 10 --

”





BUILDING CONSTRUCTION

Building Construction 3

170043910

Grades:	11, 12
Frequency:	2 periods -- every other day
Course Length:	Year
Credits:	2
Prerequisite:	Building Construction 2

This course is for the student interested in a career in the construction or architecture industry, or wanting to expand their carpentry skills in a hands-on learning environment. This course is a multi-level class and is taught as a rotating curriculum between a focus on residential construction methods and systems. A focus on interior and finish carpentry, cabinetry, and furniture making.

Building Construction 4

170491410

Grades:	12
Frequency:	2 periods -- every other day
Course Length:	Year
Credits:	2
Prerequisite:	Building Construction 3

This course is for the student interested who is ready to take on a leadership role in the program while expanding their carpentry skills through independent learning. This course is a multi-level class and is taught as a rotating curriculum between a focus on residential construction methods and systems. A focus on interior and finish carpentry, cabinetry, and furniture making.



“

Three years ago I had no skills that would make me money. Now with the help of Building Construction 3, I have a very happy and wealthy perception of my future. Not only that, I'm confident enough to leave a lasting impact on each and every jobsite I step foot in because of BC3.

-- Viviana F. MHS 12 --

”



ELECTRONICS TECHNOLOGY

Intro to Electronics Technology 171011920

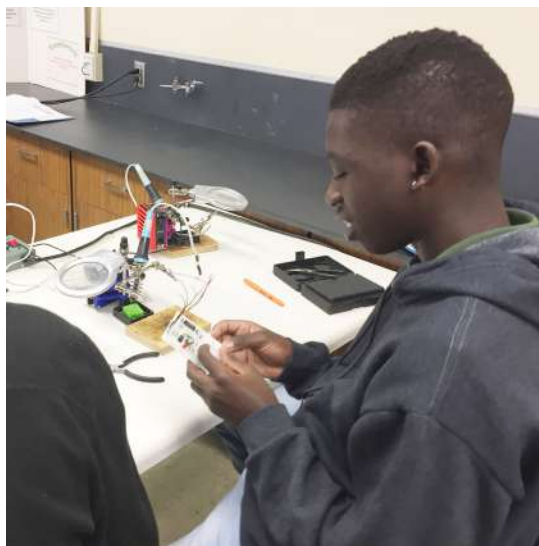
Grades:	9, 10, 11, 12
Frequency:	1 period -- every other day
Course Length:	Semester
Credits:	0.5
Fee:	\$15

In this semester class students will learn the basic principles and processes used in the high tech electronics assembly industry. Using safety, assembly and soldering skills students follow written directions and use electronic components to build the following projects: games, buzzers, light displays and prototype circuits. This course is a prerequisite for Electronics Technology 1.

Exploring Electronics 171012910

Grades:	9, 10, 11, 12
Frequency:	1 period-- every other day
Course Length:	Year
Credits:	1
Fee:	\$30

In this year long class offers students the opportunity to build more projects as they learn the basic principles and processes used in the high tech electronics assembly industry. Using safety, assembly skills and soldering skills students follow written directions and use electronic components to build the following projects: games, buzzers, power supply, strobe light and prototype circuits. This course is a prerequisite for Electronics Technology 1.



“

If you stick with it you'll be able to do a lot of hands on projects that take a lot of time, patience and problem solving. Learning how to use Multi Sim to make your own circuit boards, then testing them to see if they worked. That was lots of fun, we helped each other out.

-- Carter B. CHS 11--

”

Electronics Technology 1 171061910

Grades:	10, 11, 12
Frequency:	1 period -- every day
Course Length:	Year
Credits:	2
Fee:	\$30
Prerequisite:	Intro to Electronics Technology, Exploring Electronics or Engineering Robotics 1
College Credit	Yes

For students who have successfully completed Intro to Electronics Technology, Exploring Electronics or Engineering Robotics 1. Focuses on electronics theory, semiconductors, amplifier systems, digital systems and circuit board design. Computer circuit simulation is emphasized along with principles, processes, applications and skills needed in high tech industries. Safety is taught and tested throughout this course.



