## LITTLE CHUTE



Academic and Career Planning Guide
2021-22
Preparing all students for success!

## PUBLIC NOTIFICATION OF STUDENT NONDISCRIMINATION POLICY

In accordance with federal laws, state laws, school policies and rules, it is the policy of the Little Chute Area School District that no person may be denied admission to any public school in the District or be denied participation, be denied the benefits of, or be discriminated against, in any curricular, extracurricular, public service, recreational, or other program or activity because of the person's sex, race, religion, national origin, orientation, or physical, mental, emotional or learning disability or handicap in its educational programs or activities. Federal law also prohibits discrimination in employment on the basis of age, race, color, national origin, sex, religion, or handicap.

The District shall provide appropriate educational services or programs for students who have been identified as having a handicap or disability, regardless of the nature and/or severity of the handicap or disability. The District shall also provide for the reasonable accommodation of a student's sincerely held religious beliefs with regard to examinations and other academic requirements.

The District encourages informal resolution of complaints under this policy. A formal complaint procedure is available, however, to address allegations of policy violations in the District.

Any questions concerning this policy or requests for the formal complaint procedure should be directed to:

David Botz, District Administrator<br>Little Chute Area School District<br>1402 Freedom Road<br>Little Chute, WI 54140

It is the policy of the Little Chute Area School District that no person may be denied admission to any public school in this district or be denied participation, be denied the benefits of, or be discriminated against in any curricular, extracurricular, public service, recreational, or other program or activity because of the person's sex, race, religion, national origin, ancestry, creed, pregnancy, marital or parental status, sexual orientation, or physical, mental, emotional or learning disability as required by section 118.13 of the State Statutes. This policy also prohibits discrimination as defined by Title IX of the Education Amendments of 1972 (sex), Title VI of the Civil Rights Act of 1964 (race, color, national origin), Section 504 of the Rehabilitation Act (handicap), and Americans with Disabilities Act of 1990 (disability).

The District shall provide appropriate educational services or programs for students who have been identified as having a handicap or disability, regardless of the nature or severity of the handicap or disability. The District shall also provide for the reasonable accommodation of a student's sincerely held religious beliefs with regard to examinations and other academic requirements.

The District encourages informal resolution of complaints under this policy. A formal complaint procedure is available, however, to address allegations of policy violations in the School District.

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This registration booklet is designed to help you and your parents plan your high school program at Little Chute High School. Please read the class descriptions and discuss your course selections with your parents. You will meet with your counselor to explore your ideas.

## TO ALL LCCPA STUDENTS

Little Chute High School administration and staff prepared this book to assist you in planning your educational program for the 2020-21 school year. Review this booklet before making decisions on courses you plan to request.

It is your responsibility to select the courses that meet LCHS' graduation requirements and best meet your needs based on your interests, aptitudes, abilities, and future plans. It is also your responsibility to return all your completed materials. Teachers, counselors, and parents will help you in making your decisions. You will also want to consider the following:

1. Know what the requirements are for graduation from Little Chute High School. Are you meeting these requirements in your planning? This is your responsibility.
2. Before selecting a course, check the course description. Does it meet your needs based on your future?'
3. You must have teacher approval for some courses. If needed, get this as soon as possible.
4. If in doubt about credits for graduation, college, and tech schools, apprenticeships or vocations, see your counselor for help.
5. Plan not just for next year, but for your entire high school career and your future educational plans. Keep your options open by taking a challenging curriculum in the academic and technical areas.
6. Selecting a course does not guarantee that you will actually be scheduled into that course. Every effort will be made to honor a student's request, but it is often impossible to make a $100 \%$ perfect schedule. When conflicts occur, your counselor will assist you in making alternate choices.

Please take advantage of the many resources available to you - teachers, counselors, parents and others in planning your schedule so that it meets your school-to-career goals.

Good Luck!
Mr. Bird

## Mission and Philosophy

The mission and vision statements of Little Chute Career Pathways Academy are stated below:

## MISSION

LCCPA provides students with high-level academic and career preparation through interdisciplinary learning, internships, and innovative partnerships with post-secondary institutions and business leaders.

## VISION

- Students at LCCPA will demonstrate strong employability and work ethic skills, aligned to the 21st Century Partnership, to ensure post-secondary success.
- Students at LCCPA will discover and review career pathways and put into practice opportunities consistent with their aptitudes and interests.
- Students at LCCPA will work in conjunction with Fox Valley Technical College, UW-Fox Valley, and local business and industry, developing their post-secondary focus.


