

# CareerTEC Chronicle

*“An investment in knowledge pays the best interest.”*

## From the Director ...

# Thanks for Caring

### Consortium Member Districts

- Dakota#201
- Durand #322
- Freeport #145  
(including Aquin)
- Orangeville #203
- Pearl City #200
- Pecatonica #321

### CareerTEC Programs

- Auto Body
- Auto Mechanics
- Careers in Auto Technology
- Careers in Business
- Computer Information Systems
- Construction Trades
- Cosmetology
- Criminal Justice
- Culinary Occupations
- Early Childhood Education
- Graphic Design
- Health Occupations
- Industrial Technologies
- Nail Tech
- NJROTC

### CareerTEC

2037 W. Galena Ave.  
Freeport, IL 61032

Phone: (815) 232-0709  
Fax: (815) 235-8050

See us at:

[www.careertec-il.org](http://www.careertec-il.org)

**N**o, the 2020-21 school year has not been the year we imagined.

While some may like them to keep their faces warm, most of us hate wearing masks. We miss seeing each other's smiles in class. Social distancing makes it difficult to have any kind of connection with each other. Some elect to just stay home and learn remotely.

Don't forget the rules ... we seem to need rules to do anything and everything! Check your temperature. Wash your hands. No food in class. Stay six feet apart. Constant questions if you feel sick or have symptoms.

It's all a bit much, and yet it's important and necessary to keep everyone safe and healthy from COVID-19.

I am so proud of our students and staff for making the best of a stressful, demanding year. It certainly hasn't been easy.

CareerTEC prides itself on hands-on learning. In general, most of us learn best by doing and yet, when we go remote,



**Brian Greene,**  
CareerTEC  
Director

this kinesthetic or tactile learning becomes hands-off. Not including our classes held at Highland Community College, we were remote between Oct. 27, 2020, and Jan. 4, 2021 (and some of our classes were remote even longer).

Yet, everyone has mostly seemed to take these inconveniences in stride. The pandemic was not planned nor was it wanted. It's been tragic and has caused lots of suffering in our world.

We move forward and do the best we can under the less-than-ideal circumstances. Emotionally and physically, we take care of each other and ourselves by abiding by the rules. We all view the virus in

different ways, but we respect the fact that our carelessness and/or neglect could cause pain to someone else.

If you feel sick or have any virus symptoms, please stay home and, if possible, learn remotely. If you are fine, we *strongly* encourage you to attend class in person ... again, we pride ourselves on hands-on learning.

Please wear your mask properly at all times; cover your nose and mouth. I've noticed a few students slipping on this ... Wearing your mask is similar to laws regarding smoking in public areas: It is intended to protect others.

Students, please be sure to thank your teachers for everything they do for you; it's not simple serving online and in-person students. Teachers, please thank our students for their patience.

No, it's hasn't been the year we wanted but we have persevered and made it a great year! Thank you to everyone!

### Follow us on:



@CareerTEC



CareerTEC @freeport61032

### INSIDE THIS ISSUE:

#### Program Updates for ...

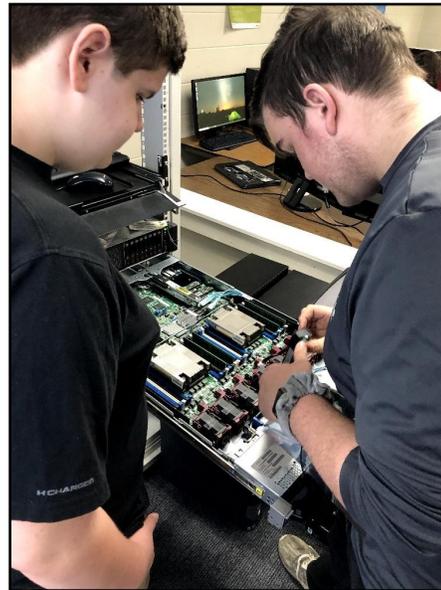
- CIB and CIS, Page 2
- CTYA and Culinary, Page 3
- HOYA I and II, Page 4
- CJ and Ind. Tech, Page 5
- Cosmetology, Nail Tech and ECE, Page 6
- Graphic Design, CATS, and NJROTC, Page 7