ELECTRONICS TECHNOLOGY

Electronics Technology 2

171491910

Grades:	11, 12
Frequency:	1 period -- every day
Course Length:	Year
Credits:	2
Fee:	\$30
Prerequisite:	Electronics Technology 1
College Credit:	Yes

Further developing skills, students design and fabricate products using engineering formulas learned in Electronics Technology 1. Products are documented using the engineering standards of written, theoretical circuit descriptions. Computer circuit simulation and circuit board design are emphasized along with a Technical Skills portfolio that is presented to industry representatives.

Electronics Technology 3

171492910

Grades:	12
Frequency:	1 period -- every day
Course Length:	Year
Credits:	2
Fee:	\$30
Prerequisite:	Electronics Technology 2 or instructor approval
College Credit:	Yes

This advanced robot course provides challenging and fun opportunities to put prior coursework into application. Using a robot platform students create electronic control systems for motion control, sensory inputs and microprocessors to embed artificial intelligence. Using sound recognition and optical output systems, students experiment with autonomous systems. The final product is a student-designed, autonomous robot that students take home.



I like that I've become better at problem solving...for instance I had a project recently with two boards connected and one wasn't working. I've learned to stretch everything out, break it down, and pinpoint exactly what's going on.

-- Devin MHS 12 --



MANUFACTURING ENGINEERING

Engineering Robotics 1

210091910

Grades:	9, 10, 11, 12
Frequency:	1 period -- every other day
Course Length:	Year
Credits:	1
Fee:	\$20

In this course students will be introduced to the basics in manufacturing and electronics skills. Working with circuit boards students will learn to utilize basic electronic components, soldering and assembly circuit boards, wiring the motors and switches to control the robotic arm functions. Students will be working with their hands to set up and operate a variety of equipment used to manufacture components that will help them design, assemble and build a robotic arm that they will take home after completing this course. This course is a prerequisite for Electronics Technology 1 or Manufacturing & Engineering 2: Machining.

Engineering Robotics 2

210092910

Grades:	10, 11, 12
Frequency:	1 period -- every other day
Course Length:	Year
Credits:	1
Fee:	\$20
Prerequisite:	Engineering Robotics 1

Explore Arduino programing, breadboarding, solidworks CAD program and build a kit robot. Students will learn to program an arduino with breadboard and the kit robot. Students will learn solidworks CAD program to create a 3D model, assemble the 3D model in the program and earn college credit.

“

It's like an art class, but you get the satisfaction of making something that functions.

Brionna J. RPHS 12

”

Survey of Manufacturing & Engineering

132031920

Grades:	9, 10, 11, 12
Frequency:	1 period -- every other day
Course Length:	Semester
Credits:	0.5
Fee:	\$20

This project based class exposes students to arc welding processes, basic metal working, computer aided drafting and basic machine skills. Five hands-on projects are created from design to product. Students begin career readiness for shop helper and material handlers. Course is not a prerequisite for Manufacturing & Engineering Level 1.



This is the first course for students interested in the Manufacturing and Engineering Path.

Manufacturing & Engineering 1

132032910

Grades:	9, 10, 11, 12
Frequency:	2 periods -- every other day
Course Length:	Year
Credits:	2
Fee:	\$40
College Credit:	During welding semester

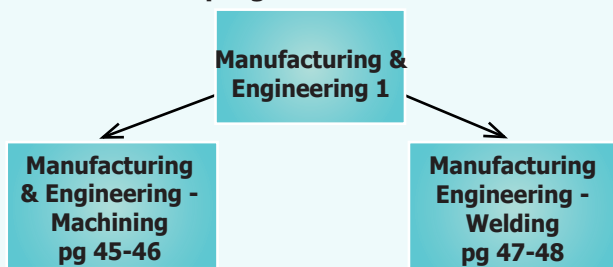
In this year-long course, students explore the manufacturing industry, developing skills in machining and welding. During the machining unit students learn to machine on the manual mill, engine lathe, layout and blueprint reading. Students will create a machinist hammer, C-clamp and center punch. In the Welding unit students will learn to develop skills in 5 different welding processes, metal working, equipment operation, blueprints reading with welding symbols and earn a OSHA 10 safety certification. There is no prerequisite for this course.



