Volume 8, Issue 2 March 2022

CareerTEC Chronicle

"Partnering to Prepare Students for Tomorrow's Careers."

From the Director ...

Consortium Member Districts

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

CareerTEC Programs

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- Criminal Justice (Page 6)
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- Graphic Design
- Health Occupations (HOYA 1, Page 4; HOYA II, Page 5)
- Industrial Technologies
- Nail Tech
- NJROTC

CareerTEC

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

See us at:

www.careertec-il.org

Please go to our website to see the March articles from our CareerTEC teachers!

The Future is Now

our Future, our Choice.
Currently, high school students in our consortium's member districts are registering for their 2022-23 classes. It's an important time for our students, schools, CareerTEC, and our communities.

You may ask, "Why is it important for our communities?"

Answer: Today's students will be the backbone of our future communities.

Just take a look at the programs we offer to the left ... Plus, next year, we are excited to be offering new classes for our students who wish to be teachers and firefighters.

CareerTEC's programs will start a path for many of our students into tomorrow's careers and fill the void of many essential jobs in northwest Illinois.



Brian Greene, CareerTEC Director

This is a big reason why students should consider taking a CareerTEC class. This is why it is so essential that we work with our local employers to determine what they need from future hires.

Why else should a student take a CareerTEC class?

- 1.) Explore to determine if a career is a good fit. I would rather a student pay a little money now for books and fees tuition is paid by the schools to figure it out rather than spend a lot of money and time in college or some other program later.
- 2.) Dual credit. Ten of our 14 current programs offer college and high school credit.

- 3.) Industry certifications and credentials. Students can earn a leg up on future applications with certifications, such as a CNA.
- 4.) Work-based learning. Students learn while listening, observing, or working on the job.
- 5.) Students can learn lifelong skills even if they don't make their class a career. It's always good to know construction, healthcare, and culinary ... to name a few.
- 6.) Students will meet teens from other schools with common interests.
- 7.) Excellent teachers who did not start as teachers but rather in the career field in which they teach. Plus, our teachers can help students network and find future jobs.

It's all about the future. The future is calling. It's time for our students to answer!

 $\label{eq:See Page 8 for instructions} See Page 8 for instructions to apply for FY23 CareerTEC classes.$

Follow us on:



@CareerTEC



CareerTEC @freeport61032

IMPORTANT DATES

- MARCH 21-25: Spring break, no classes at HCC, St. John, FHS, and construction
- MARCH 28: CareerTEC classes resume at all locations
- APRIL 1: End of 3rd Quarter
- APRIL 4: Guaranteed Seat Deadline for students applying to CareerTEC for 2022-23 school year

CAREERS IN BUSINESS (CIB)

December

November brought about the student's first real challenge as spelling, punctuation, and grammar were not their strong suit, generally speaking.

Communication skills are a work in progress for all of us. As such, the master grading system is used for assignments so the students are continuously improving each business proposal until it reaches the level of success required to be utilized in the business world.

December will continue to focus on communication skills by incorporating Microsoft Word into the assignments as 95% of the business world uses this platform. Lastly, in the spirit of the holiday season, the students will volunteer several times through the Salvation Army by ringing bells and helping at the local pantry. Our second year students will also participate in our volunteer experience as they were not able to last year.

January

Happy New Year from the Business class! December provided a couple of



opportunities for the students to volunteer ringing bells for the Salvation Army; it's our way of giving back to the community and the students had a great time wearing their Santa hats and other festive apparel. They genuinely enjoyed interacting with so many people and had a great time. I am so very proud of them!!

They also finished up their College Business Proposals, which look

outstanding. The proposals were designed to help them have a better idea of what is required to get into college academically and financially, as well as weighing all of the other factors such as location, majors provided, housing, and safety statistics to name a few. A second college will be researched later this semester.

The students have also been learning Microsoft Word; Excel begins soon. Toward the end of the month, we dive into investing and the Stock Market Game, which is an annual favorite and gets quite competitive! The students form teams and compete against each other as well as regionally and nationally. No inside suggestions, please, as we wouldn't want anyone to get accused of "insider trading."