## Program Updates at St. John's ...



### CAREERS IN BUSINESS

CIB 1 students have been learning how to properly write/present business proposals, letters, memos, and presentations while also learning Microsoft PowerPoint and Word. Next, we begin personal finance and investing and begin our annual participation in The Stock Market Game, which is a three month national investing competition. We remain hopeful that students will be able to participate in job shadowing in the spring.



### COMPUTER INFORMATION SYSTEMS

This year CIS 1 and 2 students have made cables, created virtual machines, disassembled and reassembled, and performed troubleshooting on computers. Students have cloned hard drives from HDDs and upgraded laptops with SSDs. Students have installed operating systems. Students have created and performed network troubleshooting, both on physical hardware and in Cisco Network Academy virtual simulator Packet Tracer. Year two students are currently working in the C++ programming language. Three year-one students have currently passed A+ Certification Exam 220-1001.



### 2021-22 Applications Being Accepted

1. Go to [www.careertec-il.org](http://www.careertec-il.org)
2. On top of home page, choose 2021-22 Course Offerings for complete information about each of CareerTEC's programs.
3. Either in course offerings or in Student Application at the top of the home page, select the application link.
4. Applications should be done with a parent/guardian in order for proper consents and information to be received.

# Program Updates at Construction & PCK ...

## CONSTRUCTION

Construction students at the work site are practicing accurate tape measurements and performing accurate cutting. The areas in the house that are under construction are framing a closet, framing an inside door, sanding drywall after taping, and applying joint compound. Squareness in these areas are proven by the students using various methods such as cross measuring diagonally, using a square and the 3,4,5 variant to determine square corners during and after assembly. Students are also using a level for plumbness of framing, which is resulting in less headaches for installing drywall and doors. Some students are working in the finishing stages of gradual tapering the seams on drywall by sanding for a better look. Air registers outlet covers are being checked for fit with some alterations being done to improve aesthetics. Along with performing the work, students are discovering the in and outs of the tools, fasteners, and supplies in a



safe way. Oh yes, and wearing masks!

Currently, CTYA is onsite for two days a week and remote for the other three days. Students will return to hybrid learning (in person or remote) five days a week starting March 8. We are hanging water resistant drywall in the master bathroom. Upon completion we will apply drywall compound and sand to a smooth finish. Final coats of finish drywall compound and final sanding are also being completed in the living room and great room.

Other projects in process



include framing and sheeting a storage system in the garage.

On off-site days, students

are developing their resumes and learning about the city and county building permit process.

## CULINARY OCCUPATIONS

In recent weeks, Culinary Occupations students have been learning a variety of useful skills and techniques. Students have learned about leavening agents through baking lab activities, including cupcakes, mint-frosted sugar cookies, and cinnamon rolls.

Additionally, students were taught how to cook with fresh herbs and prepared dishes including cheddar chive biscuits



with sausage gravy, homemade pizza, and pork chops with rosemary apple chutney.

## Program Updates at St. John's ...

### HOYA II

HOYA II students are playing BINGO and Jeopardy to build our foundation of medical terminology word parts. The students are using 3 R's to also cement this foundation: wRite, Review, Repeat. They have to write the word part on the definition BINGO cards as a tactic to assist with the correct spelling.

As they worked diligently at their internship sites, HOYA II students found a fun way to assess their ability to carry out daily tasks while evaluating whether they will have enough energy to respond to the unexpected demands that commonly occur while providing care to others. The physical fitness activity included measuring their flexibility, leg muscle strength as well as muscle and cardiovascular endurance. Students had to perform three sets of each series of activities.