## The Three Pillars

In order to fulfill our purpose, the LCCPA program is built on three interconnected pillars: Core Academics, Career Exploration, and 21st Century Skills.

## CAREER EXPLORATION

One of the main purposes of the LCCPA is to engage students in active career exploration from the moment they enter our doors. The focus of our exploration activities will be on careers in Engineering and Manufacturing and Health Sciences. Each of these pathways encompass a wide variety of career opportunities. To learn more about the Career Exploration pillar, please go to page

## CORE ACADEMICS

The "Core" classes of a high school education have long been identified as language arts, math, science, and social studies. These areas are also an integral part of LCCPA. There are several distinguishing features of core education at LCCPA. To learn more about the Core Academics pillar, please go to page

## TWENTY-FIRST CENTURY SKILLS

"Twenty-first Century Skills" is an educational catchphrase that is used to describe the types of competencies that individuals will need to succeed in our ever changing "real world" work environment. Throughout the development of the academy, we have found that employees who possess these non-academic skills are held in equal regard to those who demonstrate high level academic ability. Because of this, we have made teaching and evaluating these skills a major part of our purpose. To learn more about the Twenty-First Century Skills pillar, please go to page

## Pillar \#1: Career Exploration

When students enter LCCPA, they are required to choose one of two career pathways: Engineering and Manufacturing or Health Sciences. The choice of pathway is merely a starting point for our students, but it does reflect a fundamental expectation that we have of all of our students, and that expectation is that they have a purpose for what they do. We are accepting of almost any action that a student proposes to complete in pursuit of their personal mission. The only thing we do not accept is NOT having a mission!

The process of establishing and pursuing a personal mission is fundamental to our approach to education at LCCPA, and it begins with each student taking an active role in their pursuit of an understanding of careers. Our career exploration program has three integral pieces:

## Career Experiences

Students at LCCPA will have the opportunity to explore careers in Engineering and Manufacturing and Health and Human Services by taking part in a variety of career exploration visits, job shadows, and internships with our industry partners. This will allow our students to have a "real life" experience with the career opportunities within their chosen cluster. Students will receive the benefit of developing mentoring relationships with professionals who can give them advice on how to pursue the career of their choosing.

## Career Coursework

Students at LCCPA will be involved in career related coursework throughout their high school experience. For example, students in Engineering and Manufacturing will take engineering focused courses such as Introduction to Engineering Design and Principles of Engineering, and Mechanical Drawing, as well as manufacturing related courses such as Metals, Woods, and Machine Tool Technology. Students in our Health and Human Services Pathway will take courses such as Principals of the Biomedical Sciences, Human Body Systems, Medical Interventions, Medical Terminology, and Certified Nursing Assistant training.

## Career Research

High school students are expected to become proficient researchers. They need to know how to identify and access appropriate resources to gather information about a given topic. At LCCPA, students will learn how to become high-quality researchers as they learn about careers in Engineering and Manufacturing and Health Sciences. Students will learn how to access a variety of online databases to gather information about careers, will complete several seminars to investigate careers related to their personality type and interests, and will constantly review and revise their personal mission statements based on the information they have gathered.

On the following pages, you will see the suggested four-year program for each of our pathways. This will include a recommended course sequence as well as detailed descriptions of each of our career related courses.

## COURSE SEQUENCE Engineering and Manufacturing

The following sequence of courses will provide for a comprehensive high school education and meet the requirements for a high school diploma.

