Introduction to Engineering and Design
Springbrook High School
201 Valleybrook Drive
Silver Spring, MD 20904
2015-2016

Springbrook’s mission is to ensure that ALL students have the opportunity to succeed in a rigorous curriculum, including the completion of a learning experience in a college-level environment.

**Course Description**
The Introduction to Engineering and Design course is a 1 credit requirement for students to graduate from high school. It will prepare students to understand and apply technological concepts and processes that are the cornerstone for the high school technology program. Group and individual activities engage students in creating ideas and developing innovations on engineering practical solutions. Technology content, resources, and laboratory/classroom activities will allow students to apply their knowledge of science, mathematics and related studies through authentic situations.

**Instructional Philosophy:**
Learning is a process in which students acquire new concepts and extend their understanding of familiar concepts. By interpreting new information and applying various skills, learners connect new knowledge and understanding to what they already know. Students can reorganize or adjust their understanding to accommodate the new information and ideas. In order for learning to be effective, students require instruction in the use of a variety of strategies and skills.

**Course Standards:**
As students progress through the course sequence they will become proficient in:
- Research and inquiry based learning experiences
- Design and problem solving challenges
- Team projects, team leading, and cooperative learning experiences
- Public speaking using PowerPoint presentations to communicate with the audience
- Data collection and analysis
- Managing time, resources and projects
- Critical thinking skills
- Understanding the potential impact their ideas and products may have on society

**Technology utilized in this course will include:**
- Computers with internet capability
- Microsoft Word and PowerPoint software
- Web-based learning experiences
- Printing software and equipment
- Computer Aided Design Software
- Hand tools and power equipment (in some instances)

**In this course, we will:**
- Develop an in-depth understanding of the characteristics and scope of technology.
- Explore the influence of technology on history.
- Explore the relationships and the connections between technology and other fields of study.
- Describe technological problems.
- Design alternative solutions by applying the core concepts of technology.
- Assess engineering designs.
- Evaluate the performance of the designs.
Course Timeline

Course Standards are based on the curriculum developed by MCPS (Montgomery County Public Schools) and PLTW (Project Lead the Way).

AP vertically aligned standards to be emphasized in this course include:
- Ability to design 3-D models and simulations
- Apply mathematical and scientific calculations to design and construct an engineering solution to a problem

Academic skills that cross all curriculum areas are identified as:
- Inquiry
- Writing
- Collaboration
- Reading
- Mathematics
- Science
- Problem Solving

Major Assignments and Assessments
- Each unit of study will conclude with a culminating assessment that will include a project, a presentation, and/or a written test that will be graded as a summative assessment.
- The activities, projects, and labs leading up to the culminating project will be graded as a formative assessment.
- Assignments given for completion at home, either partially or entirely will be graded as homework.
- There will be a county mandated exam at the conclusion of both Semester 1 and Semester 2.

Grading Policy
- Students are assessed on the above objectives through various art experiences, written responses and oral presentations.
- Formative 50% (Sketches, quizzes, in-progress critiques, written responses)
- Summative 40% (Completed Projects, tests, self-critiques)
- Homework 10%

When using points or percentages, a teacher assigns a grade no lower than 50% to the task/assessment. If a student does no work on the task/assessment, the teacher will assign a zero. If a teacher determines the student did not attempt to meet the basic requirements of the task/assessment, the teacher may assign a zero.

Please Note: Extra credit will not be assigned. All students will be held accountable for knowing all material being assessed.

Homework Policy
Homework will be assigned and assessed according to the objectives of the course. Some assignments may be started in class and require completion at home.

Re-Assessment and Re-Teaching Policy
Students do not always master the objective on the first try; therefore, students will have the opportunity to resubmit formative assignments. Summative assessments cannot be reassessed and homework is measured for completion on time.

Attendance and Make-up work
Daily attendance to class is necessary to achieve at the highest level. If you must miss class, it is your responsibility to make up missed work by the deadline. To respect instructional time, you will be required to either pick up missed work from a clearly designated location (in the classroom), or from the teacher during lunch or office hours. If your absence is unexcused, you may not be permitted to make up work.
Late Work

Students will have 2 class periods to turn in late work; unless otherwise arranged by the teacher.

Required Materials

✓ Technology Fee (per semester) --$5. Payment may be made in cash or by check made out to Springbrook High School. The lab fee will cover the cost of all consumable materials used by students to create projects which they will be encouraged to take home.

Recommended Materials

Students are recommended to have the following materials in order to be prepared for class:

✓ A planner or organizer (the Springbrook student planner is acceptable); though any store bought or computerized version is acceptable as long as it is carried by the student throughout the day.

✓ A binder or section within a binder dedicated to this course.

✓ Lined loose leaf paper or spiral notebook.

✓ Pen, Pencil, Eraser, and Highlighter.

✓ Other useful materials: Ruler, Protractor, Compass, Flash Drive

This course will use textbooks, Power Point presentations, hand-outs, internet resources, periodicals, and journal selections throughout the course of the school year to learn and obtain content related knowledge. It is recommended that all handouts and information be maintained in a student binder or folder. The student has a responsibility to be prepared and bring their materials to class each class period.

Office Hours

Office hours are during lunch or after school by appointment with the teacher. Students are required to make an appointment for Office Hours so as not to create conflicts with other students and activities. Students with a grade below a C (70%) are strongly recommended to schedule a time for academic assistance. You may be required to attend a lunch session by me or your administrator if:

*Your grade is below a C

*You are missing work that can still be made up
SPRINGBROOK HIGH SCHOOL

Introduction to Engineering Course Acknowledgement Sheet

I, _____________________________ (student name), have read and understand the classroom expectations, grading information, and classroom policies outlined in the Introduction to Engineering Course Syllabus.

Student Name: ______________________________________________________

Student’s Signature: __________________________________________________

Date: ______________

Parent/Guardian Name: _______________________________________________

Parent’s/Guardian’s Signature: _________________________________________

Date: ______________

Please sign and return for a homework grade.
AP COMPUTER PROGRAMMING

COURSE EXPECTATIONS

MR. PRICE – ROOM F209

Course Overview:
(From the AP Computer Science A Course Description Located on the college board website
https://apstudent.collegeboard.org/apcourse/ap-computer-science-a)

Students should be able to:
• Design and implement solutions to problems by writing, running, and debugging
  Computer programs.
• Use and implement commonly used algorithms and data structures.
• Develop and select appropriate algorithms and data structures to solve problems.
• Code fluently in an object-oriented paradigm using the programming language
  Java.
• Read and understand a large program consisting of several classes and interacting
  Objects.
• Recognize the ethical and social implications of computer use.

Class Expectations:
• Be respectful of people and property
• Come to class on time and prepared to learn with all necessary materials.
• Complete all assigned work on time.
• Name, date, class, period must be on each assignment to be graded

Grading

Students will be assessed in the following categories:
Formative Assessments: 50%  Summative Assessments: 40%  Homework: 10%

-------------------------------------------------------------------------Continued On Back-------------------------------------------------------------------------
Due Dates and Deadlines:

Assignments will be given a due date and a deadline. Students are expected to come in outside of class to work if they need more time to submit prior to the deadline. Assignments submitted after the due date, but prior to the deadline will have a deduction of 10% applied to the final grade for one day late and 50% for two or more days late. Most deadlines are two days after the project is due. Projects submitted after the deadline will receive a grade of zero.

Absences/Missed Work and/or Test:

Students who miss class due to absences are expected to contact me the day they come back to determine what they have missed. Students who are absent the day of a test will be expected to take the assessment (outside of class) the first day they return from their absence.

Tardiness:

A tardy is a failure to be seated in the assigned seat when the tardy bell rings. Excused tardies must have an appropriate signature – from an administrator, guidance counselor, etc. All other tardies are considered unexcused. Students with 3 or more unexcused tardies will receive a phone call home and detention.