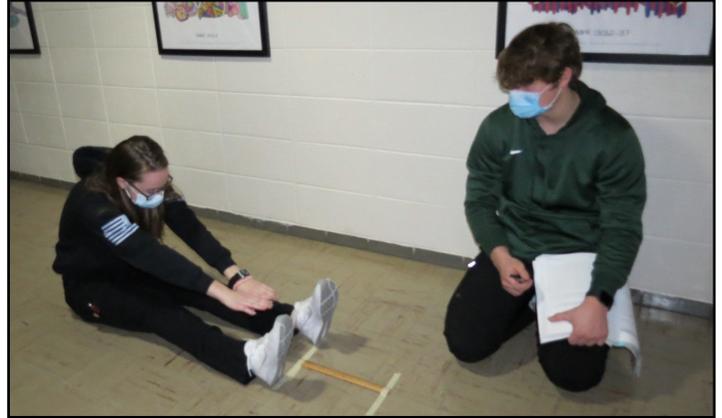
1. Flexibility activity: Students sat on the floor with legs straight out in front of them and slowly reached with both hands as far forward and they could. We then measured the distance in inches.

2. Leg muscle strength activity: Students performed the standing broad jump, again measuring their result in inches.

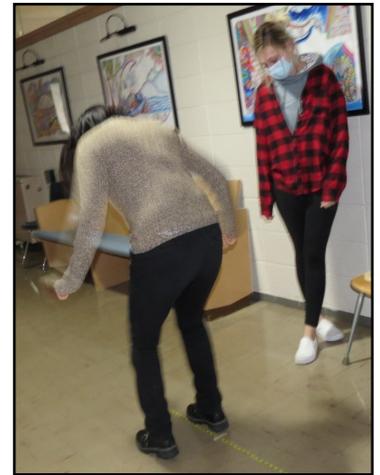
3. Muscle endurance activity: Students performed as many sit-ups as they could in one minute.

4. Cardiovascular endurance activity: Students took a resting pulse rate. Then, while their partner supported the step ladder, the student had to step up and down from the ladder for three minutes. Then, they recorded their pulse rate.

Please remember that the students completed three sets of each series, back to back. Depending on their results, they received an



“Excellent,” “Good,” “Average,” “Fair,” or “Oops” rating for each category. Students then had to discuss areas they would like to improve and plan changes that will ensure that they can meet those goals.



### HOYA I

How do we breathe? How do we die? How do we love?

We have had quite a busy last few months.

We learned about oxygen and what breathing does for our bodies. Some students experienced what it felt like to wear a nasal cannula through a class period in their nostrils. Then, they explained to the class what and how the experience felt. We then discussed how patients and residents must feel when asked to wear it long term.

We spent several weeks understanding death, grief, the dying process, and what our role is in death as humans and healthcare providers. Students were moved by the movie *Tuesdays with Morrie*.

Hospice came to our classes



via Zoom and gave a great presentation. We explored students' fears about death and experiences they had with death.

Then of course in this Hallmark week of love, we are starting to work on the body systems/organs. A big project has begun. On a life lesson



level, we are looking at the types of love, our beliefs about love, what role love/passion for a career plays in our lives, and what role love/touch plays in the healing process.

Lastly, we looked at ourselves as humans and journeyed about what in us

makes us a hypocrite and how we can work on that to impact others and our world positively. We assessed the quote, "Yesterday I was clever and wanted to change the world. Today I am wise so I am changing myself." — Rumi

The students continue to grow in knowledge, understanding, and depth. Since we were unable to do clinicals, we have had speakers via Zoom come on and be interviewed about their college and career path. We have had a mental health nurse and an ICU travel nurse so far.

It has been well received and we will continue to explore more careers in this way. Lastly, we hope come March we can do clinicals. Please hope with us!