MANUFACTURING ENGINEERING - MACHINING

Upon completion of M&E level 1, students choose a skill path to follow: M&E Machinery or M&E Manufacturing & Blacksmithing for levels 2, 3, and 4 in the program.

Upon successful completion of Manufacturing and Engineering level 1, students choose one of two skill pathways to pursue: Manufacturing and Engineering Machining or Manufacturing and Engineering Manufacturing and Welding for levels 2, 3, and 4 of the program.



Manufacturing & Engineering 2: 211062910 Machining

Grades:	10, 11, 12
Frequency:	2 periods -- every other day
Course Length:	Year
Credits:	2
Fee:	\$40
Prerequisite:	Manufacturing & Engineering 1 or Engineering Robotics 1

Expand knowledge of manual lathe and mill operations during your second year in the machine shop. Design, machine, and manufacture finished products, selected from a menu of projects, such as a 123 block or a project of their own design. Students will explore CNC (Computer Numerical Control) in

I plan to be an Airframe mechanic in the Air Force and the manufacturing and welding classes got me interested in this career. Classes are really helpful and you learn a lot of hands on skills.

-- Harrison RPHS 10

learning how to set-up and operate a CNC mill through projects. Safety is emphasized and tested throughout this course.

Manufacturing & Engineering 3: 132043910 Machining

Grades:	11, 12
Frequency:	2 periods -- every other day
Course Length:	Year
Credits:	2
Fee:	\$40
Prerequisite:	Manufacturing & Engineering 2 Machining
College Credit:	Pending
Internship:	Yes

Further explore the work of a precision machinist. Students complete self-paced projects and have an opportunity to learn and use MasterCam, read G&M Code, and generate G&M code that is used in industry. Projects include complex parts as well as assemblies that require the use of Computer Numerical Controlled (CNC) automated machines. Students will complete the course work required to earn a certification from the Titans of CNC's online CNC mill course. Safety is emphasized and tested throughout this course.





MANUFACTURING ENGINEERING - MACHINING

“

I like the new concepts we learn at each level on the mill, lathe, computer and CNC. At this level we are learning how to center the cylinder and cut equal parts on the middle of each side using the mill.

-- Bogdan S. CHS 11

”

Manufacturing and Design 4: Machining 132044910

Grades:	12
Frequency:	2 periods -- every other day
Course Length:	Year
Credits:	2
Fee:	\$40
Prerequisite:	Manufacturing & Engineering 3 Machining
Internship:	Yes

Students explore and work with more detailed parts and projects in the engineering lab or machine shop. Self-paced projects include advanced application of CNC programming, lathe and mill operations. Students will complete the course work required to earn a certification from the Titans of CNC's online CNC lathe course. Safety is emphasized and tested throughout this course.

Manufacturing & Engineering Intern 132481920

Grades:	11, 12
Frequency:	Varies
Course Length:	Semester
Credits:	Varies
Prerequisite:	Manufacturing & Engineering 3 and instructor approval
Internship:	Yes