Be sure to check with your son/daughter about their current college of choice and to see how their trading team is doing. Stay warm!

February

The students have completed Word and are at the midpoint of Excel. We kicked off the Stock Market Game and have eight teams participating.

(CAREERS IN BUSINESS continued on page 3)

COMPUTER INFORMATION SYSTEMS (CIS)

December

In November, we had a nice, informal Zoom session with a Game Animator who is currently working on the latest Call of Duty multi-million dollar game in the franchise. Students got to ask questions and see some of the work that he had done over the past 20 years.

We also invited Joe Rendone from FHN to come over and talk with the students about internships and job opportunities through FHN.

Year one students learned about the different types of electricity and how to

troubleshoot power supplies. Year two students are working a Linux terminal. with routing tables and configuring routers manually. Next month we will be preparing for finals and certification testing.

January

Last month, CIS1 finished up working with and implementing mass storage devices and CIS2 students set up their own network with a Cisco switch and router as their intermediary devices. Both year one and two are currently taking their finals and finishing up the semester.

This month CIS1 will begin their journey more into the operating side of the PC. Year two students will start learning how to code the

programming language C from

February

Congratulations to CIS Year 1 students Maxwell Gibson and Colin Watson, who are the first two students to pass A+ Exam 220-1001 in the first semester. Congratulations to CIS Year 2 students Paul Guiffre and Dylan DeJong, who both passed their Network + Certification Exam N10-007.

A special congratulations to Paul Guiffre, who's the first student to be a fully certified A+ and Network + Technician! This month CIS 1 will be getting under the Windows and Linux Operating Systems. CIS 2 students are working with control structures in the



bash shell and beginning their journey into Cyber Security.

> - Doug Meyers, Computer Information Systems instructor

Program Updates at Construction & St. John's ...

CONSTRUCTION

December

In Construction Trades this past month, we had a lot going on. Two weeks ago, the boys finished the roof framing job on Walnut Road. They did an outstanding job in all aspects of the endeavor. I truly believe the boys could frame something similar without my help or guidance. Since then, we have returned to Factory Street where we are prepping our walls and ceilings for primer and

We also have lined up a couple all-day jobs (a shed and a large feeding troth) in the vicinity.

January

Our construction students have been spending the majority of their time at the Factory Street location. We continue to prep drywall for painting. The ceiling in the garage has been covered with 5/8" drywall, a fire code requirement, and is now ready for barn metal for the finish look.

Right before Christmas break, the boys and I took a field trip to a farm near Loran in Pearl City. They



were able to build most of a 12'x5' mobile cattle feeder. The weather was cold, but the boys showed some toughness and grit and did a fine job.

February

Since we returned from Christmas break, the boys have been working on their drafting skills. We have put those skills to use in the most recent project, designing a small home and then building a small model of that home.

We split up into groups of two to begin the process: marking the footprint of the homes on plywood, transcribing all the walls within that footprint, installing all the top and bottom plates and then laying out where all the windows, doors and studs go. Then we started to build the walls. When the



walls are done, they will continue on with the ceiling joist and cutting in the roof rafters.

When they complete the model homes, they will take that knowledge and put it to use in the construction of a custom shed for a local Freeport resident.

I'm impressed with the quality of work that the boys have performed thus far.

Dan Harrington,
 Construction Trades
 instructor

CULINARY ARTS

December

Students continued to expand upon their culinary skills and

knowledge.
They learned how to prepare a variety of sauces, including teriyaki, gravy, and barbeque.
They also



learned how to prepare soup, including methods of thickening and flavor balancing. The soups made in class that were most enjoyed by students include chicken and dumpling, chili, and roasted pepper tomato.

January

During the month of December in Culinary Occupations, students learned a variety of new culinary skills. For example, students became proficient with utilizing fresh herbs and spices in their cooking by preparing foods such as Indian curry, homemade taco seasoning, chimichurri, and pesto. They also developed their baking skills by preparing carrot cake and Christmas cookies, among other recipes. Students are becoming confident in their culinary abilities as the year progresses.