## Program Updates at Highland College ...

### CRIMINAL JUSTICE

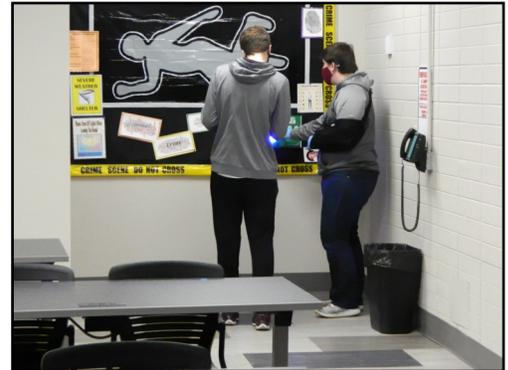
In Criminal Justice first year (CJS 102 Corrections and CJS 103 Introduction to Cyber Security), we are learning about the history of corrections and sentencing processes. We will start branching out into topics such as re-entry, prison programming, juvenile detention, and more. Each day in class we learn content and apply these in critical thinking challenges or tasks.

Today, was a fun activity day for the "Hidden Fingerprint Challenge." Students have the class period to locate 40 hidden fluorescent fingerprints I hid in the building throughout the first and second floor. Using special blue lit flashlights, orange goggles, and other safety equipment, socially distanced teams embarked on their investigation scavenger hunt.

For Introduction to Cyber Security, students are building upon fundamental concepts and starting to learn about different types of

cybercrimes. For example, yesterday, we compared traditional bank robbery to ransomware bank robbery. Identifying the similarities, differences, motives, techniques used by offenders, and more. Next week, we are exploring organized cybercrime and threats by various cyber criminals.

In Criminal Justice second year online (CJS 203 Criminal Law and CJS 208 Introduction to Terrorism and Counter-terrorism), students are learning about the origins of terrorism and will start branching out to specific categories of terrorism, such as dissident, state-sponsored, and religious-motivated terrorism. While the class is online, the discussion forums given students a chance to communicate with each other and the instructor regarding specific topics. In Criminal Law, students are learning about the principles of liability, legality, Constitutional limits, and so much more.



### INDUSTRIAL TECHNOLOGY

This semester Industrial Tech students are working on shielded metal arc welding (stick welding) for a few weeks then back and forth with gas metal arc welding (MIG welding). In the first semester they learned the five weld joints and the four weld positions. They worked on their quality of welds and learned to set their voltage/wire speed/maintain their weld gun, and also learned to use the chop saw/plasma cutter and use proper protective equipment and safety. Some of the students built some projects, such as a skate board ramp, chairs, and hammers.

This semester they need to know seven basic weld symbols for their assessment test; the goal is 100% with at



least 80% correct in the form of written and verbal format. The two fabrication students are designing a weld and plasma table for the lab while also helping me in the weld lab on projects.

Year 1 Industrial Technology students have continued to learn in the welding lab on Mondays and Wednesdays. On Tuesdays and Thursdays, students have graduated from the 2D CAD

software to the 3D CAD software. We are building 3D solid models similar to those used by engineers. These models can be converted to blueprints, assemblies, 3D printer programs, or CNC machining programs.

Year 2 Industrial Technology students continue to utilize the 3D CAD software. They are refining their blueprints and assembly drawings. Additionally, they are in the



process of designing an outlet phone charger, which they will 3D print. They are also completing a number of assembly projects in which they engineer and model the components, assemble the components in the 3D software, and finally apply tolerances to the components to assure proper fit and function.

## Program Updates at Highland College ...

### EARLY CHILDHOOD EDUCATION

This year has been one of many challenges, but it has especially been a challenge for our early childhood program. Due to the licensing regulations for our community licensed programs and partners, our students were not allowed to be in early childhood programs with children.

This has been disappointing to all of us – students, instructor and the programs. The programs really enjoy having our students, and the students love to work directly with children. At the beginning of February, our four Year 2 students were allowed to begin their fieldwork experiences and placed into two of the local early childhood programs. This was due to the lowering rate of COVID-19 and lessening of licensing.