Communication:

Office: 301-989-5700 Email: Michael_C_Price @mcpsmd.org

Remember to check Edline regularly to keep up on your child’s grades and when they have tests. If you have any questions feel free to contact me via email or phone * Please allow 24 hours for a response

AP Exam Date: Tuesday May 3rd

Student and Parent Signatures

I ___________________________ in period ________ have read the information above and understand the contents.

Student Signature: ________________________________________________

Parent Signature: ________________________________________________

Return By: 9/04/15
Design Technology

International Baccalaureate Organization (IBO)
Welcome to the IBO course in Design and Technology

Some common questions and answers when you start the course
Basic equipment
Expectations
Course outline
Assessment criteria
How are my internal assessments and project marked?
How do teachers judge my work?
Your exams and assessment
Your portfolio
The Group 4 project
Command terms
Mathematical requirements

Core Topic 1 Design Process
1.1 The design cycle model and the design process
1.2 Generating ideas
1.3 Communicating ideas

Core Topic 2 Product Innovation
2.1 Designers and product cycle
2.2 Invention and innovation
2.3 People and markets

Core Topic 3 Green design
3.1 Principles of green design
3.2 Life cycle analysis
3.3 Strategies for green design

Core Topic 4 Materials
4.1 Introducing and classifying materials
4.2 Properties of materials
4.3 Timber
4.4 Metals
4.5 Plastics
4.6 Ceramics
4.7 Composites

Core Topic 5 Product development
5.1 Manufacturing techniques
5.2 Craft production
5.3 Mechanization
5.4 Automation
5.5 Economic considerations

Core Topic 6 Product design
6.1 Ergonomics
6.2 The designer and society

Core Topic 7 Evaluation
7.1 Evaluation and designing
7.2 Evaluation and manufacturing
7.3 Evaluation and the consumer

Glossary
Appendix
Foreword

Congratulations! You have decided to enroll on a course that will stimulate, motivate, challenge and reward your interest in designing and making. This DT IB Course book is designed to:

- Help you understand what the course is about
- Show you how the course is organized
- Help you to understand and be involved in your own assessment
- Act as an activity and revision guide through your learning journey in the Core topics

Some common questions and answers when you start the course

“I didn’t get the grade I expected in D&T. Does this mean I will find the course too difficult?”
If you have studied a related GCSE D&T course at GCSE and achieved a grade B or higher, then you are suited for study at Higher level. It may be that some students have been accepted on to the course with lower grades due to individual circumstances; for example, a student may have not been able to complete coursework due to a personal situation and achieved a grade ‘C’. However their capability is known to be strong.

“I haven’t done D&T before. Will I be able to cope?”
Generally speaking if you achieved a grade ‘C’ or lower in a related GCSE Technology course, then study at Standard level is most appropriate. Students may be accepted onto the course that have not studied GCSE Technology but have a proven basic knowledge and/or interest in the subject. Students who have not studied Technology recently or who have no practical skills need to be aware that it will present significant challenges.

“Oh other people on the course seem to know more about D&T than me. Am I going to fall behind?”
Basic terminology such as ‘brief’, ‘specification’ and ‘ergonomics’ will be in frequent use as well as a presumed knowledge of basic designing and making principles. Students who are unfamiliar with these terms will need to do extra independent study. The staff here are very supportive and the materials produced can help with this, but essentially, students must recognize the particular challenges they may face from the beginning of the course and commit actively to overcoming them and have realistic expectations.

“What words of advice can you give me?”

- Use your diary and make sure you do your work on time
- If you have any kind of problem, tell your teacher in advance so that they have time to help you before the deadline
- Don’t try to work on your own. DT is a collaborative course – you need to work together and support each other
- Put your highest level of effort into all your work because it all counts
- Don’t be put off by challenging work. Do your best. We all learn and make progress when we face up to challenges. Why else would you be doing IB?
Basic equipment
You will be expected to provide the following things every lesson:
- Pens, pencils and coloring pencils
- Basic drawing equipment such as ruler, compass, eraser, etc.
- An A4 Folder with lined and plain paper for keeping notes
- Flash Drive 2-4 Giga Bites

Expectations
You can expect us to do the following:
- Provide you with the materials you need to prepare for your examinations
- Provide you with the materials you need for the production of project work & assignments
- Give you clear guidance about how your work is structured and assessed
- Provide written and spoken feedback on your progress
- Plan and deliver lessons which link directly to the topics you need to cover

We will expect you to do the following:
- Arrive to your lessons on time and with the correct equipment and materials
- Participate to the best of your ability in all lessons
- Dedicate the right amount of time to homework and revision
- Hand in assignments on time
- Ask in plenty of time if you need any guidance or advice
- Look after all your work in a well-organized way. The responsibility for storing work safely and maintaining your projects and notes lies with you alone. The department can provide places for you to keep work but it is not our responsibility to monitor its whereabouts.
Course outline
The course is part of Group 4 ‘Experimental Sciences’. Here is a really simple breakdown describing how your course is structured. Don’t worry if it doesn’t all sink in straight away, it is our job to make sure that you meet all the course requirements. Your job is to know where you are now, where you are going next, and how to get there.

This is your course in a nutshell:
- Exams - 64% Three papers based on CORE THEORY and OPTIONS in May of Year 13.
- Internal assessments - 18% Assignments over the whole course.
- Design Project - 18% Project of your choice started at the end of Year 12 and finished in January of Year 13.

The course explained in detail
You will be taught the following components and the recommended teaching time for each is also stated:

<table>
<thead>
<tr>
<th>STANDARD LEVEL</th>
<th>HIGHER LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theory (core and options)</td>
<td>95 hours</td>
</tr>
<tr>
<td>Practical work (Internal Assignments, Design project and Group 4 project)</td>
<td>55 hours</td>
</tr>
<tr>
<td>TOTAL teaching time</td>
<td>150 hours</td>
</tr>
</tbody>
</table>

You will actually get far in excess of this number of teaching hours over the course. You are expected to spend additional time on homework, assignments and private study; Standard Level students around 2 hours additional time per week, Higher Level students around 3 hours per week.

You will be expected to use the workshops in some of your private study time and after school to complete practical work. Make sure you tell your teacher in advance if you need to do this.

Looking at the ‘theory’ more closely
You all learn the following 7 topics. They are called CORE TOPICS. The number of hours spent on teaching and learning for each one is shown:
- Topic 1: Design Process. 10 hours
- Topic 2: Product Innovation. 7 hours
- Topic 3: Green Design. 9 hours
- Topic 4: Materials. 17 hours
- Topic 5: Product Development. 11 hours
- Topic 6: Product Design. 5 hours
- Topic 7: Evaluation. 6 hours

Total for CORE THEORY: 65 hours

All Compulsory for both SL and HL
If you are a Higher Level student, you will study another five topics called ADDITIONAL HIGHER LEVEL TOPICS (‘AHL’). They are:

- Topic 8: Energy. 9 hours
- Topic 9: Structures. 10 hours
- Topic 10: Mechanical Design. 8 hours
- Topic 11: Advanced manufacturing techniques. 10 hours
- Topic 12: Sustainable development. 12 hours

Total for ADDITIONAL HIGHER LEVEL TOPICS (‘AHL’): 49 hours

To finish off your theory, you study ONE OPTION:

Option A: Food Science and Technology.
Option B: Electronic Product Design.
Option C: CAD/CAM.
Option D: Textiles. 30/45 hours.
Option E: Human factors design.

If you are a standard level student, your option teaching time is 30 hours.

If you are a higher level student, your option teaching time is 45 hours.

Coursework
You probably chose to do D&T because you like designing and making things. This is the part of the course where you can do just that. It all counts for 36% of your final assessment so it’s worth a lot.