February

In January, students completed their international projects. Each student chose a country, researched that country's cuisine, and presented it to the class. Additionally, those students chose a recipe from that country that the entire class prepared. The recipes were very popular with students, and included Korean fried chicken, Japanese Ramen, Greek chicken gyros, German cheesecake. and Mexican enchiladas. All recipes were prepared from scratch, of course!

(CAREERS IN BUSINESS continued from page 2)

Recently they've been learning about companies, stocks, reading a stock quote, risk, what metrics to use when doing stock analysis and other parts of investing. The trash-talking among teams has already begun and they are excited to start the game. The CIB teams compete against each other as well as regionally and nationally. At the end of the game in May, students are expected to complete their stock portfolio, and a presentation and an essay on their experience.

Mid-month we will host a career fair for the high schools in our consortium at St. John's Church where CIB holds class daily. We are developing activities for the visiting students to participate in order to learn more about the CIB program and CareerTEC as a whole.

Lastly, students will finish Excel this month and then we will pivot back to personal finance topics such as an indepth look at different types of insurance: health, house, renters, and car to name a few. They will be prepared when they step into the world on their own. I am sincerely blessed and thankful to have a fantastic group of students again this year.

Elizabeth Hazzard,
 Careers in Business instructor

Steve Konefes,
 Culinary Occupations instructor

HEALTH OCCUPATIONS I

December

Another month has passed and our pace remains steady and our days full. This month we worked on different ways to transfer people without using our bodies. Mechanical lifts have made our jobs easier and have reduced back injuries. Going up in a sling lift is scary for the students, but it also has allowed them to feel what our residents feel during the transfer. The students experience dependence and the lack of control in the situation.

Orientation and understanding a patient or resident's space is important in giving good care. We learned proper use of beds, how all the buttons work, different bed positions, resident positions, and how different equipment works. Making beds continue to be a skill we work on and improve on. The tight mitered corners continue to be a challenge, but the students are getting better at them.

How much do you weigh? No one has ever liked that question, but, unfortunately in health care, weight can be so important. We base medication dosing on weight. Students learned how to weigh each other on an old mechanical scale and how to measure height.

Our math was working on height and weight conversions. In health care, weight is converted into kilograms and for height we use inches.

Now the real fun has begun with teeth brushing. Today in class they learned the importance of oral care and how to brush teeth appropriately. The best part was they took turns brushing each other's teeth to give them the sense of how our residents feel in that position. The giggles, awkward feelings, and satisfaction of learning a new skill is always fun. They were good sports!

Volunteering remains a part of our program, even though it has been more difficult due to COVID-19. We were able to serve a local nursing home before Thanksgiving break by cutting out many Christmas project pieces that they need over the next month. It was simple but impactful.



Our November word of the month was Teamwork! The class selected these students for the student of the month: Kennedy Price, Alexis Palumbo, Lexie Cardon, Diana Hernandez, Estafany Vega, Morgan Muller, and MaKenna Powell.

December will bring on more skills, another volunteer project, and a teambuilding day between all the CareerTEC classes at St. John's Church.

January

Semester is drawing to a close and we are excited for all that is to come!

December was very busy and passed quickly. We were able to do some volunteer projects for a local nursing home, ring the bell for the Salvation Army, and do our check-off for our bedmaking skill. Each skill comes with a check-off process, in which the student has to display knowledge and proficiency.

Our new skills were learning peri care, partial bath, vital signs and brushing teeth. It is always easy to brush your own teeth, but it's a different feel to brush someone else's teeth. It was the first personal skill our students experienced on each other. The level of awkwardness was felt in the room as each opened their mouths and put their care in the hands of a random classmate. This process not only taught them how to do the skill, but how our residents feel in these situations. It was a good lesson learned!

Ringing the bell for the Salvation Army



brought the students and those in the community joy. The students did an awesome job with music playing and bringing forth their best holiday cheer.