|  | Ninth Grade | Tenth Grade |
| :---: | :---: | :---: |
| 1. | Freshman Humanities [see page \#23 for details] | Sophomore Humanities [See page \#24 for details] |
| 2. | Freshman Humanities [see page \#23 for details] | Sophomore Humanities [See page \#24 for details] |
| 3. | Math [Algebra or Geometry] | Math [Follow sequence based on initial course] |
| 4. | Biology | Chemistry [upon completion of Biology] |
| 5. | Freshman Seminar [See page \#32-33 for topics] | Semester \#1: Sophomore Seminar [See page \#33 for topics] <br> Semester \#2: Mechanical Drawing 1/Elective/Resource |
| 6. | Introduction to Engineering Design | Principles of Engineering |
| 7. | Semester 1: Foundations of Technology and Engineering Semester 2: Encore/Elective/Resource | Encore/Elective/Resource |
| 8. | Encore/Elective | Encore/Elective |
|  | Ninth Grade Notes | Tenth Grade Notes |
|  | Encore/Elective/Resource can be filled with Spanish [1 or 2], a music course[ choir or band], or an extra work period. Students who do not take Spanish or music will be expected to take additional manufacturing courses in the spring semester [metals and/or woods]. | - Encore/Elective/Resource can be filled with Spanish [1 or 2], a music course[ choir or band], or an extra work period. <br> - Engineering and Manufacturing students will be expected to take Mechanical Drawing 1, Metals 1, and Woodworking 1 in their Encore/Elective/Resource periods if they are not enrolled in Spanish 2. Students should also strongly consider taking Architectural Design 1. <br> - Sophomore Seminar only runs for Semester 1. A section of Mechanical Drawing 1 will typically run in its place during Semester 2. |


|  | Eleventh Grade | Twelfth Grade |
| :---: | :---: | :---: |
| 1. | Junior/Senior ELA Course [see page \#18-19] | Junior/Senior ELA Course [see page \#18-19] |
| 2. | Junior/Senior Social Studies [see page \#21-22] | Junior/Senior Social Studies [see page \#21-22] |
| 3. | Math [Follow Sequence] | Math [Follow Sequence] |
| 4. | Science | Science |
| 5. | Seminar/Electives/Work | Electives/Work |
| 6. | Electives/Work | Electives/Work |
| 7. | Electives/Work | Electives/Work |
| 8. | Electives/Work | Electives/Work |
|  | Eleventh Grade Notes | Twelfth Grade Notes |
| - ELA: If a student's pathway is taking them through a 4-year college, it is recommended that they take at least one of the Advanced Placement options [AP Language or AP Literature] during grades 11/12. Otherwise, the student should choose two of the following each year [Literary Genres, Creative Writing, Film and Literature, Applied English, Classic Novel Studies] <br> - Social Studies: If a student's pathway is taking them through a 4-year college, it is recommended that they take at least one of the Advanced Placement options [AP U.S.History or AP Psychology] during grades 11/12. Otherwise, the student should choose two of the following each year [Sociology, Current Events, Political Science, Economics, History of Mankind ] <br> - Math: Students who intend to go to college to pursue Engineering should make every effort to complete Algebra 2 and Trigonometry by the end of their Junior year so that they can take AP Calculus as a senior. Otherwise, students simply need to follow the math sequence until their 3-credits are complete. <br> - Science: All Engineering and Manufacturing students should plan on taking Physics as a junior or senior. In addition, students pursuing a career in Engineering should highly consider taking AP Chemistry <br> - Grade 11 Engineering and Manufacturing students should take Machine Tool 1, Metals 2, and/or Mechanical Drawing 2 as electives during Junior Year. Students should highly consider taking Woodworking $1 / 2$ or Architectural Design 1/2. <br> - Grade 12 Engineering and Manufacturing students should take the Machine Tool 2 and Metals 3 as electives during Senior Year. <br> - ALL Engineering and Manufacturing students are strongly encouraged to find a work placement during their junior and/or senior year. If students have earned all of their core academic credits, they may be able to work a half-day or more as a junior and senior. <br> - Depending on their individual pathway, Business electives through Little Chute High School might be very appropriate for an Engineering and Manufacturing student. <br> - Seminar: Depending on a student's individual schedule, they will participate in two junior seminar topics: PErsonal Finance and ACT Prep. |  |  |

*Foreign Language may be required for admittance to colleges and universities. Other colleges/universities may not require it for admittance, but students could be required to take it at the college level, depending on their program. Therefore, it may help to have some foreign language background prior to high school graduation.

## LCCPA ENGINEERING AND MANUFACTURING COURSE DESCRIPTIONS

## INTRODUCTION TO ENGINEERING DESIGN

The major focus of IED is the design process and its application. Through hands-on projects, students apply engineering standards and document their work. Students use industry standard 3D modeling software to help them design solutions to solve proposed problems, document their work using an engineer's notebook, and communicate solutions to peers and members of the professional community. This course is required for all first year LCCPA students who are pursuing the Engineering, Manufacturing, and Technology career pathway. Students who complete this course with a B or better grade AND who receive a stanine score of 7 or better on the end of course exam are eligible to receive 3 college credits from Milwaukee School of Engineering.