There are two types of ‘coursework’:
1. Internal Assessments. These are mini projects that show your skills in a number of key areas like drawing, research and manufacturing. You will be asked to do several different assignments over the whole of the course. They will usually be linked to the theory that you will be learning – so the two things go together. They are all worth 18% of your total assessment.

2. Design Project. In year 13, you will spend about a term doing a project of your own choice. This is worth 18% of your total assessment.

A word about coursework!
Remember, you don’t just need your coursework at the end of the course - your coursework is your portfolio and you will need to finish it on time, look after it in your portfolio and have it ready to show people at any time. For example, when you are being interviewed for a place at University. You are applying for a job. Keep on top of your coursework.
Assessment criteria
There are 6 ‘internal assessment criteria’ which are used to assess your work. The following four are assessed twice, one in your internal assessments and once in your design project:

Planning (PA)
Research (RA)
Development (DA)
Evaluation (EA)

Manipulative Skills (MS) is assessed once only in your design project

Personal Skills (PS) is assessed once only during the Group 4 project

Each criterion has three ‘aspects’. The following section describes what you have to do for each aspect:

Planning (PA)
.. / Aspect 1: Defining the problem
.. / Aspect 2: Formulating a brief or a research question
.. / Aspect 3: Selecting variables or specifications

Research (RA)
.. / Aspect 1: Strategies
.. / Aspect 2: Data collection
.. / Aspect 3: Data processing and analysis

Development (DA)
.. / Aspect 1: Creativity
.. / Aspect 2: Techniques
.. / Aspect 3: Solution

Evaluation (EA)
.. / Aspect 1: Conclusion
.. / Aspect 2: Procedure
.. / Aspect 3: Recommendations

Manipulative skills (MS) ***ONLY USED FOR ASSESSING THE DESIGN PROJECT***
.. / Aspect 1: Procedures
.. / Aspect 2: Use of equipment and materials
.. / Aspect 3: Techniques

Personal skills (MS) ***ONLY USED FOR ASSESSING THE GROUP 4 PROJECT***
.. / Aspect 1: Self-motivation and perseverance
.. / Aspect 2: Working within a team
.. / Aspect 3: Self reflection

How are my internal assessments and project marked?
Each aspect can be awarded one of three levels:
  Complete – in other words you have met the criterion fully = 2 marks
  Partial – you have met some but not the entire criterion = 1 mark
  Not at all – you haven’t met the criterion at all = 0 marks

The letters C P N are used to summarize these awards.

Because there are 6 criteria, you can get a maximum mark of 30 marks for your project, a maximum of 24 for all your internal assessments plus 6 marks for the Group 4 project. So the total for all of your ‘coursework’ is 60 marks.

The exam board changes this to a percentage and adds it to your exam results.
How do teachers judge my work?

It’s important to remember that your work is being judged all the time; teachers will be recording all of your assessments and also noting your organization, attitude and effort. So assessment doesn’t just happen when work is marked.

Remember also that your teacher will contribute to your subject reference, so it is important that they you give them every opportunity to praise you. However, you need to understand how teachers make a judgment about your work and your potential. This is how it is done:

You will be awarded a level at the end of your course. The levels range from 1-7.
Level 4 is a pass  Level 5 is a good performance  Level 6 is very good  Level 7 is outstanding

It would be very rare indeed for a student to be awarded a level 7 in Year 12 as they would not yet have completed enough work to make a fair judgment, but in some exceptional cases, students do achieve level 7 in Year 12*. We have to decide what ‘level’ you are working at for each piece of work you do. This might be difficult if the work is a test for example and you get a percentage or mark. To help, we have produced the following guide:

<table>
<thead>
<tr>
<th>%</th>
<th>IB Level</th>
<th>Descriptor</th>
</tr>
</thead>
<tbody>
<tr>
<td>85+</td>
<td>7</td>
<td>Excellent</td>
</tr>
<tr>
<td>69-85</td>
<td>6</td>
<td>Very Good</td>
</tr>
<tr>
<td>56-68</td>
<td>5</td>
<td>Good</td>
</tr>
<tr>
<td>39-55</td>
<td>4</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>28-38</td>
<td>3</td>
<td>Poor (Border fail)</td>
</tr>
<tr>
<td>16-27</td>
<td>2</td>
<td>Fail</td>
</tr>
<tr>
<td>0-15</td>
<td>1</td>
<td>Fail</td>
</tr>
</tbody>
</table>

Please remember that teachers can only make judgments about your capabilities based on evidence. You need to do display the right attitude to your studies from the outset and remember that all of your actions contribute to our ability to assess your work and help you to do your best.
Your exams and assessment

| Paper 1 | Standard level: 45 minutes.  
|         | 30 multiple choice questions on the CORE THEORY  
|         | Higher level: 1 hour.  
|         | 40 multiple choice questions on the CORE THEORY plus ADDITIONAL HIGHER LEVEL TOPICS  

| Paper 2 | Standard level: 1 hour.  
|         | Section A: Data based question plus several short answer questions - all compulsory based on CORE THEORY.  
|         | Section B: One extended question from a choice of three based on the CORE THEORY.  
|         | Higher level: 1 hour 45 minutes.  
|         | Section A: Data based question plus several short answer questions - all compulsory based on CORE THEORY plus ADDITIONAL HIGHER LEVEL TOPICS.  
|         | Section B: One extended question from a choice of three based on the CORE THEORY plus ADDITIONAL HIGHER LEVEL TOPICS.  

| Paper 3 | Standard level: 1 hour.  
|         | Several short answer questions and one extended response question based on the OPTION - all compulsory.  
|         | Higher level: 1 hour 15 minutes.  
|         | Several short answer questions and one extended response question based on the OPTION - all compulsory.  

| Internal Assessment | Investigations (coursework):  
|                    | A range of investigations and project work set by the teacher and conducted throughout the course. This will form the basis of your portfolio.  

| Design project | A project of your choice which represents the full design and make process, started at the end of Year 12 and concluded around January in Yr. 13.  
|                | Also a major item in your portfolio.  

Your portfolio

You are expected to keep a well-organized portfolio of your work. This should be continuously added to as you go through the course. It should contain a wide variety of work that shows your best designing and making skills in a range of areas such as research, designing, CAD, CAM and evaluating.

It should also contain your GCSE work if you have it and any other work that relates to D&T such as competitions that you have entered or work that you have done as part of the CAD program. This is incredibly important.

If you apply for a design-based University course or if you apply for a job, you will be expected to provide a portfolio that shows your talents in their best possible light. This is not something you should throw together just before an interview but is something that should be built up from the moment you start the course.

Staff in the department can advise you on putting it together and keeping it updated. Remember that the portfolio is your responsibility.
The Group 4 project
What is it?

“...a collaborative activity where students from different group 4 subjects work together on a scientific or technological topic, allowing for concepts and perceptions from across the disciplines to be shared.”

Around 10 hours in total: Planning: around 2 hours
Action: around 6 hours
Evaluation: around 2 hours

You will work alongside students in other Group 4 subjects (Physics, Chemistry and Biology) on a collaborative project. You will be asked to produce a folio and / or display of evidence that documents your work. The will be used to assess 'Personal Skills'.

It usually takes place during the end of Year 12 and runs over a three day period. At the end of your project, you and the rest of your team will make a presentation to students and staff of the senior school. This will form part of the assessment.

You all have to take part in the Group 4 project and will receive specific details about the project nearer to the time.

Command terms
Command terms are used a lot in this course, and especially in examination questions. It is important to understand what they mean.

They are divided up into 3 ‘Objectives’.
Objective 1 verbs require a simple response and are worth 1 mark
Objective 2 verbs require a justified or explained response and are worth 2 marks
Objective 3 verbs require an interpreted or calculated response with explanation and are worth 3 marks.