In the new year we will take our final. Just a friendly reminder, if your student is not at an 80 percent after the final, he or she will be unable to participate in clinical, but he or she will still receive their two high school credits upon completion of the class. We also continue to prepare for clinicals as they are right around the corner. Clinicals will start in February! Lastly, CPR certification is always a fun week and we hope to squeeze that into January as well.

May the new year bring goals to strive for joy, peace, and good things for all! Thank you for sharing your students with us and for allowing us to be a small part of their life's journey!

February

It has been another exciting and busy month. We started January with the dreaded final, but everyone did a great job and put out a strong effort to end their semester.

Our first big project of the year involved anatomy and physiology! We explored each system of the body and some of the normal and abnormal changes we experience as we age. Disease and disorders were also a large part of this project. Students were asked to be creative, do a slide presentation, and present their system to the class. For the

HEALTH OCCUPATIONS II

December

HOYA II had a very busy November. Each student presented specific diseases that can either be caused by stress or made worse by stress. We learned that stress increases our cortisol levels as well as triggering an inflammatory response. We also discussed how everyone has stressors in their lives and its not necessarily the stress but how one deals with the stress. Not all stress is bad; we have to learn what our stressors are and to make sure we have several tactics to keep stress from overwhelming us.

Students also researched a potential college choice based on their top two major choices. They looked into student body size, student-to-instructor ratios, crime rates in the area, student retention rate, pass rates as well extracurricular activities/clubs they would be interested in doing. They also discussed overall cost; not only current tuition but the historical average increases. They discussed how they would pay for their college choice via student loans, specific scholarships, if their parents would be helping, or if they would be working to help pay the costs. Students had to look into housing costs and availability, as well.

December may be a short month but we have lots to do. We are reviewing the many regulations affecting clinical trial research and are currently researching historical clinical research trials to assess how much the regulations may have changed. Students will be presenting their assigned research trial in class after examining the good and bad actions affiliated with those clinical trials. We will then be looking at some of the current clinical trials occurring across the nation.

Students will be completing a Community Health Survey in December as a tactic to assess what the local community members believe are the positive aspects and potential health needs that affect the area. We will be building upon that when we return from Christmas break.



January

December was short but eventful. HOYA II students did a fantastic job with researching and presenting their historical clinical research trial projects. They approached the projects with open minds and explored some controversial methods of healthcare research involving not only animals but vulnerable human populations. Students used their critical thinking skills and we had lively discussions after each presentation.

They discussed ethical and moral concerns with any type of clinical research and the regulations that are to be followed.

Students were surprised at the number of rules and regulations that must be followed for ethical clinical trials to occur, the amount of money spent on the trials, how many years trials can continue, the need to repeat trials that are the same or similar to previous ones, and how other countries' choices can impact clinical trials in the United States.

We discussed the new Alzheimer's medication, aducanumab, that has recently been FDA approved, including the clinical trials that were completed, the cost, the effectiveness of the drug and what it will mean to our Alzheimer's population.

January will be just as busy. Students are researching their community demographics and will be combining these demographics with the information they obtained from the Community Health surveys in December. They will be comparing and contrasting the health concerns of their survey respondents with their classmates. They will be analyzing the



differences within community size in the area.

We will also be working with Joseph's Pantry this month; taking donations and volunteering time for our local vulnerable population. Many people volunteer and donate during the holiday season and pantries are known to run low post holiday, so that is the reason we decided to do this in January.

Last but definitely not least, after the final on Jan. 12, we will be jumping into the Medical terminology portion of the class.

February

The students shared their community health survey information in class. Surprisingly, very few people surveyed stated that infectious disease was a concern in their community. Sadly, many stated that gun violence, mental health, drug/alcohol abuse, and child abuse were the top health concerns. This was common in both small and large communities. We discussed how mental health is closely intertwined with the other top concerns.

Medical Terminology is off to a great start. Yes, learning Medical terminology is quite similar to learning a foreign language. Most medical words have a Greek or Latin foundation. We have begun to utilize our new textbook with the online

(HOYA II continued on page 7)

Program Updates at HCC & FHS ...