ITE Credit: 1.00
Pre-Requisites: Required of all first-year Engineering/Manufacturing students

## FOUNDATIONS OF MANUFACTURING \& ENGINEERING

FME is an introduction to the Manufacturing and Engineering courses available at LCHS. In the Drafting portion of this course, students are introduced to Visualization and Technical Sketching techniques used to complete worksheets on graph paper. In the Metals Manufacturing portion of the course, students will be introduced to basic welding, simple cutting processes, and basic fabrication. Students will also produce a small welding project. In the Woodworking portion of this course, students will learn how to safely use tools and equipment to produce an item. Students may also work with drawing software to utilize the Laser Engraver and/or (CNC Computer Numerical Controlled equipment) Router

ITE Credit: 0.50
Pre-Requisites: Required of all first-year Engineering/Manufacturing students

## PRINCIPLES OF ENGINEERING

This survey course exposes students to major concepts they'll encounter in a post-secondary engineering course of study. Topics include mechanisms, energy, statics, materials, and kinematics. Students develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges, document their work and communicate solutions. This course is required for all second year LCCPA students who have decided to continue to pursue the Engineering, Manufacturing, and Technology career pathway. Students who complete this course with a B or better grade AND who receive a stanine score of 7 or better on the end of course exam are eligible to receive 3 college credits from Milwaukee School of Engineering.

ITE Credit: 0.50
Pre-Requisites: Required of all second-year Engineering/Manufacturing students

## METALS 1

Metals I will provide students experience in machining, welding, and cutting process. Students will focus their time in this course on welding techniques and basic welding joints using both GMAW(Wire-feed) and SMAW(Stick) processes. Students will also learn to use PlasmaCAM to cut parts using the computer. Students will apply the skills they learn in their term projects.

ITE Credit: 0.50
Pre-Requisites: None

## MECHANICAL DRAWING 1 - FVTC

Mechanical Drawing I concentrates on developing basic drafting skills. Units covered include sketching, instruments, lettering, symbols, geometric construction, orthographic projection, and pictorial drawings.
Students that have successfully completed Mechanical Drawing I with a minimum grade of a "B" will receive 4 (Free of Charge) "Dual Credits" with Fox Valley Technical College. These FVTC courses include...

| $10-606-141$ | Introduction to Solidworks | 2 credits |
| :--- | :--- | :--- |
| $10-606-151$ | Sketching and the Design Process | 1 credit |
| $10-606-152$ | CAD (Computer Aided Design) and Geometric Constructions | 1 credit |

ITE Credit: 0.50
Pre-Requisites: None

## METALS 2 - FVTC

In Metals 2, the student continues their training in the metals field. Approximately $1 / 2$ of the course will be the FVTC Intro and Safety Welding course as dual credit and free to the student. This will focus on basics of welding safety and prepare them for the FVTC Welding program. In welding we will focus on learning to interpret welding symbols and weld in different positions. Students will have a very large portion of the course dedicated to Projects in Metals 2 and those projects tailored to meet the student's interests and career goals.

ITE Credit: 0.50
Pre-Requisites: Metals 1 and Mechanical Drawing 1

## METALS 3

Metals 3 is 4 credits of FVTC welding courses; Welding Print Reading, Welding Symbols, and GMAW Techniques 1. This will be taught as dual credit and the credits are free for the student. Students that take both Metals 2 and Metals 3 and pass all FVTC courses will receive the Basic GMAW Welder Certificate from FVTC. This course will be a semester long for a block. Students will visit FVTC to test welds and work through some of the Labs. Students will only work on projects if time permits.

ITE Credit: 0.50
Pre-Requisites: Metals 2; Instructor Approval

## MECHANICAL DRAWING 2 - FVTC

Mechanical Drawing 2 is a continuation of Mechanical Drawing 1. Units covered include dimensioning, auxiliary views, section views, intersections and developments, assembly drawings, detail drawings, as well as a design project. Students that have successfully completed Mechanical Drawing 2 with a minimum grade of a " $B$ " will receive 3 (Free of Charge) "Dual Credits" with Fox Valley Technical College. These FVTC courses include...