If you learn them, they will help you to decide the depth of response that you give when you answer a question. These are all listed in the appendix.

Glossary
These words are used a lot in the course. The glossary is there to help you learn them and refer to them when answering questions, conducting research, etc. The glossary is shown in full in the appendix.

Mathematical Requirements
You need to be reasonably competent at Math’s in this course. You will not be expected to learn equations but be able to carry out a basic range of mathematical calculations. The list in the appendix gives full details.
**Course Description:** This course teaches how to effectively manage career and educational choices through incorporating employment, education, and training goals.

**Course Goals:** Students will build financial literacy skills and integrate the Maryland’s Skills for Success competencies. Students complete a career portfolio that demonstrates proficiencies in workplace readiness, personal financial management, personal growth and development, and employment experiences.

**Required Texts:** None

**Required Supplies:** Notebook for this course (or section in a notebook), pen or pencil and paper daily

**Expected Learning Outcomes:**

**Financial Literacy**

- Paystubs and Taxes
- Budgeting
- Saving
- Banking – Checking
- Banking – Electronic
- Identity Theft
- Credit cards
- Insurance
- Being a smart consumer
- Investing
• Renting vs. Owning

**Assignment/Make Up Policy:**

Students have a responsibility and are expected to make up missed work, regardless of the legal status of their absence. If the absence is excused or is a result of a suspension, the teacher will help a student make up the work. If the absences if unexcused, the teacher does not have to help a student make up the work missed, give a retest or give an extension on work that was due. Even though the teacher does not have to help a student make up missed work, the student still has to make up the work so the student can complete the rest of the course. For unexcused absences, teachers may deny credit for missed assignments or assessments, in accordance with the process approved by the principal and the leadership team.
College Career Research and Development (CCRD) B

Course Description: Students research current career information for successful career planning and management. Students develop self awareness, career awareness, financial literacy, communication and indispensable work-related knowledge and skill sets. A variety of career and interest assessments, as well as portfolio development, demonstrating workplace and academic readiness, prepare students for college and careers.

Course Goals: Students will be able to set goals, analyze dependable strengths, develop post secondary plans, clarify values, research careers and compare personal plans to trends in careers.

Required Texts: None

Required Supplies: Notebook for this course (or section in a notebook), pen or pencil and paper daily

Expected Learning Outcomes:

Unit 4: Job Seeking and Advancement: Students will acquire effective methods for finding and applying for jobs.

- Searching for a Job
- Job Applications
- Resumes and Cover Letters
- Interviews
- Follow-up Letters and Methods

Unit 5: Social Issues: Students will use learn safety and social issues pertaining to the workplace.
Assignment/Make Up Policy:

Students have a responsibility and are expected to make up missed work, regardless of the legal status of their absence. If the absence is excused or is a result of a suspension, the teacher will help a student make up the work. If the absences if unexcused, the teacher does not have to help a student make up the work missed, give a retest or give an extension on work that was due. Even though the teacher does not have to help a student make up missed work, the student still has to make up the work so the student can complete the rest of the course. For unexcused absences, teachers may deny credit for missed assignments or assessments, in accordance with the process approved by the principal and the leadership team.

There will be no final exam but there will be a cumulative assignment at the end of the semester. Those students moving on to Career Seminar and Site Based Work Experience next year should have a job by the summer and keep for the following school year.
Course Description/Goals: This course is designed to help students improve their grades and successfully move to the next grade level. Each week we will be monitoring grades, contacting teachers and checking binders/book bags for organization. Our goal is for students to earn report card grades of “C” or higher to maintain eligibility for activities, enable students to earn course credit and successfully move to the next grade level. During the semester we will be exploring college and career options for after high school. Students will be encouraged to use their Naviance accounts and make use of Springbrook’s College and Career Center.

Class Expectations:
- Be respectful of people and property.
- Come to class on time and prepared to learn with all necessary materials.
- Complete all assigned work on time.

Materials:
- Pen/Pencil
- Agenda Book
- Paper
- Computer Access

Weekly Schedule:
Weekly – Personal Development Assignment
Monday- GPA calculation/Grade check
Wednesday- Organization day/Notebook Checks

Grading:
Students are graded on an “All Task” basis with each assignment carrying equal weight. (Assignments are not divided into categories) Students will receive grades based on the following things:
- Weekly Organization/Binder/Materials check: 5 points weekly
- GPA calculation/Grade check: 5 points weekly
- Personal Development Assignments: Range from 10-20 points

Z’s and O’s: When using points or percentages, a teacher assigns a grade no lower than 50% to the task/assessment. If a student does no work on the task/assessment, the teacher will assign a zero. If a teacher determines that the student did not attempt to meet the basic requirements of the task/assessment, the teacher may assign a zero (MCPS Policy).

Due Dates/Deadlines: Teachers will establish due dates and deadlines. Teachers are expected to separate the due date from the deadline in order to increase opportunities for students to complete assignments; however, there may be some exceptions when the due date and deadline are the same. It is recognized that for daily homework assignments the due date and deadline may be the same to facilitate the teaching and learning process.

Assignment/Make-Up Policy: Students have a responsibility and are expected to make up missed work, regardless of the legal status of their absence. If the absence is excused or is a result of a suspension, the teacher will help a student make up work. If the absence is unexcused, the teacher does not have to help a student make up the work missed, give a retest, or give an extension on work that was due. Even though the teacher does not have to help a student make up missed work, the student still has to make up the work so the student can complete the rest of the course. For unexcused absences, teachers may deny credit for missed assignments or assessments, in accordance with the process approved by the principal and the leadership team (MCPS Student handbook).

Teacher Availability: I am available before school from 7-7:45, at lunch (Tuesday-Friday), and afterschool by appointment. Please let me know when you are coming and what you need help with so that I can prepare for you and we use our time efficiently.

*I look forward to working together with you to have a successful semester.*
Course Overview Level 3:

This course extends the concepts of AP® Computer Science A with an emphasis on object-oriented programming (OOP) and design. Students are expected to gain high proficiency in creating and implementing classes including creating new classes using inheritance and implementing interfaces. Topics studied in this course include one and two dimensional arrays, advanced data structures (including trees, linked lists, sets, and maps), algorithms, algorithmic analysis, and object oriented design. Students will also be introduced to game and App development.

Course Overview Level 4 (Research Project):

Students will research and identify a problem relevant to his or her life/community. Applying the concepts they learned, students will design and create a mobile solution using MIT App Inventor to solve their identified problem. All students work either independently or on a team with my guidance. Lenovo Scholars Network has provided laptops and tablets for the students to work on. With parent permission, students will be allowed to use this equipment at home as well. Requirements for this final project include the completion of a journal, a functioning application, oral presentation, and final paper.

Class Expectations:

- Be respectful of people and property
- Come to class on time and prepared to learn with all necessary materials.
- Complete all assigned work on time.
- Name, date, class, period must be on each assignment to be graded

Grading

Students will be assessed in the following categories:
Formative Assessments: 50%  Summative Assessments: 40%  Homework: 10%

---------------------------------------------------Continued On Back----------------------------------------------------
Due Dates and Deadlines:
Assignments will be given a due date and a deadline. Students are expected to come in outside of class to work if they need more time to submit prior to the deadline. Assignments submitted after the due date, but prior to the deadline will have a deduction of 10% applied to the final grade for one day late and 50% for two or more days late. Most deadlines are two days after the project is due. **Projects submitted after the deadline will receive a grade of zero.**

Absences/Missed Work and/or Test:
Students who miss class due to absences are **expected to contact me the day they come back** to determine what they have missed. Students who are absent the day of a test will be expected to take the assessment (outside of class) the **first day** they return from their absence.

