**Engineering for Empowerment Elective Class**
Mr. Englen – Room 147 (Shop Computer Lab)
(503) 844-1220 ext 5907    englena@hsd.k12.or.us

**Course Overview:** This course combines computer science and technology to teach students the necessary skills to use various forms of technology to design their own projects and create their own products.  Units of study include; Computer Basics (hardware and software), Productivity software (Microsoft office, etc.) Internet Use and Research Skills, web design, computer programming, robotics, and electronics/circuits.

## Course Learning Targets/Standards:

This class will focus on the International Society for Technology Education (ISTE) standards.

1. **Creativity and Innovation**
   Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.
   a. Apply existing knowledge to generate new ideas, products, or processes
   b. Create original works as a means of personal or group expression

2. **Communication and Collaboration**
   Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.
   b. Communicate information and ideas effectively to multiple audiences using a variety of media and formats
   d. Contribute to project teams to produce original works or solve problems

3. **Research and information Fluency**
   Students apply digital tools to gather, evaluate, and use information.
   b. Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media
   c. Evaluate and select information sources and digital tools based on the appropriateness to specific tasks

4. **Critical thinking, problem solving, and Decision Making**
   Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.
   b. Plan and manage activities to develop a solution or complete a project
   c. Collect and analyze data to identify solutions and/or make informed decisions

## Grading Scale:

Students will be graded using a weighted percentage scale.  The categories of school work will be weighted as follows:

| Category of Work | Percent of Overall Grade |
|---|---|
| Class work and homework assignments:<br>• "practice" or formative assignments | *25%* |
| Quizzes, tests, major writing assignments and unit projects:<br>• *"evaluation" or summative assessments* | *75%* |

A= 90-100%
B= 80-89%
C= 70-79%
D=60-69%
F=50-59%
I = Insufficient evidence to determine an accurate level of proficiency in class/course learning targets

## Academic and Non-Academic Assessments and Communication:

Students will be assessed in their progress through a variety of techniques including: daily check-ins, weekly quizzes, projects, essays, and unit tests.  Non-academic behaviors, such as handing work in on time, effort, and classroom behavior, will be shared either by direct communication, in the form of emails or phone calls, or as comments on progress reports and report cards.

## Honor's Opportunities:
Students will be given opportunities throughout the year to dive deeper into the curriculum.  The options will be as followed:
* Challenge assignments-in lieu of proficient assignments
* Extension components to projects

Please contact me if you are feeling your child is in need of more enrichment opportunities

## Computer Use:

We will be using computers and other forms of technology on a daily basis in this class.  Students will be required to sign a separate technology use contract to be allowed to use the computers.  Any blatant disregard or misuse of the computers, Internet, and other technology used in this class may result in the student being removed from the class along with other disciplinary action. **Computer games are not to be played in this class until all projects are completed to the highest quality possible, and approval has been given by the teacher.**

## Classroom Expectations:

1. **Be Safe**
   - Keep your hands to yourself.
   - Keep all 4 chair/desk legs on the ground.
2. **Be Respectful**
   - Be considerate – treat others how you wish to be treated.
   - Listen and follow directions. Do not talk out of turn.
3. **Be Responsible**
   - Be on time, in your assigned seat and quiet when the bell rings.
   - Come to class with all necessary supplies (pencil, paper, etc).
   - Be ready to learn and contribute to class discussions.

## Consequences for not following Expectations:

1. **Warning-** This is your reminder to get back on track!
2. **Lunch Detention –** Lunch Detention will be given for repeat misbehavior. Parents and/or guardians will also be contacted and informed of their student's behavior.
3. **Administrative referral –** Referrals will be given for blatant disregard of expectations and misbehavior.  Each referral requires a meeting with an administrator concerning the behavioral misconduct.

**\*** It is up to Mr. Englen to decide if the above consequences are appropriate for a student's misbehavior or disregard of class expectations.  Severe disruptions may result in immediate referral with the student being sent to the counseling office.  **Remember this elective class is a privilege, and continued behavioral problems may lead to exclusion from the class.**

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Please sign and return the bottom half of this sheet by Monday, September 8th.

We have read the attached information and understand what the requirements are for the Engineering for Empowerment Class.

_____        _____
Student Name                                        Student Signature

_____        _____
Parent Name                                          Parent Signature

_____        _____
Parent Contact Phone #                          Parent Contact Email

Preferred Contact:
(check one)  \_\_\_ email      \_\_\_ home phone      \_\_\_ work phone