10-606-139 Intro to Autodesk Inventor 2 credits
10-606-153 Multiview Projections 1 credit

ITE Credit: 0.50
Pre-Requisites: Mechanical Drawing 1

MACHINE TOOL JUMP START - FVTC
A specialized program with FVTC, where the student receives college credit and gets an early start in the Machining field. Courses include: Measurement and Benchwork 1, Engine Lathe 1, and Blueprint Reading for MTO.

ITE Credit: 1.00
Pre-Requisites: None

## ARCHITECTURAL DESIGN 1

Architectural Design 1 concentrates on the study of residential design and construction. Students will design a set of plans. The plans include presentation drawings, electrical plans, roofing plans, and elevation drawings.

ITE Credit: 0.50
Pre-Requisites: None

## ARCHITECTURAL DESIGN 2

Architectural Design 2 is a continuation of Architectural Design 1. Upon completion of all drawings, the student will develop a model of that house.

ITE Credit: 0.50
Pre-Requisites: Architectural Design 1

## WOODWORKING 1

Woodworking 1 is an entry level course which deals with the proper and safe use of conventional woodworking equipment. Students will develop basic woodworking skills by constructing a useful project.

ITE Credit: 0.50
Pre-Requisites: None

## WOODWORKING 2

Woodworking 2 is an advanced course that deals with design elements and quality construction. Advanced joinery and machine set-ups are discussed and used where appropriate. Students have access to all drawing software used for the CNC (Computer Numerical Controlled equipment) Router and Laser Engraver.

ITE Credit: 1.00
Pre-Requisites: Woodworking 1; Mechanical Drawing 1

# COURSE SEQUENCE Health Sciences 

The following sequence of courses will provide for a comprehensive high school education and meet the requirements for a high school diploma.

|  | Ninth Grade | Tenth Grade |
| :---: | :---: | :---: |
| 1. | Freshman Humanities [see page \#23 for details] | Sophomore Humanities [See page \#24 for details] |
| 2. | Freshman Humanities [see page \#23 for details] | Sophomore Humanities [See page \#24 for details] |
| 3. | Math [Algebra or Geometry] | Math [Follow Sequence] |
| 4. | Biology | Chemistry [upon completion of Biology] |
| 5. | Freshman Seminar [See page \#32-33 for topics] | Semester \#1: Sophomore Seminar [See page \#33 for topics] <br> Semester \#2: Medical Terminology |
| 6. | Principles of the Biomedical Sciences | Human Body Systems |
| 7. | Encore/Elective/Resource | Encore/Elective/Resource |
| 8. | Encore/Elective/Resource | Encore/Elective |
|  | Ninth Grade Notes | Tenth Grade Notes |
|  | It is highly recommended that Health Science students fill one of the open periods with a Spanish course [1 or 2]. The remaining open period can per filled with a music course [choir or band] or resource period. | - It is highly recommended that Health Science students fill one of the open periods with a Spanish course [2 or 3]. <br> - The remaining open period can per filled with a music course [choir or band] or resource period. <br> - For the second semester, Health Science students will take Medical Terminology in place of seminar. |


|  | Eleventh Grade | Twelfth Grade |
| :--- | :--- | :--- |
| 1. | Junior/Senior ELA Course [see page \#18-19] | Junior/Senior ELA Course [see page \#18-19] |
| 2. | Junior/Senior Social Studies [see page \#21-22] | Junior/Senior Social Studies [see page \#21-22] |
| 3. | Math [Follow Sequence] | Math [Follow Sequence] |
| 4. | Science | Science |
| 5. | Medical Interventions | Electives/Work |
| 6. | Seminar/Electives/Work | Electives/Work |
| 7. | Electives/Work | Electives/Work |
| 8. | Electives/Work | Electives/Work |
| Eleventh Grade Notes |  |  |

