



Career Lab Syllabus
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OVERVIEW:

Welcome to Career Lab, a class designed to introduce you to careers and technologies that will affect not only your daily life but future choices. Many of these modules have been developed to interact with high-tech equipment.

Self-directed student activity guides have been developed to assist you in learning about each module. The activity guide will explain each activity and direct you through the explorations of that technology with little or no teacher direction. Reading is a very important part of each and every module. As a result, it is an important element of this class.

You will notice that the career lab has been designed in an exciting and pleasing way and that each module contains new and expensive equipment. We are very proud of the lab and want to keep it looking nice and in good repair. **It is your responsibility to do your part to protect the equipment and to help with the daily room maintenance. Remember, you are working with very expensive equipment and everyone must be careful.**

All of the careers and technologies that you will be exploring have activities that are self-directed. It is hoped that your experience in this class will be exciting, interesting, and fun and that after you have taken this class you will have a better understanding of the careers and technologies that you will encounter in the future. Enjoy, and have a good experience.

BASIC SKILLS:

In addition to exploring a number of modern technologies you are expected to learn basic and fundamental skills that will be very useful to you regardless of the career you choose. One major objective of the explorations in career lab is to allow you to experience as many careers and areas of technology as you can in the time period and space available. An important part of any technology involves the application and use of the reading, writing, and math skills that you have learned in other classes. Although the emphasis of this class is hands-on activities, you will be required to read and write as a part of each module. You will also see your math skills are important and can be applied in everyday situations.

At each module is a student activity guide. The guide contains self-directed instructions to assist you in exploring the careers and technology. These instructions will explain each activity to you and will allow you to explore the careers and technologies in a personal and interesting way. You will have to follow directions very carefully and read each word and sentence to make sure that you understand what you are doing. You will also be working with another person at the module. This will take cooperation on the part of both students. You are encouraged to get to know your module partner, work together, and become a good team. In fact, you should complete each activity together. As you will soon notice, there is a lot of information at each module. You must not waste time. You must stay on task and work to complete the activities.

CLASSROOM PROCEDURE:

One of the objectives of this class is to provide a relaxed and enjoyable learning environment for all students, therefore, the classroom policies are simple and kept to a minimum. It is your responsibility to read, understand, and follow these policies:

1. Each day you are to go directly to the area to which you are assigned. It is your responsibility to be in your designated area and working by the time class is to begin.
2. While working in your module, you may move around in your designated area only. You are not to leave your module area at ANY time unless you have PERMISSION from the instructor to get a drink, go to the restroom, sharpen your pencil, go to the printer, or get supplies.

3. You are not to talk to another student that is not assigned to your designated area.
4. Do not bring food, drinks, gum, or candy into the career lab.
5. You are not to enter the lab or storage room without the permission of the instructor.
6. You are encouraged to talk with the instructor anytime. Raise your hand for assistance.

ATTENDANCE:

Attendance in the class is very important. You will be expected to attend all class sessions. Any missed classes must have clearance from the office.

Absences

1. Excused and unexcused absences will be handled according to school policy.
2. If you miss class because of In School Suspension (ISS) it is your responsibility to make up any work missed.
3. If you miss an extended time of class due to illness/vacation/etc., it is your responsibility to make arrangements with Mr. Wielgus to get your assignments caught up.

Tardies

1. A tardy in the career lab is when you are not in your assigned area when the bell rings (or when class is scheduled to begin). In order for you to participate in the day's activities, you must have an excused tardy slip from the office or another instructor.
2. The first tardy will be a warning. The second and subsequent tardies will result in a lunch detention being assigned.
3. Abusive tardies will be reported to the office.

LABORATORY:

The career lab has been designed to provide an atmosphere which encourages and challenges all students to learn according to their own capabilities.