Tardiness:
A tardy is a failure to be seated in the assigned seat when the tardy bell rings. Excused tardies must have an appropriate signature – from an administrator, guidance counselor, etc. All other tardies are considered unexcused. **Students with 3 or more unexcused tardies will receive a phone call home and detention.**

Communication:
**Office:** 301-989-5700  
**Email:** Michael_C_Price @mcpsmd.org

Remember to check Edline regularly to keep up on your child’s grades and when they have tests. If you have any questions feel free to contact me via email or phone *Please allow 24 hours for a response*

---------------------------------------------------------------------------------------------------------------------

Student and Parent Signatures
I ________________________________ in period ________ have read the information above and understand the contents.

Student Signature: ________________________________

Parent Signature: ________________________________

Return By: 9/04/15
Course Description/Goals: This course is designed to help students improve their grades and successfully move to the next grade level. Each week we will be monitoring grades, contacting teachers and checking binders/book bags for organization. Our goal is for students to earn report card grades of “C” or higher to maintain eligibility for activities, enable students to earn course credit and successfully move to the next grade level. During the semester we will be exploring college and career options for after high school. Students will be encouraged to use their Naviance accounts and make use of Springbrook’s College and Career Center.

Class Expectations:
- Be respectful of people and property.
- Come to class on time and prepared to learn with all necessary materials.
- Complete all assigned work on time.

Materials:
- Pen/Pencil
- Agenda Book
- Paper
- Computer Access

Weekly Schedule:
Weekly – Personal Development Assignment
Monday- GPA calculation/Grade check
Wednesday- Organization day/Notebook Checks

Grading:
Students are graded on an “All Task” basis with each assignment carrying equal weight. (Assignments are not divided into categories) Students will receive grades based on the following things:
- Weekly Organization/Binder/Materials check: 5 points weekly
- GPA calculation/Grade check: 5 points weekly
- Personal Development Assignments: Range from 10-20 points

Z’s and 0’s: When using points or percentages, a teacher assigns a grade no lower than 50% to the task/assessment. If a student does no work on the task/assessment, the teacher will assign a zero. If a teacher determines that the student did not attempt to meet the basic requirements of the task/assessment, the teacher may assign a zero (MCPS Policy).

Due Dates/Deadlines: Teachers will establish due dates and deadlines. Teachers are expected to separate the due date from the deadline in order to increase opportunities for students to complete assignments; however, there may be some exceptions when the due date and deadline are the same. It is recognized that for daily homework assignments the due date and deadline may be the same to facilitate the teaching and learning process.

Assignment/Make-Up Policy: Students have a responsibility and are expected to make up missed work, regardless of the legal status of their absence. If the absence is excused or is a result of a suspension, the teacher will help a student make up work. If the absence is unexcused, the teacher does not have to help a student make up the work missed, give a retest, or give an extension on work that was due. Even though the teacher does not have to help a student make up missed work, the student still has to make up the work so the student can complete the rest of the course. For unexcused absences, teachers may deny credit for missed assignments or assessments, in accordance with the process approved by the principal and the leadership team (MCPS Student handbook).

Teacher Availability: I am available before school from 7-7:45, at lunch (Tuesday-Friday), and afterschool by appointment. Please let me know when you are coming and what you need help with so that I can prepare for you and we use our time efficiently.

*I look forward to working together with you to have a successful semester.*
Course Overview

Each student who successfully completes Designing Technology Solutions A and B will be able to:

- Define and understand conceptual technological issues and their influence on society
- Explore the engineering design process through software engineering and robotics
- Comprehend the principles of programming, hardware and software design and networks.
- Understand and be able to solve problems by using the design process, identifying and defining the problem, and evaluating and implementing design solutions.
- Understand social computer issues including cyber-security, privacy, and intellectual property.
- Work cooperatively with peers and in small groups.
- Express their knowledge and problems solving abilities in a variety of ways.

This course satisfies the technology credit for high school graduation.

Grading

Students will be assessed in the following categories:

- Formative Assessments -- 50%
- Summative Assessments – 40%
- Homework – 10%

Due Dates and Deadlines

Assignments will be given a due date and a deadline. Students are expected to come in outside of class time to work if they need more time to submit prior to the deadline.

Additional Expectations

- Students who miss class due to absence are expected to read the daily slides in Google Classroom to determine what they have missed.
- Students who miss a test day are expected to take the assessment (outside of class) within the number of days they missed when they return from their absence. For example, if a student is absent two days, they have two days from the day they return to make up the test.
• Students who fail to submit missing work will be held accountable in the exact same manner as the students who are present in class.
• Working on non-class related activities during lab time will result in disciplinary action such as loss of lab privileges.
• **A tardy is a failure to be seated in the assigned seat when the tardy bell rings.**
  Students arriving late to class are frequently disruptive and even delay the start of class. They are also missing important information. Excused tardies must have an appropriate signature – from an administrator, guidance counselor, etc. All other tardies are considered unexcused. Students with one or two unexcused tardies will receive a warning. Students with three or more unexcused tardies will receive a phone call home. Lunch detentions will be assigned for excessive tardies.
• Name, date, class, period must be on each assignment to be graded.

**Communication and Availability**

• Email: kimberly.a.price@mcpsmd.net

• Office: 301-989-5700

• I am available Tuesdays after school, Thursdays before school, and other times (including during lunch,) by arrangement.

**Student and Parent Signatures**

I __________________________________ in pd _________ have read the information.

X __________________________________________________________________________ (Student)

X __________________________________________________________________________ (Parent/Guardian)
Foundations of Technology

Grades 9, 10, 11, 12

This course prepares students to understand and apply technological concepts and processes that are the cornerstone of the high school technology education program. Students study the nature and technological issues of the “Designed World”. Group and individual activities engage students in creating ideas, developing innovations, designing, fabricating, and engineering practical solutions to everyday problems. Technology content, resources, and laboratory/classroom activities allow students to apply science, mathematics and other school subjects in authentic situations.

Technology Credit:
Graduation Requirement
Required County Exam at the end of each Semester

Instructor: Mr. Todd Thaniel  Room B-108
Phone: 301-989-6093
E-mail: trobinson_thaniel@mcpsmd.org

Supplementary reading(s):
Handouts, PowerPoint Presentations, and other resources

Materials:
1. Pencil / Pen
2. Paper and notebook
3. Agenda book – You must have your agenda book to be excused from class, no exceptions.
4. Other materials may be required on an as needed basis.

Consumable Supplies Fee:
There is an $8.00 lab fee associated with this course. The lab fee helps to pay for materials and supplies used by the students taking this course. Lab fees will be collected the 1st week of school for materials to be used directly in the classroom. Payments can be made in the form of cash, money order, check, and online credit card payment. Please make all checks out to Springbrook High School and print the student’s name and ID# on the check. Students will be given a receipt at the time of payment.

Units of Study for the Semester:
1. Agriculture and Biotechnology
2. Natural vs Technological Processes
3. Core Technologies
4. Medical Technologies
5. Manufacturing
6. Information and Communication
**Attendance, Tardiness:**
Students are expected to attend class in accordance with the Public School Laws of Maryland. Students are expected to be in class and prepared to learn when the class starts. Tardiness to class of more than 20 minutes will be treated as an absence. Multiple unexcused tardies and absences, may result in a loss of credit for a course.

**Class participation:**
Participation in class discussion and lab activities are a required part of this class.

**Missed exams or assignments:**
Anytime a student is absent, a note from the parent should be presented to the attendance office within 3 days of the absence. If the absence is unexcused, any assignments not turned in on the assigned date, may not be accepted by the teacher and the student may receive zero on the assignment. In addition, any late work may result in a lowered grade or possibly a zero.