- ELA: If a student's pathway is taking them through a 4-year college, it is recommended that they take at least one of the Advanced Placement options [AP Language or AP Literature] during grades 11/12. Otherwise, the student should choose two of the following each year [Literary Genres, Creative Writing, Film and Literature, Applied English, Classic Novel Studies]
- Social Studies:It is HIGHLY recommended that all Health Science students take AP Psychology and Sociology during their junior or senior year. AP U.S. History may be appropriate for a student whose pathway is taking them through a 4-year college. Otherwise, the student should choose two of the following each year [Current Events, Political Science, Economics, History of Mankind ]
- Math: All health science students should try to complete Algebra 2 by the end of their sophomore or junior year so that they can take AP Statistics as a junior or senior. Otherwise, students simply need to follow the math sequence until their 3-credits are complete.
- Science: During their junior and senior year, Health Science students should take a minimum of two of the following three courses: Anatomy and Physiology, AP Biology, and AP Chemistry. Physics is very appropriate for Health Science students and is required of students entering a variety of HealthScience careers, including Physical Therapy.
- Grade 11 Health Science students should highly consider taking the Certified Nursing Assistant class. This class is a requirement for entering certain careers [i.e. Nursing] but may not be necessary for other careers [i.e. Physical Therapy, Speech Therapy, etc.] Each student's individual mission/pathway needs to be considered when thinking about adding this class to a schedule.
- Health Science students are encouraged to find a work placement during their junior and/or senior year, especially if they have their CNA license.
- Depending on their individual pathway, Business electives through Little Chute High School might be very appropriate for a Health Sciences student.
- Seminar: Depending on a student's individual schedule, they will participate in two junior seminar topics: Personal Finance and ACT Prep.
*Foreign Language may be required for admittance to colleges and universities. Other colleges/universities may not require it for admittance, but students could be required to take it at the college level, depending on their program. Therefore, it may help to have some foreign language background prior to high school graduation.


## LCCPA HEALTH SCIENCE COURSE DESCRIPTIONS

## PRINCIPLES OF THE BIOMEDICAL SCIENCES

Students investigate various health conditions including heart disease, diabetes, sickle-cell disease, hypercholesterolemia, and infectious diseases. They determine the factors that led to the death of a fictional person, and investigate lifestyle choices and medical treatments that might have prolonged the person's life. The activities and projects introduce students to human physiology, medicine, and research processes. This course provides an overview of all the courses in the Biomedical Sciences program and lays the scientific foundation for subsequent courses.

Science Credit: 1.00
Pre-Requisites: Required of all first-year Health Science students

## HUMAN BODY SYSTEMS

Students examine the interactions of human body systems as they explore identity, power, movement, protection, and homeostasis. Students design experiments, investigate the structures and functions of the human body, and use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration. Exploring science in action, students build organs and tissues on a skeletal manikin, work through interesting real world cases and often play the role of biomedical professionals to solve medical mysteries.

## Science Credit: 1.00

Pre-Requisites: Required of all second-year Health Science students

## MEDICAL INTERVENTIONS

Students investigate a variety of interventions involved in the prevention, diagnosis and treatment of disease as they follow the life of a fictitious family. The course is a "How-To" manual for maintaining overall health and homeostasis in the body. Students explore how to prevent and fight infection; screen and evaluate the code in human DNA; prevent, diagnose and treat cancer; and prevail when the organs of the body begin to fail. Through these scenarios, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics.

## Science Credit: 1.00

Pre-Requisites: Required of all third-year Health Science students

## CERTIFIED NURSING ASSISTANT

A nursing assistant is an essential member of the healthcare team. This program will help you learn how to provide for the personal care and comfort of people with health problems. You will learn to bathe, dress, feed, mobilize and transport people; obtain pulse and temperature; and report observations and reactions to the health care team. Nursing assistants prepare equipment, take care of the patient's room and keep patient records. In this role, you may assist clients with dementia and rehabilitation needs, and provide restorative care to help them maintain their independence. Upon completion, you'll be ready to take the certification exam. You will have a variety of employment options as a certified nursing assistant.

Elective Credit: 1.00
Pre-Requisites:

## MEDICAL TERMINOLOGY

Focuses on the component parts of medical terms: prefixes, suffixes and word roots. Students practice formation, analysis and reconstruction of terms. Emphasis on spelling, definition and pronunciation. Introduction to operative, diagnostic, therapeutic and symptomatic terminology of all body systems, as well as systemic and surgical terminology.

Elective Credit: 1.00
Pre-Requisites:

## Work Experience/Volunteering

In order to gain a deeper understanding of the careers within their pathway and the skills required to be successful in those careers, LCCPA students of all age levels are encouraged to take advantage of volunteer and work opportunities with one of our industry partners. The flexible nature of the LCCPA curriculum allows students to rearrange their schedule to fit in opportunities when the become available.