1. Upon entry into the career lab, you are to proceed directly to your assigned module.
2. When you enter the module, you need to check inventory and/or materials to see that everything is in place and that no damage has occurred to any of the equipment. **If you wait until after class has started, you will be responsible for any damage that may have been done. Do your part to keep the module in good condition. Please ask if you have any questions about how to operate any of the equipment in the career lab.**
3. You will receive participation points for each day that you stay on task, show cooperation with fellow students and the instructor.
4. Please learn to respect other people's property. If you find something that belongs to someone else, notify the instructor. Remember, it is your responsibility to take care of your own materials.
5. Once the class has begun and you are in your module, you may be allowed to go to the restroom or get a drink, etc., however, you must obtain permission from the instructor before you go. You will be allowed to leave the lab minimally.
6. If you have a question while working in a module, raise your hand. Before raising your hand to summon the instructor, **attempt to solve the problem or answer the question by rereading the instruction in the student activity guide with your partner.**
7. Last thing each class, students will check inventory on their module, clean up the area, and return materials to the proper places.

DISCIPLINE:

Your attitude and behavior is a very important part of this program. You, and only you, are responsible for your behavior. The success of the program is dependent upon how you act and react to your fellow students and the instructor. In order to make this an enjoyable learning experience for all students, the following procedures have been implemented in the career lab.

1. You are subject to the school rules as stated in the student handbook. The instructor in the career lab will enforce all school policies.
2. You will be held accountable for your own behavior. You will be held accountable according to the following criteria:
 - a. First offense – Warning
 - b. Second offense – Lose participation points and lunch detention
 - c. Third offense – Lose participation points and lunch detention

- d. Multiple offenses – Will be referred to the office
3. The instructor in the career lab will determine acceptable behavior on a fair and impartial basis to insure the best possible learning environment for all.

GRADING:

During this quarter your grade will be based on the number of points you accumulate. You earn points for completing aspects of the module, such as:

1. **Daily Response Questions** – Each module contains 45 daily response questions. Activities 1 through 9 contain 5 questions each. Each question is worth 1 point.
2. **Lab Participation** – Each module is worth 215 points. 50 or those points are through participation. You earn these points by staying on task, cooperating with your fellow students and the instructor, completing the daily activities completely and accurately – 5 pts. per day will be given for lab participation
3. **Portfolio** – Students will complete an objective assessment sheet and compile a portfolio of everything they have completed during each activity of the module. 10 points will be possible per activity.
4. **Post-Test** – Each module has a 20 question Post-Test. Each question will be worth 1 point. The Post-Test will be given at the beginning of Activity 10.

Other points for your grade are earned through your score on problem solving activities or other activities that may be part of the career lab.

****Extra Credit may be earned by completing Activities 11 – 15 in the Student Workbook. For each completed extra credit activity, 3 points will be added to the student's overall grade.**

THE MODULES

- **Architectural Drafting**
 - *Students begin this module by becoming familiar with the different tools — pencils, scales, erasers, T-squares, templates, and dividers — necessary to create precise and accurate architectural drawings. As students use these tools, they are obtaining valuable experience and practice in creating appropriately scaled designs, simple floor plans, accurate linework and letterwork, difficult wall section drawings, foundation plans, and front elevation plans. In addition to handling sophisticated measurements, students learn the complexities of reading architectural blueprints.*
- **Computer Applications**
 - *Computers are everywhere, and the people who have at least a basic understanding of common applications, such as word processing, spreadsheets, and presentation software, will be a step ahead of those who don't. In this module, students get a solid introduction to these important computer applications and plenty of time and support in their sustained practice. As they work, they develop a report using a word processing program, a family budget using a spreadsheet, and a short presentation using a presentation software.*
- **Computer Programming**
 - *In this curriculum, students will be introduced to computer programming using the C# (C-sharp) language. Students will explore the Microsoft® Visual Studio Express application. They will learn basic commands of the C# language, and they will learn about object oriented programming and create a simple Windows® user interface.*
- **Desktop Publishing**
 - *In this curriculum, students will explore the field of desktop publishing. They will learn about the various tools and concepts used in this field. The students will also learn to create various documents while adhering to important publishing principles. After the students complete their publications, they will learn how to export their publications for various media as well as what to look for when selecting a printing company.*