**Lab safety/health:**
It is the responsibility of the students to follow the training of safe practices in the Technology Lab. The implementation and promotion of safe practices in the Technology Lab to prevent incidents and injuries to students are the responsibility of everyone.

**Academic dishonesty:**
Cheating on assignments is a serious offense and can result in a student or students in receiving a zero on any assignment which can negatively affect their overall grade.

**Grading:**
Grading Categories:
- **Homework** - 10%
- **Formative** - 50% (class activities, warm-ups, presentations, projects, reports, etc.)
- **Summative** - 40% (tests, quizzes, research papers, unit reports and projects, etc.)

**Electronic Devices:**
All electronic devices should be turned off and out of sight at the beginning of each class period. If electronic devices are displayed or used during the class period, they may be confiscated and later retrieved at the end of the school day.

**Expectations:**
*It is expected that each student will participate in all class activities and treat others the way they would want to be treated.*
Questions: If there are any questions please do not hesitate to ask, I can be reached by phone at (301) 989-6093 or by email at trobinson_thaniel@mcpsmd.org. Please return the bottom portion of this paper with the appropriate signatures to your instructor.

Foundations of Technology (FOT)
Course Syllabus and Expectations

My signature indicates that I have read and understand the Foundations of Technology (FOT) Syllabus and Expectations guide and will abide by the guidelines mentioned within.

Student’s Printed Name: ________________________________
Student’s Signature: ________________________________

Parent’s Signature: ________________________________
Date: ________________________________
INTERNATIONAL BACCALAUREATE
COMPUTER SCIENCE
COURSE EXPECTATIONS
MR. PRICE – ROOM F209

Course Overview:
By now you have learned robotics, engineering design, and programming games and applications. We will now take it a step further. In this course you will learn about and participate in:

- A broad range of computer science topics from system fundamentals, Computer Organization and Networks.
- One or more Programming and or Game Design competitions
- Mobile Phone Application Programming
- Advanced Game Programming

Class Expectations:

- Be respectful of people and property
- Come to class on time and prepared to learn with all necessary materials.
- Complete all assigned work on time.
- Name, date, class, period must be on each assignment to be graded

Tardiness:
A tardy is a failure to be seated in the assigned seat when the tardy bell rings. Excused tardies must have an appropriate signature – from an administrator, guidance counselor, etc. All other tardies are considered unexcused. Students with 3 or more unexcused tardies will receive a phone call home and detention.

Grading
Students will be assessed in the following categories:
Formative Assessments: 50%  Summative Assessments: 40%  Homework: 10%
-----------------------------------------------------------------------------------------------------------------------------Continued On Back-----------------------------------------------------------------------------------------------------------------------------
**Due Dates and Deadlines:**

Assignments will be given a due date and a deadline. Students are expected to come in outside of class to work if they need more time to submit prior to the deadline. Assignments submitted after the due date, but prior to the deadline will have a deduction of 10% applied to the final grade for one day late and 50% for two or more days late. Most deadlines are two days after the project is due. **Projects submitted after the deadline will receive a grade of zero.**

**Absences/Missed Work and/or Test:**

Students who miss class due to absences are **expected to contact me the day they come back** to determine what they have missed. Students who are absent the day of a test will be expected to take the assessment (outside of class) the **first day** they return from their absence.

**Communication:**

**Office:** 301-989-5700  
**Email:** Michael_C_Price @mcpsmd.org

Remember to check Edline regularly to keep up on your child’s grades and when they have tests. If you have any questions feel free to contact me via email or phone *Please allow 24 hours for a response*

---------------------------------------

**Student and Parent Signatures**

I _________________________________ in period __________ have read the information above and understand the contents.

Student Signature: _________________________________

Parent Signature: _________________________________

Return By: 9/04/15
Title: Internship Syllabus

Internship Coordinator: Sheri Lowe

Course Description
This course provides an opportunity to receive academic credit for a part-time internship experience that applies classroom concepts to the world of work. Requires application and acceptance from Guidance Department and Internship Coordinator, a weekly log and time sheet for hours worked, quarterly project, employer evaluations, and seminar attendance and participation. Course may be taken for 1, 2 or 3 periods.

Objective
Internship students receive academic credit (they may also be paid) in exchange for working in a cooperating organization, agency or business offering an approved internship experience and satisfying course requirements. An internship is an educational experience integrating classroom theories into a professional work setting.

Goals of the Internship:
1. Apply concepts and skills gained from academic experience to a professional work setting
2. Develop new knowledge and skills by taking an active role in the organization
3. Gain exposure to various work roles and career options
4. Clarify and enhance educational and career goals
5. Acquire professional work experience before graduation
6. Foster professional work relationships for mentoring and networking

Course Requirements and Grading Policy
Application including specifics on work and/or internship experience such as company name/location, supervisor number of hours worked and pay (if applicable).

Daily Sign In - Students will sign in daily outside Room G-202 – Record Keeping and Homework Assignments (Professional Dress Card, Some seminar assignments 10% grade

Weekly Seminar Participation – Students are required to attend and participate in weekly Monday seminars. These will be held in F-215 or online. Weekly Reflection Sheet – Students will submit weekly log sheet detailing hours and work completed. Documenting projects or assignments, meetings with supervisor/mentor or other staff members and writing a reflection statement. Weekly reflection and time logs are due one week after the end of the work week. Quarterly Project – At the end of each quarter the student will submit a project related to their internship site or course objectives. Projects will be assigned before the 4th week of each quarter. These three items all fit into the formative category which counts as 50% of the Grade

Employer Evaluation – This check list evaluation will be completed by the employer at the end of each quarter and the students weekly hours requirement are summative assignments and will constitute 40% of the student’s grade.
Dear parents and students:

This letter is filled with important information, which will help you to understand the expectations and goals for this class.

**Objectives:**
This curriculum is designed for students with basic PC skills, who are interested in developing the skills and fundamental knowledge needed to obtain an entry-level computer networking job or career. It provides a hands-on approach to networking education that allows students to gain practical experience with the use of instructional labs and the Cisco Networking Academy’s online curriculum. Students complete engaging classwork that will help them understand the general theories behind computer networking. The curriculum encourages students to consider additional education in IT by teaching applied skills midway through the four-course series. CCNA Discovery was designed to be delivered as an independent curriculum or integrated into broader courses of study at secondary schools, technical schools, colleges, and universities. *(Students will only focus on CCNA Discovery 1 and 2.)*

Upon completion of the first two courses of CCNA Discovery, Networking for Home and Small Businesses and Working at a Small-to-Medium Business or ISP, a student has the option to take the CCNET (CISCO Certified Entry Network Technician) certification exam. CCENT certifies the practical skills required for an entry-level IT positions in computer networking. In addition, to completing this course a student’s aptitude and competence to work in a professional environment is assessed and he/she will be eligible, and may be selected for a course related internship the following school year.

**Supplies:**
You will need to bring the following items to class with you each day:

- 3-ring binder or spiral notebook
- Pen/Pencil
- Paper

**Notebook:**
You are required to keep an organized Computer Maintenance three ring binder. Your notebook will be a valuable resource for labs, research, tests, and quizzes. Notebooks may be reviewed periodically through

**Textbooks:**
Students will use Cisco’s online Networking Academy curriculum as their textbook. Each student will register and create their own username and password once school begins, at netacad.com.
Grades:
You are evaluated on the basis of all of your work. This will include classwork, labs, homework, projects, independent studies, participation, as well as quizzes and tests. Your report card grade will reflect an overall picture of both academic study skills and performance.

Grading Policy
• Students are assessed on the above objectives through various art experiences, written responses and oral presentations.
  • Formative 50% (Classwork, Hands-on Labs, Completed Projects, written responses)
  • Summative 40% (Tests, & Quizzes)
  • Homework 10%

Edline:
Parents and students should check Edline periodically to get a reflection of the student’s academic performance. Please feel free to connect me if the grades in Edline do not reflect the grades handed back in class.