Students will be excused from a portion of the school day for work and will receive elective credits. This is a Term course that can be taken each term for a total of two credits. Students interested must complete an application to be eligible. Staff and prospective employers will screen all applicants. Working or volunteering requires a student to be responsible, self-motivated, and self-reliant, and helps students develop and nurture these skills. students receive elective academic credit on a pass/fail basis upon submitting evidence of the hours spent in their work/volunteer experience.

## YOUTH INTERNSHIP PROGRAM

Youth Internship Program provides students with an avenue for school-to-career transition. Students with specific career objectives can obtain on-the-job experience in their respective career area. Students must have taken or be scheduled for extensive course work in the career area they wish to pursue before entering this course. This course has two components that include the classroom course and on-the-job work experience. Students must apply to be considered for this course. A committee of faculty members will review the applications and select candidates eligible to participate. Students are responsible for providing their own transportation.

## YOUTH INTERNSHIP PROGRAM - Grades 11-12

How the Program Works:

1. Applicants will be students who have a specific career goal and are interested in learning more about the occupation through "on the job" experiences.
2. Students will complete a typed application form, including transcripts, and submit it to Pupil Services. Applications should reflect at least one and one-half credits of completed (or scheduled) coursework related to the career area the student is listing as a career goal.
3. Applications will be reviewed by vocational teachers, counselors, and administration.
4. Final selection of students eligible to participate in the internship program will be made by the end of the third term.
5. Successful applicants will be contacted during August when appropriate work site placements have been identified.
6. Typically, students are interviewed for available positions. The employers make final hiring decisions. The goal is for all eligible students to have an appropriate job site secured by the first day of the school year.
7. Students are released from school one to two blocks per day to work at their job site. Credit toward graduation is granted upon successfully completing the requirements of both the school and the employer. Students receive a "Pass" or "Fail" grade.
8. All students participate in random urine analysis testing. Students are responsible for paying for the initial testing directly at the testing site (approximately $\$ 35$ ). The school district pays for those randomly selected for testing thereafter.

## Pillar \#2: Core Academics

The "Core" classes of a high school education have long been identified as language arts, math, science, and social studies. These areas are also an integral part of LCCPA. There are several distinguishing features of core education at LCCPA.

## Self-Paced Coursework

All of our math and science curriculum, and much of our language arts and social studies curriculum is designed to be completed in a self-paced manner by our students. The curriculum is accessible in the cloud, and is available to any students anytime and anywhere. This self-paced coursework provides our students with a great deal of flexibility which they can use to their advantage as they pursue their individual missions. For example, students can comfortably miss school to take part in a career experience and know that they can simply pick up where they left off with their academic work when they return to school. Our self-paced coursework has many other advantages as well. Students learn how to be goal driven, independent students, skills that they will need to master in order to be successful when high school is over. Self-paced learning forces students to learn HOW to learn. All of these skills tie into our general philosophy of helping our students identify and pursue their personal mission by taking control of their own education.

## Relevant Coursework

At LCCPA, we take a different approach to scheduling than what would be common in a traditional high school. Rather than looking at a menu of course offerings and choosing classes they "think" they would like to take, requesting those classes, and then hoping that the computer creates a schedule that reflects their requests, the classes that our students take are determined by the personal mission that they have established. We spend a lot of time making connections between students' career goals and aspirations and the type of education and training required to achieve those goals. These connections allow students to make intelligent, well-informed decisions about the core academic courses they should take in order to fulfill their mission.

## Rigorous Coursework

Our goal is for each of our students to take the most rigorous coursework that they are capable and comfortable completing in order to achieve their personal mission. For students whose mission will take them to a four-year college, we currently offer eight different Advanced Placement courses to help them develop the skills required of a successful college student. At the same time, we realize that rigor means different things to different students. The most rigorous schedule possible for our students who plan on attending a technical college or entering the workforce might involve working half-days for one of our industry partners. In this case, our flexible core academic classes allow students to tailor their schedules to meet their personal needs.

On the following pages, you will see the mission and philosophy of each of our core academic departments and have the opportunity to learn more about our specific course offerings.

## Mission Statement:

The LCCPA English Department ensures each student will be a competent, capable, and critical thinker and communicator of information through rigorous, worldly, and engaging instruction, practice, and application.