- **Digital Audio Production**
 - *Most people only think of radio when they think of digital audio production, but it encompasses so much more. In this module, students delve into the exciting world of digital audio production. Students have the opportunity to explore all facets of digital audio production, including multimedia and broadcast. This module increases the students' knowledge of audio production and the technological advancements made in the industry by using state-of-the-art digital audio production techniques. Students utilize production and post-production digital editing techniques such as recording, editing, and mixing to create a professional, high quality product.*
- **Electronics**
 - *Students begin the Electronics module by becoming acquainted with electrical components and their symbols. Soon they are interpreting schematic designs and creating a variety of circuits with resistors, transistors, photocells, capacitors, and inductors. The students then use a digital multimeter to measure voltage, current, and resistance. After making an alarm system, students go on to create their very own PA system using just the trainer and their own knowledge! By the end of this MediaPLUS module, students are able to analyze an electronic circuit, determine any problems, and choose, as well as carry out the best solution.*
- **Flight Transportation**
 - *The DEPCO Flight Transportation uses specifically designed yoke and computer-simulated flight instruments to give a realistic experience. By using this equipment and software, students learn primary flight controls such as the yoke and throttle. Students also learn difficult flight tasks including, turning without changing altitude, making a successful two-minute turn, and following a flight path. In addition to reading and interpreting an altimeter, heading indicator, airspeed indicator, turn coordinator, and vertical speed indicator, students learn about radio navigational tools and Global Positioning System (GPS) navigation.*
- **Get The Look**
 - *Professionals who work in style-related careers have a wide variety of opportunities for the development, implementation, and sales of products and services. In DEPCO's Get the Look module, students experience four professions that fall into this category. As students learn about what it takes to work as an Apparel Design Engineer, Clothes Designer, Cosmetologist, and Fashion Consultant, they complete activities, learn useful information, and have a great time doing it!*
- **Graphic Design**
 - *In this popular MediaPLUS module, students explore the fundamentals of graphic design and learn how to apply them in order to manufacture real-world projects produced in industry today. A solid foundation in audience analysis, color theory, typography, and design principles are taught to the students as they work on challenging design projects. Lastly, students apply their new knowledge of graphic design by producing a T-shirt, hat, or mouse pad with the assistance of a computer, graphic design software, printer, and transfer press.*
- **Hospitality & Tourism**
 - *A good meal and sound nights sleep are things a traveler needs. Since ancient times, weary travelers have looked to innkeepers for a meal and rest. However, things have changed since ancient times. The industry of hospitality and tourism has followed a high-tech path. What were once a few rooms over an old tavern have flourished into what we now see as mega resort complexes, towering skyscrapers, and thrilling theme parks. In this module, students learn about the many facets this industry provides to not only consumers, but to those who choose to make hospitality and tourism a career. Students start by creating a luggage tag and then move on to essential skills such as map reading, utilizing hotel management software, and theme park simulation software.*
- **Landscape Design**
 - *Landscape design involves the analysis, planning, design, creation and/or construction of exterior spaces utilizing plant materials and appropriate landscape elements. And to think all of this can be done with simple software and of course, creativity. The landscape design module will test students' ingenuity as they design a rough draft of a landscape design and then use software to complete the final project. Through this process students gain valuable experience and practice in completing scaled designs, the application of basic design principles to landscape, and even basic math skills to create a bill of materials. Bonus activities will allow students to solve problems similar to*

those that professional landscape designers may experience and to use the Internet to research career opportunities relating to landscape design.