MCPS Computer Conduct:
All MCPS computers and equipment should be used for educational purposes only. Any student participating in computer, computer equipment, network and internet misuse, should be aware that any behavior which violates the rules will result in the loss of computer privileges and/or other disciplinary actions. Students will also be responsible for any damages to a computer that he or she causes. If the student discovers any damage, it must be reported to the instructor at the beginning of the period so that the appropriate person can be charged for the damages.

Expectations:
• Be respectful of others, yourself, and classroom materials at all times.
• Be on time to class and in your assigned seat.
• Complete all work assignments and turn them in on time.
• Be prepared for class by bringing the proper materials.
• You are responsible for all make-up work and incomplete lab assignments. When absent from class, make-up labs or classwork maybe made-up on most Tuesday’s, Wednesday’s, and, Thursday’s after school, until 4:00pm. (See teacher for confirmation.)
• All students are responsible for cleaning up their area before leaving class each day.
• You must obtain the teacher’s permission before using or moving any equipment and /or materials.
• There should be no food, drink, or gum consumed near classroom computers.
I have read, understand, and will comply with the policies and classroom rules stated in this class syllabus.

Date: _______________________

Print Student’s Name: ____________________________

Student’s Signature: ____________________________

Parents’ Signature: ____________________________
Exploring Computer Science

Term: 2015-2016 School Year
Instructor: Ms. Nelson

Course Description:

Computing is involved in nearly every field of study, career and industry today. Exploring Computer Science (ECS) is a high school course that provides students with an introduction to the world of computer science. The course consists of 6 units. Assignments and instruction are inquiry and project based and designed to be relevant and meaningful for students.

Course Goal: Students will develop skills and knowledge based on the foundation of concepts and practices utilized in computer science.

<table>
<thead>
<tr>
<th>Units</th>
<th>ECS Course Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Computer Interaction</td>
<td>Students are introduced to the concepts of computer and computing while investigating the major components of computers and the suitability of these components for particular applications.</td>
</tr>
<tr>
<td>Problem Solving</td>
<td>Students become “computational thinkers” by applying a variety of problem-solving techniques as they create solutions to problems in a variety of contexts.</td>
</tr>
<tr>
<td>Web Design</td>
<td>Students are prepared to take the role of a developer by expanding their knowledge of programming and Web page design and applying it to the creation of Web pages, programs, and documentation for users and equipment.</td>
</tr>
<tr>
<td>Programming</td>
<td>Students are introduced to some issues associated with program design and development. Students design programming solutions to a variety of computational problems including animated stories, video games and community based projects.</td>
</tr>
<tr>
<td>Computing and Data Analysis</td>
<td>Students explore how computing facilitates new methods of managing and interpreting data. Students use computers to translate, process and visualize data in order to find patterns and test hypotheses.</td>
</tr>
<tr>
<td>Robotics</td>
<td>Students apply previous concepts to the study of robotics and work in small groups to build and program a robot to perform a required task.</td>
</tr>
</tbody>
</table>

Grading

Students will be assessed in the following categories:

- Formative Assessments -- 50%
- Summative Assessments – 40%
- Homework – 10%
Due Dates and Deadlines
Assignments will be given a due date and a deadline. Students are expected to come during lunch, before or after school if they need more time to submit prior to the deadline. Assignments submitted after the due date, but prior to the deadline will be deducted 10% of the final grade for one day late and 20% for two days late or more. Projects submitted after the deadline will receive a grade of zero.

<table>
<thead>
<tr>
<th>If the assignment is turned in after...</th>
<th>Penalty</th>
</tr>
</thead>
<tbody>
<tr>
<td>the due date and before the dead line date</td>
<td>10% off</td>
</tr>
<tr>
<td>the dead line date</td>
<td>50% off</td>
</tr>
</tbody>
</table>

Z’s and 0’s: All assignments are based on points. Students will receive a grade no lower than 50% to the task/assessment. If a student does no work on the task/assessment, the teacher will assign a zero. If a teacher determines that the student did not attempt to meet the basic requirements of the task/assessment, the teacher may assign a zero. (MCPS Policy)

- Retake/Reassessment Policy
  Course alike must match MCPS policy
- Assignment/Make Up Policy
Students have a responsibility and are expected to make up missed work, regardless of the legal status of their absence. If the absence is excused or is a result of a suspension, the teacher will help a student make up work. If the absence is unexcused, the teacher does not have to help a student make up the work missed, give a retest, or give an extension on work that was due. Even though the teacher does not have to help a student make up missed work, the student still has to make up the work so the student can complete the rest of the course. For unexcused absences, teachers may deny credit for missed assignments or assessments, in accordance with the process approved by the principal and the leadership team. (MCPS Student handbook)

Teacher Office Hours:
I am available Monday, Wednesday and Friday from 2:30 – 2:50 PM in room F 207. If additional time is needed, students may request an appointment.

Any student who wishes to work independently in the computer lab may do so Monday – Thursdays during lunch. Prior arrangement with the teacher is required.
Personal Finance – Course Syllabus
Springbrook High School
Mrs. Nicole Brown – Room C307 - Office room G202
Available before and afterschool and at lunch by appointment
Nicole_B_Brown@mcpsmd.org
301.989.6032

Course Description
This course gives students a consistent framework for thinking through financial choices in order to improve their well-being. Decisions require action. Students who take charge of their finances are better prepared to invest in themselves and cope with the financial ups and downs that life will bring. An activity and project-based approach will be used.

Course Goals
Throughout this course, students will learn:

- Personal goals and values are the foundation of personal finance
- Invest in yourself (human capital)
- There is an ongoing association between your present-self and your future self
- The value of money changes over time
- Compound interest makes savings work for you, and borrowing work against you.
- Opportunity costs and tradeoffs are inherent in every decision you make.
- Risk and return are inherent in financial investing
- Take steps to protect yourself from the unexpected (fraud, insurance, etc.)
- What you look like on paper (credit report, spending plan, etc.)

This course is designed for students in the 10th thru 12th grade. No prerequisite is required.

Instruction
Instruction will focus on hands-on activities as well as lecture, group discussion, use of technology, and other methods. Students will have the opportunity to work both individually and as part of a small group to complete assignments. Projects will require students to use academic skills in language arts, math, social sciences, and science. Community resources will be accessed by inviting guest speakers, and conducting panel discussions.

Course Assessment

- **Formative Assessments:**
  
  *Formative Assessments:* This includes all assignments that are completed in class including warm-ups, exit assessments, worksheets and daily assignments. These assignments are to be handed in by the due date. Formative Assessments are 65% of your grade, so it is important that they are completed consistently.

- **Summative Assessments:**
  
  *Cumulative Projects:* Cumulative projects will be assigned at the end of a lesson or unit or topic. If you miss a project for any reason, please see me for make-up times. You will only be allowed two days upon your return to make-up a test. Summative assessments will be weighted as 30% of your grade.

- **Homework for Practice and Preparation:**

  Occasionally there will be homework. These will be graded and weighted as 5% of your grade.

**Unexcused Absences:**

All absent notes must be submitted to the attendance office for verification. Once the absence has been recorded as **excused**, you will be allowed to complete the assignment(s) you missed.
Z's and O's:

When using points or percentages, a teacher assigns a grade no lower than 50% to the task/assessment. If a student does no work on the task/assessment, the teacher will assign a zero. IF a teacher determines that the student did not attempt to meet the bas

Due Dates/Deadlines:

Assignments submitted beyond the due date will be deducted points. Assignments beyond the deadline will not be accepted unless there is an excused absence note.