This has opened up opportunities for the Year 1



students to spend time in the observation booths at the Y Child Care Center to at least observe live children in real time. We have viewed many videos over the year of

children in classrooms, so they were ready for real time. We have had guest speakers via Zoom from other parts of the state. We also had the wonderful opportunity to learn

how to do infant massage from the ROE Parent Enrichment Program parent educators. The students practiced doing infant massage on dolls.

### COSMETOLOGY

Currently, our year 1 Cosmetology students are working on shampoo, conditioning and styling hair. They practice on their mannequins and then practice on each other. It becomes a fun time for the student as it gets him or her out of the desk and get to be in the salon.

Year 2 Cosmetology students are working on roll-sets, perming and braiding. They are not currently working on bookwork or exams as they will practice on mannequins to perfect their skills to provide a service for their clients.



### NAIL TECHNOLOGY

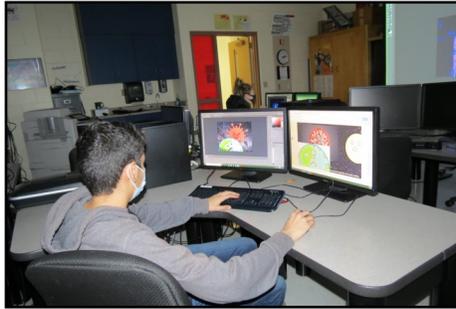
The Nail Technology students are currently studying the world of electricity. We are learning about direct currents, alternating currents, electrical measurements, UVA, UVB, and UVC rays. We are also learning the importance of electricity and electrical safety in the beauty industry. Later this week, we will be honoring Black History Month by doing nail art using the colors of the African-American Flag.

## Program Updates at Freeport H.S. ...

### GRAPHIC DESIGN

Graphic design students have been working directly with Ms. Cornelius (whether in-person or via screencast lessons) to learn various image editing techniques in Photoshop and/or Photopea (Photoshop's free, web-based doppelganger that works on Chromebooks). Students have learned about masking, layer control, layer effects and styles, channels, and various image adjustment and selection options/tools.

Additionally, students completed two text effect tutorials that they selected. The purpose of these tutorials was to



give students the opportunity to create imagery from written technical documentation, forcing students to read and interpret instructions rather than rely on direct verbal and visual cues.



Between now and spring break, students will be making posters and then moving on to animation.

### CAREERS IN AUTO TECHNOLOGIES & SERVICE (CATS)

At the beginning of the year, CATS started the first-year CareerTEC students with small engines, and second-year students picked up where we left off last year with v8 Chevy engines. Then in October, we all got into starting and charging systems. In December, we all started on drive axles. When we came back from winter break, we have been



working on suspension systems.

Now we are working on things in the shop that need repair. The first year is



working on snow blowers and small engines of all kinds. The second year is rebuilding a small block Chevy with new pistons, rings, cam, bearings,

heads, oil pump. Plus, we all are repairing cars that need oil changes, starters, alternator, suspension and drive axles.



### NAVY JUNIOR RESERVE OFFICERS TRAINING CORPS (NJROTC)

The NJROTC program is excited to be back to in-person classroom instruction and allowed to resume team practices. The Air Rifle Marksmanship, Drill, Academic and Athletic teams are in full swing, and we are anxious to start practices this month for our new E-sports team.

Right now we are the only Navy JROTC program in the country pursuing an E-sports program. Always good to be a trendsetter.

After a prolonged delay in gaining access to our supply room due to construction and window replacement, we have finally issued uniforms to most cadets and started personnel inspections on a weekly basis. Just in time for our NJROTC Area Managers Inspection at the end of the month.

Recruiting is a priority for us this time of year. We are looking for 50 new cadets who want to challenge themselves mentally, morally, and physically to become the 21st century leaders our country needs.

# A Look Inside CareerTEC