- **Personal Finance**
 - *DEPCO's Personal Finance curriculum helps students develop the skills needed for solving real-world problems. Students will be introduced to personal financial planning, budgeting, investments, and insurance protection. Students will learn to improve their decision-making skills, which will enable them to become more responsible consumers, producers, and business owners. Students will also learn how to handle money, set priorities, and accumulate savings as well as determine employer benefits.*

- **Precision Measure**
 - *Accurate and precise measurements of parts and products are crucial to the success of many major industries in society today. Design, fabrication, and manufacturing are examples of such industries. The Precision Measure module covers the full spectrum of measurement needs by explaining the functionality and components of different measurement systems and the tools utilized in each system. Measurement tools include anything from a common steel rule and tape measure to the more complex thumb lock caliper, dial caliper, and micrometer. By the end of this module, students will have a firm understanding of the wide variety of measurement practices, along with an excellent foundation in key mathematical processes, such as determining area and volume of objects, calculating square feet, and reducing fractions to their lowest terms.*

- **Presentation Technology**
 - *Presentation technology is a powerful graphics curriculum based upon PowerPoint. Using PowerPoint, the students gain a basic knowledge of each component of a presentation: individual slides, speaker notes, an outline of a presentation, handouts, lectures, agendas, and flyers. The students then use graphics, text, charts, movies, sound effects, and even the Internet to share this information. The presentation is then displayed as an electronic slide show on a computer, a video projector, or the Internet.*

- **Residential Plumbing**
 - *In Residential Plumbing, students gain a solid understanding of the tools, terms, and techniques found in the plumbing industry. After a thorough orientation to safety standards and procedures as well as the Student Residential Plumbing Center, students put together and take apart a lavatory faucet. Next, they mount a kitchen sink faucet and install a kitchen sink waste water removal system, install a shower head and faucet, and outside faucets. As students complete each hands-on activity, they are learning about the kinds of CPVC pipes and fittings, the four basic areas of home plumbing, types of plumbing lines, and much more.*

- **Residential Wiring**
 - *Students start this module with a complete safety and hand tool orientation, and then they become familiar with the Student Wiring Panel, our specialized residential wiring kit. They begin by installing and wiring the service entrance, ground rod, and service panel before installing and wiring a dizzying array of items: circuits, breakers, junction boxes, convenience outlets, ceiling lights, wall switches, additional junction boxes, a 220-volt outlet, doorbell, and a 3-way switch. Lastly, National Electrical Code (NEC) information, units of electricity, and accurate calculation of electric usage are some of the final components that help to produce this exciting DEPCO module.*

- **SolidWorks Basics**
 - *The SolidWorks program is used to design and document three-dimensional parts and assemblies. It provides two-dimensional and three-dimensional tools, creates quality products with fewer revisions, and efficiently manages the design process. In this curriculum, students will learn to draw, extrude, cut, fillet, and chamfer parts, and animate an assembly.*

MODULE PREFERENCES

Students will be given the opportunity to rank modules according to their interest. Depending upon the number of students who rank each specific module will determine the actual modules that the student completes. For example, if 10 people rank Graphic Design as their favorite module, only 6 students will actually get to complete the module. The remaining 4 will have to complete a different module...hopefully their second choice. **The students will be scheduled to their modules by a computer program.** The instructor is not scheduling the students because he does not want to get into the game of "Susie really wanted this

module but you gave it to Johnny because you like Johnny better". The scheduling software takes all of the students' preferences into account when scheduling the module rotations.

THE BOTTOM LINE

This will be a fun class. The Triad school district financially invested into this class. Each student will be expected to maintain proper behavior at all times. Students found to be negligent, purposefully misusing equipment, or in any way behaving in such a way that could lead to damage to the equipment or that endangers other students will be sent directly to the school's administrative team. The responsible/correct use of any equipment will be taught and discussed in class, but it would be helpful if parents and students discuss its necessity at home, so that there is no misunderstanding regarding the responsible use of the equipment the Triad school district has invested in for this class.

Students that put forth the effort into this class will earn a good grade, find it enjoyable, and will learn about different careers and/or technical skills.

We have read and discussed this class syllabus and we understand the responsibilities in regard to using the equipment in the Career Lab. We are aware of the consequences for mishandling/abusing equipment and other irresponsible behavior. We understand our student will not be permitted to use any Career Lab equipment until this document is signed and returned.

Student Name

Student Signature

Date

Parent Name

Parent Signature

Date