Advanced Computer
Curriculum Bullets
11th & 12th Grade

- Running a business
  - Students will run a simulated business – ground up
    - Name, Logo, Business Flyer
    - Writing a business plan
      - Research a business plan and how to write one
    - Research the type of business you are wanting to own
      - Search local business and interview the owners
    - Running a personal budget on Microsoft Excel for your business plan
    - Running a business budget for your business plan
    - Designing items to sell in your business
    - Researching how to be interviewed for a job
    - Research giving an interview to hire employees
      - Having mock interviews
    - Run spreadsheet for your employee in your business
    - Directing and producing a commercial for your business
      - Advertisement
    - Running a 4-month profit spreadsheet for your business plan
    - Putting your over-all business project to a PowerPoint presentation
      - Presenting this business to the classroom
    - Guest speakers for the classroom that own business locally

- Christmas Budget "$10,000.00 Bedroom Budget Project
    - Students are given a budget to design a bedroom
        - Run their budget on Microsoft Excel
        - List everything, they purchased
            - Name of item
            - Order Number
            - Quantity
            - Cost
            - URL they used to find items
            - Run a pie chart to show where they money was spent
        - Excel Spreadsheets
            - Learn to write formulas
            - Run formulas throughout the page
            - Choosing the right Pie Charts
            - Making Blueprints
            - Setting up your sheets
            - Adding Sheets to your spreadsheets
            - Renaming your sheets
            - Color Coding your sheets
        - Blueprints
            - Using the items, they purchased, each student must make am Excel Blue Print of their new bedroom
            - Inserting pictures
        - The must put all information on a PowerPoint to give to the classroom as a presentation
            - One slide per item
            - All spreadsheets included in the PowerPoint
            - Must include music at the end of the presentation

- 3-D Animations – More advance for 11 & 12th grade
  - Pencil Animations
  - Making commercial to advertise Bayou Academy's Sports
    - Students learn to be creative by designing a story using Pencil Animation software
    - Add music
    - Add pictures
    - Drawing skills
    - Learning onion skins

- Stop Animations - More advance for 11 & 12th grade – Has to have an impact on todays problems – Example: Stop Bullying
- Using Lego parts to design and direct a movie dealing with a particular topic
  - Camera Skills
  - Vegas Movie Software (Professional)
  - Voice Overs
  - Engineering skills in set design
  - Learning how to render when finished to make a movie for different computers
  - Story board design
  - Directing a Movie
  - Producing a Movie

  - Creating Commercials – Advance for 11th & 12th – For Bayou Academy has to have an impact – Examples – Bayou's Go Green Commercial
    - Learning to direct
    - Learning to write scripts
    - Videoing
    - Editing
    - Saving and inserting
    - Downloading to web site

- Website Design
    - Design your own website
    - Uploading files to website
    - Publishing website
    - Housing your videos on another site to use on your website

- Robotics – 2nd Semester – More Advance – Using LabView & Tetrix
    - Engineering
        - Building designs using written instructions
        - Designing and writing your own instructions
        - Building designs using your own written instructions
    - Map Designs
        - Following the specifications to a written map from the teacher
        - Making your own written map for another team to follow
    - Basic Science/Math skills
        - Using math/science to program your bot to do a certain task
    - Programing
        - Programing using LabView
        - Programing using RobotC
        - Programing using Mindstorms
            - Learning how to write code in each software
    - Coding
        - Learning what coding is
        - Learning how to read code
        - Learning how to write code

    - Open Robotics
        - Letting the students take their learned skills and design a bot of their own
        - Writing the instructions on how to build this bot
    - Competition - Using bigger robots for 11th & 12th
        - Letting the students design a set for the competition

- - - Advertising their competition school wide but putting a commercial together
    - Battle of the Bots: the students will design, build, and execute bots to fight in the competition
  - The advance class with design the competition for computers apps class
    - Learning to make blueprints
    - Design each area of competition
    - Build sets – if needed
    - Write maps – if needed
    - Team work on a large scale