<table>
<thead>
<tr>
<th>Supplies Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is no textbook for the course. Instruction will come from the <em>Take Charge Today</em> curriculum through the University of Arizona. The class will be taught using PowerPoint and note taking guides. Each student will need a three-ring binder to keep the guides as well as notebook paper. Activities, assignments and project outlines can be three-hole punched for organization. A writing utensil (pen/pencil) will be required daily.</td>
</tr>
</tbody>
</table>

Course Outline

<table>
<thead>
<tr>
<th>Course Introduction</th>
<th>Unit 1: Take Charge of Your Financial Well-Being</th>
<th>Unit 3: Saving and Investing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Money in Your Life</td>
<td>Choose to Save</td>
<td>Choose to Save</td>
</tr>
<tr>
<td>Financial Decisions</td>
<td>Savings Tools</td>
<td>Savings Tools</td>
</tr>
<tr>
<td>Setting Financial Goals</td>
<td></td>
<td>The Fundamentals of Investing</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unit 2: Managing Your Money</th>
<th>Unit 4: Spending</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Depository Institutions</td>
<td>Credit Reports and Scores</td>
</tr>
<tr>
<td>The Basics of Taxes</td>
<td>Credit Basics</td>
</tr>
<tr>
<td>Statement of Financial Position</td>
<td>Understanding Credit Cards</td>
</tr>
<tr>
<td>Income and Expense Statement</td>
<td>Protecting Yourself from Fraud: Identity Theft</td>
</tr>
<tr>
<td>Spending Plans</td>
<td>Types of Insurance</td>
</tr>
<tr>
<td></td>
<td>Smart Consumer Spending</td>
</tr>
<tr>
<td></td>
<td>Major Expenditures: Housing, Transportation and Food</td>
</tr>
</tbody>
</table>
ACADEMIC SUPPORT
College Preparation and Literacy
Course Expectations/Syllabus
Ms. Richards (G201)

Course Description:
This course is designed to help students improve their grades and successfully move to the next grade level. Each week we will be monitoring grades, contacting teachers and checking binders/book bags for organization. Our goal is for students to earn report card grades of “C” or higher to maintain eligibility for activities and enable students to earn course credit and successfully move to the next grade level. During the semester we will be exploring college and career options for after high school. Students will be encouraged to use their Naviance accounts and make use of Springbrook’s College and Career Center.

Class Expectations:
- Be respectful of people and property.
- Come to class on time and prepared to learn with all necessary materials.
- Complete all assigned work on time.

Materials:
- Pen/Pencil
- Agenda Book
- Paper
- Computer Access

Weekly Schedule:
Weekly – Personal Development Project
Wednesday- Organization day/Notebook Checks
Friday- GPA calculation/Grade check

Grading
Students are graded on an “All Task” basis with each assignment carrying equal weight. (Assignments are not divided into categories) Students will receive grades based on the following things:
- Weekly Organization/Binder/Materials check 5 points weekly
- GPA calculation/Grade check 5 points weekly
- Personal Development Projects 10-15 points

Z’s, 0’s and X’s: If a student earns a “Z” grade on an assignment they must make up that assignment within three days after an excused absence or the grade will be changed to a “0.” A grade of “0” will be assigned if the student does not make up the work in the given time period or breaks the code for academic honesty (cheats). In some cases a grade of “X’ will be assigned indicating that the student is not required to complete the assignment and the assignment will not be used in calculating the final grade in the class.

Due Dates/Deadlines and Assignment/Make Up Policy: Students will be expected to make up the GPA calculation/Grade check and the Organization day/Notebook Checks immediately upon their return from an absence. The deadline for making up these two assignments is three days after an excused absence after that time the grade will be changed to a “0.” The due date for Personal projects shall be one week from the day assigned. Partial credit 50% or more may be assigned if the project is completed before the end of the grading period.

I am available at lunch and afterschool by appointment. Please let me know when you are coming and what you need help with so that I can prepare for you and we use our time efficiently.

I look forward to working together with you to have a successful semester. Please do not hesitate to contact me if you have any questions or concerns. The best way to reach me is via email:
melissa_s_richards@mcpsmd.org
**Grades for SBWE**

**Weekly:**
- Student completes his/her **work schedule and reflection** for the week (Monday) for a total of fifteen points.
  - 15 points: Student is scheduled to work 4 hours or more a week and completes reflection.
  - 10 points: Student completes reflection but is not scheduled to work.
  - 5 points: Student has a job but does not complete reflection.
  - 0 points: Student does not have a job nor completes reflection
- Student hands in **paystubs** from his/her job with documented hours worked (this could be done bi-weekly, bi-monthly or monthly, but it will be done at least once a quarter.) Hours will be documented by the teacher and entered into the gradebook for points. See below.

**Quarterly:**
- **Supervisor/Manager Evaluation of Student** (Form 280-81) *(1 grade for each quarter)*. 100 points per quarter. Quarters 1, 2 and 3 only.
- **Quarterly Total Hours Grade** is a percentage of the grade. Must work 67.5 hours per quarter. Each hour worked is a percentage of 67.5 hours. You may receive more than the maximum in this category. *(1 grade for the quarter)*
- **Maryland State Questionnaire** (completed by deadline each year as per SBWE coordinator) *(1 grade for the 4th Marking Period Only)*
  - 50 points: Student hands in a completed questionnaire filled out by his/her employer.
  - 0 points: Student fails to hand in a questionnaire.
    *(1 grade during 4th quarter only)*

**Per Semester:**
- **Culminating Semester Assignment for semester A and B:** Portfolio

---

➢ You are expected to give your employer at least 48 hours notice if you cannot work during your scheduled time **DUE TO EXTREME CIRCUMSTANCES.** You should have **NO MORE** than one or two call outs per semester. **IF YOU ARE SCHEDULED TO WORK, YOU ARE EXPECTED TO BE THERE.**

➢ **MCPS Form 280-83 MUST** be completed and on-file in the CCRD office by the end of the first full week of the first and/or third quarter. 25 points.
Title: Teaching as a Profession Syllabus  
Internship Coordinator: Sheri Lowe  

Course Description  
This course provides an opportunity to receive academic credit for a one period in school Internship experience for the student who thinks they may be interested in Education as a Profession. The TAP student is assigned to a classroom teacher, in a course where they showed mastery, to act as a student teacher. They are to help students in the class that may be struggling, help students who are returning from an absence and help the teacher prepare the lessons when appropriate. Requires application and acceptance from Guidance Department and Internship Coordinator, a weekly reflection and time sheet for hours worked, mentor teacher evaluations,.  

Objective  
TAP Internship students receive academic credit in exchange for working in a classroom with a cooperating teacher. The objective is for the student to be exposed to a classroom setting in the role as a teaching assistant to see if they may like to consider Education as a future career choice. An internship is an educational experience integrating classroom theories into a professional work setting.  

Goals of the Internship:  
1. Apply concepts and skills gained from academic experience to a classroom setting  
2. Develop new knowledge and skills by taking an active role in the classroom  
3. Gain exposure to various work roles and career options  
4. Clarify and enhance educational and career goals  
5. Acquire work experience before graduation  
6. Foster professional work relationships for mentoring and networking  

Course Requirements and Grading Policy  
Application including specifics on work and/or internship experience such as company name/location, supervisor number of hours worked and pay (if applicable).  

Daily Sign In - Students will sign in daily outside Room G-202 — Record Keeping and Homework Assignments (Some seminar assignments 10% grade)  

Weekly Reflection Sheet – Students will submit weekly log sheet detailing attendance and responding to a reflection statement. Reflection sheets are due one week after the end of the week worked. 50% of the Grade  

Cooperating Teacher Evaluation – This check list evaluation will be completed by the employer at the end of each quarter and the students weekly hour requirement are summative assignments and will constitute 40% of the student’s grade.