CRIMINAL JUSTICE

Criminal Justice I

In February, the criminal justice program had guest speakers from the Federal Bureau of Prisons in Thomson. A federal correctional officer and an attorney for the BOP spoke about various career opportunities in the federal prison system and about their experiences on the job.

The first-year students have been learning topics on prisoner re-entry, probation and parole, and about the inner workings of jails and prisons. We will be exploring the corrections workforce, accountability, security threat

groups, vulnerable populations, the death penalty, future of mass incarceration, and more.

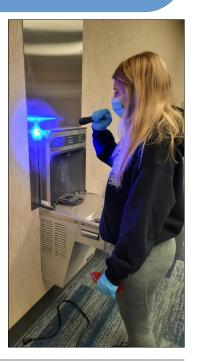
First-year students are also learning about cyber security with topics including cyber terrorism, cyber warfare, cyber espionage, and various threats to cyber security from organized crime groups, nation-states, and hackers. We will be exploring cyber security operations, legal issues and polices, and what the future holds as well.

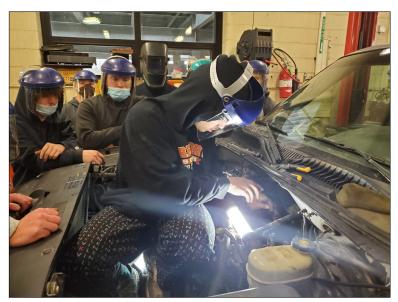
Students have been able to practice their latent fingerprint lifting skills and develop their communication skills with the Use of Force simulator.

Criminal Justice II

Second-year students are learning about factors that can contribute to juvenile delinquency and exploring the reasons why youth engage in illegal behavior. Future topics include peers, gangs, substance abuse, the juvenile court system, juvenile corrections, policing youth, and prevention. Students are also learning about various criminal law topics such as liability, crimes against persons, crimes against property, public order crimes, and crimes against the state.

Jennifer Roser,
 Criminal Justice instructor





CAREERS IN AUTO TECHNOLOGIES & SERVICE (CATS)

In February, we started with going through the parts of the automatic transmission. Then, we brought in a 1995 Chevy truck and removed and replaced the transmission. While it was apart, we pointed out a few things that were also in need of replacement.

I talked the owner into fixing them since the transmission was removed such as a rear main seal on the crankshaft exhaust manifold and a pinion voke and seal kit.

We then moved on to a 2004 Chevy Silverado and pulled the rear axles and replaced all the seals in the rear differential and rear brakes because the

(CATS continued on page 7)

EARLY CHILDHOOD EDUCATION (ECE)

Early Childhood Education I

Students have been busy. The Year 1 students are taking the Health, Safety and Nutrition course this semester. Students are in early childhood classrooms two days a week with children ranging anywhere from 6 weeks to 5 years of age. A guest speaker met with the class to share the journey of their son getting diagnosed with autism. Another guest speaker joined the class from University of Illinois Extension to teach a nutrition lesson and provide them with resources that they can use with children.

Early Childhood Education II

The Year 2 students are taking the Home, School and Community course this semester. Students are in early childhood classrooms three days a week. As Year 2 students, they will earn an ECE college certificate. The students completed and submitted the Intent to Graduate forms to receive their college certificates in May. A guest speaker presented to the students via Zoom from Indiana and shared her experiences and expertise in working with families.

The ECE CareerTEC program is hosting a Family Night Event at the Children's Hands-On Museum (CHOM) in collaboration with the ROE #8 Parent Enrichment Program on March 15. Students will be interacting with the children as the families enjoy everything that CHOM has to offer.

Melissa Johnson,
 Early Childhood Education instructor

(HOYA I continued from page 4)

most part, they did a great job, but we still have some work to do when it comes to presenting.