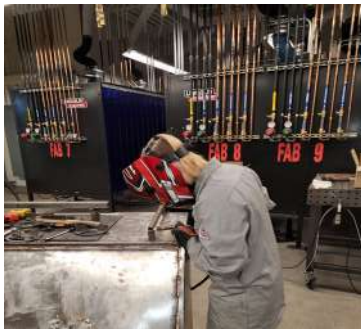
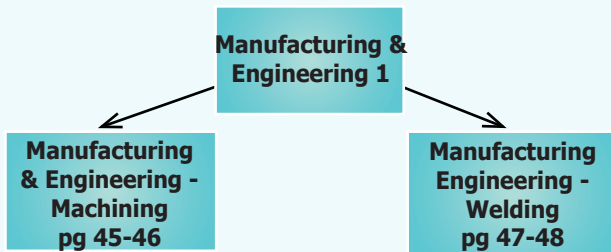
Advanced students may apply for internship opportunities in our Manufacturing & Engineering facilities. Teamwork, communication, problem solving, and productivity are applied in building employment and career foundations. Students will work with industry partners. Students must have successfully completed or be simultaneously scheduled in Manufacturing & Engineering 3 or 4. *Requires instructor recommendation, interview and approval.*





MANUFACTURING ENGINEERING - WELDING

Upon successful completion of Manufacturing and Engineering level 1, students choose one of two skill pathways to pursue: Manufacturing and Engineering Machining or Manufacturing and Engineering Manufacturing and Welding for levels 2, 3, and 4 of the program.



American Welding Society

SSC is an American Welding Society
Sense Entry Level 1 Certification Program.

Manufacturing & Engineering 3: Fab/Weld

132073910

Grades:	11, 12
Frequency:	2 periods -- every other day
Course Length:	Year
Credits:	2
Fee:	\$40
Prerequisite:	Manufacturing & Engineering Fab/Weld 2
College Credit:	Yes
Internship:	Yes

Students expand their abilities while learning how to design and manage projects throughout the year. Students will learn repair techniques and production welding. This class uses all shop equipment as well as machine tools to fabrication parts, projects and tooling. Community projects will be the focus of this class. Students will also design and fabricate a final project using techniques and skills learned through levels 1, 2 and 3.

Manufacturing & Engineering 2: Fab/Weld

132022910

Grades:	10, 11, 12
Frequency:	2 periods -- every other day
Course Length:	Year
Credits:	2
Fee:	\$40
Prerequisite:	Manufacturing & Engineering 1
College Credit:	Yes
Internship:	Yes

Students will focus on industry readiness skills in 5 areas of arc welding and high level fabrication skills. SMAW (Stick), GMAW (wire feed), FCAW (dual shield) and GTAW (tig) welding using steel and aluminum. Advanced fabrication techniques, layout and shop equipment will be the focus of this project based class. American Welding Standards will be used during this class. Safety will be taught and tested in this course.

Manufacturing & Engineering 4: Fab/Weld

132074910

Grades:	12
Frequency:	2 periods -- every other day
Course Length:	Year
Credits:	2
Fee:	\$40
Prerequisite:	Manufacturing & Engineering Fab/Weld 3
College Credit:	Yes
Internship:	Yes

Design and fabrication of projects will be the main focus of this class. Students will work independently, focusing on all aspects of the manufacturing process. Students will apply skills of design, blueprints and welding knowledge to design and build self-guided projects. American Welding Society standards will be used and expanded upon during this class. Safety is taught and tested throughout this course.



MANUFACTURING ENGINEERING - WELDING

Manufacturing & Engineering Welder Qualification 132081910

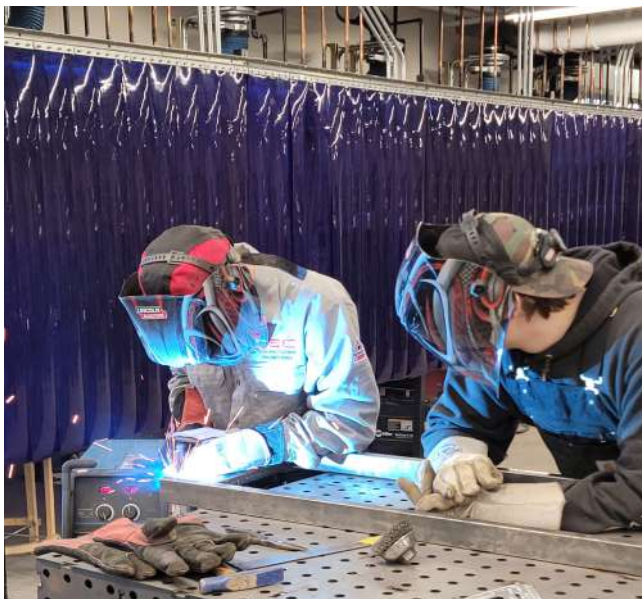
Grades:	11, 12
Frequency:	2 periods -- every other day
Course Length:	Year
Credits:	2
Fee:	\$40
Prerequisite:	Manuf. & Engineering Fab/Weld 2, application & Interview
College Credit:	Yes

Students seeking to participate in the Welder Qualification class must meet established criteria in order to apply and interview at the end of their Level 2 Fab/Weld year. Accepted candidates work through a self-paced full year program. Students work toward an American Welding Society (AWS) welding certification. Students will use the AWS d1.1 Structural steel code book as they work through welding certification. Upon certification students have met industry standards and are ready for the workplace. Students who successfully fulfill requirements in the first year of the Welder Qualification class may reapply for a 2nd year to pursue an additional AWS Qualification. May be repeated for credit.

Manufacturing & Engineering Intern 132481920

Grades:	11, 12
Frequency:	Varies
Course Length:	Semester
Credits:	Varies
Prerequisite:	Manuf & Engineering 3 and instructor approval

Advanced students may apply for internship opportunities in our Manufacturing & Engineering facilities. Teamwork, communication, problem solving, and productivity are applied in building employment and career foundations. Students will work with industry partners. Students must have successfully completed or be simultaneously scheduled in Manufacturing & Engineering 3 or 4. *Requires instructor recommendation, interview and approval.*



**“
I took welding because
I wanted to have fun.
Instead I had a blast and
gained the start to a career,
friends, and skills I didn’t
know I had.**

-- Davis. CHS 12 --

”

Parenting, Academics, Careers & Employment



PACE is a comprehensive high school diploma completion program for pregnant and parenting students (any gender between the ages of 13-21). PACE connects with a variety of community resources including the Clackamas County Department of Human Services, Healthy Start and the Clackamas Technical Education Consortium Youth Services to support students and their children. These agencies and the counseling offices at the NCSD high schools refer student parents to the program's coordinator. Students from other school districts may enroll with permission from the home district.

While parents are taking classes, on-site state certified childcare for babies and toddlers between six weeks and 4 years of age, is available. Besides the academic classes in Language Arts, Math, Science and Social Studies, PACE students take classes on parenting and career development. Students are eligible to enroll in SSC and home high school classes to meet standard high school diploma requirements.



think outside the box...

SSC Makerspace

a place to imagine, design & make

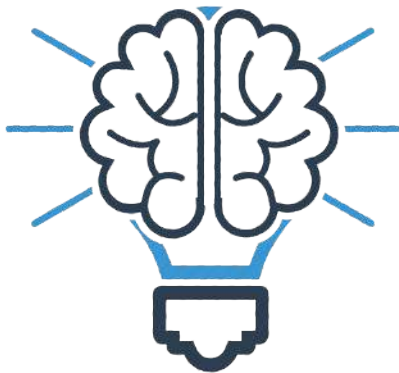
BUILD

CREATE

INVENT

DESIGN

TINKER



- *product design*
- *3-D printing*
- *3-D modeling*
- *laser cutting*
- *sewing machines*
- *CNC cutting*

EXPLORE THE OPTIONS!

*Don't know how to get started?
There is a tech on staff to help students achieve and learn!
Questions? Contact: lenzend@nclack.k12.or.us*

Open everyday during school, Tuesday & Thursday after school until 4:45 pm.