Fire life is a fantastic career choice! A visit from Freeport fire marshal Hillary Broshous taught students the great benefits of serving in a fire department. They learned about the work schedule, retirement benefits, paramedic school, requirements to get on a service and so much more. We then took a field trip next door to the station. The tone sounded so the students could experience what the staff hears in the night to wake them for emergencies. Equipment was shown in the ambulance and on the firetruck; all were amazed by the expense of the equipment. The students were given an email address



that they can contact and if interested attend a few evenings a month to learn more and do ride-alongs with the crew. IT IS A GREAT OPPORTUNITY TO EXPLORE THIS CAREER!

As for this month, we are in the final countdown prior to the start of clinical on Feb. 15. Students are signing up for their 40 hours of clinical time! They are nervous and excited. We will continue to review and prepare them for what is ahead. I have no doubt they will do great. We will be doing clinicals at Parkview, Allure (in Mount Carroll), and Medina (in Durand). Our instructors are excited to teach them all we know and help them check off their many skills.

Also this month we will tackle mental health, do yoga, learn how to feed a resident and learn about the bowels and bladder (two very important functions of our bodies)! Let the fun continue!!!!

> - Stacey Vock, Health Occupations I instructor

(HOYA II continued from page 5) portion for quizzes and workbook assignments. Part of the online aspect is students being able to practice pronunciation of the medical words with the computer program assessing each word the student practices speaking.

Each student will have an opportunity to research and teach the class one disease process that is important to them for each body system we will be studying. First, we have to finish up with the "basics" of dissecting medical words and building our foundation

of word roots, prefixes, and suffixes. They are learning that once we have a great understanding of these building blocks, we can actually analyze a medical word and break it down to the foundations and then solve the correct meaning of the word.

The students have been working diligently on their internship sites. Each month they chose one employability skill that they will work on to become a better employee. They then write a short memo as to which skill they worked on, why it is important, and

what specific tactics they focused on to improve their employability.

This month we will complete our first case study of a resident from the internship sites and discuss interdisciplinary care. Case studies are a fantastic way to increase our knowledge of healthcare, medical terminology, and importance of proper documentation.

We are also looking forward to helping vounger students with their Mall of Life experience this month. I am so very excited and proud to know that the HOYA II

students are looking forward to helping the HOYA I students become strong CNAs by taking them under their wings during the clinical rotations.

"We want to teach them to be great CNAs so they take good care of the residents and you, Ms. Steele, when you go to the nursing home."

This made my heart smile. especially when I had already warned them that I will not be an easy patient.

> Lori Steele, Health Occupations II instructor and HOYA Coordinator



(CATS continued from page 6) axle seals leaked grease onto the brakes, which could cause them to fail.

We ended up with a 2006 Chevy Silverado with low oil pressure in lot of parts from one the shop so we removed the oil pan and timing cover so we could get to the oil pump to see if we could see the problem. The class

discovered that it was an internal issue. So we got a motor from a salvage yard and removed and replaced the engine. We also had to switch over a engine to the other and do a tune-up. The truck ran great with good oil pressure when they were done. We disassembled the old engine to find out

what had failed, and we discovered the cam bearing had failed.

We finished up the month with installing a rear hatch on a Toyota GT and installing a fuel pump on a 2004 Chevy Trailblazer.

In March we have a few projects to start but our big one is last year's CareerTEC students built a small

block Chevy from ground up but we never got a chance to run it. We are going to mount the engine on our farm and get it to run and make a video to send to the past students to show them the great job they did.

> Jeff Doescher, Careers in Auto Technologies & Service instructor

A Look Inside CareerTEC



CAREER EC

Please note that some classes fill up fast.

Sign up now to ensure your seat!

Our Guaranteed Seat Deadline is April 4
(applications accepted until first day of class).

2022-23 Applications Being Accepted

- 1. Go to www.careertec-il.org
- 2. For complete information about courses and their costs, go to "2022-2023 Course Enrollment Catalog" under Quick Links at the bottom of the home page.
- 3. At top of home page, choose "Student Application/Registration Information" if/when you are ready to apply.
- 4. Either in course offerings or at bottom of Student Application page, select the application link (https://forms.gle/v8tzim5V1SvwnqwS7)
- 5. Applications should be done with a parent/guardian in order for proper consents and information to be received.