Typical Course Progression

| 9th Grade | Freshmen Humanities* |
| :---: | :--- |
| 10th Grade | Sophomore Humanities* |
| 11th Grade | Upper Level ELA [Literary Genres, Creative writing, Film and Literature, Classic Novel Studies, <br> Applied English, College Speech] <br> OR <br> Advanced Placement ELA [AP English Literature and Composition, A.P. English Language and <br> Composition] |
| 12th Grade | Upper Level ELA [Literary Genres, Creative writing, Film and Literature, Classic Novel Studies, <br> Applied English, College Speech] <br> OR <br> Advanced Placement ELA [AP English Literature and Composition, A.P. English Language and <br> Composition] |

## Freshmen and Sophomore Humanities

Freshman and Sophomore English and Social Studies Curriculum at the Little Chute Career Pathways Academy is taught in an integrated format wherein students utilize English skills and concepts as a vehicle for exploring Social Studies.

During Freshman Humanities, students will complete the following three mini-courses courses: "What Would You Die For", "Energy", and "Personal Wellness". Successful completion of these courses result in students earning 1.25 Social Studies credit. For more details on Freshman Humanities, please see page

During Sophomore Humanities, students will complete two mini-courses: "How America Works", and "The Good, The Bad, and The Ugly". Successful completion of these courses result in students earning 1.25 Social Studies credit. For more details on Sophomore Humanities, please see page

## LCCPA ENGLISH LANGUAGE ARTS COURSE DESCRIPTIONS

## Film \& Literature

This is a semester-long senior elective course following successful completion of Sophomore Humanities. The objective for this course is to analyze and evaluate films of a range of styles \& genres as works of literature with greater awareness, clarity, and skill. Through our study, students will learn to identify, interpret, discuss, and write about literary and film elements and their individual and cooperative roles in defining film as literature. We will also explore the connections between film and written literature through incorporating nonfiction articles and short fiction stories. We will also delve deep into the stories that the films tell by learning about film history and famous filmmakers as well as doing in-depth director, character, and theme studies.

ELA Credit: 0.50 (could potentially be up to 0.75 credit depending on the activities completed and the standards achieved in individual student projects.
Pre-Requisites: Sophomore Humanities; Instructor Consent

## Literary Genres

Literary Genres is an English elective wherein the student selects a literary discipline to study. Such possibilities could include Wisconsin Literature, Mystery, Science Fiction, or Historical Fiction. Students are required to fulfill a list of tasks that include a variety of written analyses, some oral presentations, related assigned readings, and researching the chosen category. This course is designed to encourage reading as well as allow the student to further explore material in which they are truly interested. Students will have the opportunity to explore topics of interest in more depth, which will allow them the opportunity to earn the credit above the base credit that is offered.

ELA Credit: 0.50 (could potentially be up to 0.75 credit depending on the activities completed and the standards achieved in individual student projects.
Pre-Requisites: Sophomore Humanities; Instructor Consent

## Creative Writing

Creative Writing is designed to provide students with the opportunity to explore the basic types of writing. Students analyze the development of short stories, plays, memoirs, and poetry. Students write examples of each form and are required to maintain a journal. Basic writing skills are emphasized and reinforced throughout the course, including: writing processes, language, grammar, and usage--these are centered around the Six Traits of Writing. Students will work to complete a writing portfolio throughout the term. Students will have the opportunity to explore topics of interest in more depth, which will allow them the opportunity to earn credit above the base credit that is offered.

ELA Credit: 0.50 (could potentially be up to 0.75 credit depending on the activities completed and the standards achieved in individual student projects.
Pre-Requisites: Sophomore Humanities; Instructor Consent

## Classic Novel Studies

Creative Writing is designed to provide students with the opportunity to explore the basic types of writing. Students analyze the development of short stories, plays, memoirs, and poetry. Students write examples of each form and are required to maintain a journal. Basic writing skills are emphasized and reinforced throughout the course, including: writing processes, language, grammar, and usage--these are centered around the Six Traits of Writing. Students will work to complete a writing portfolio throughout the term. Students will have the opportunity to explore topics of interest in more depth, which will allow them the opportunity to earn credit above the base credit that is offered.

## ELA Credit: 0.25

Pre-Requisites: Instructor Consent

## Applied English

Applied English is a course which allows the student to explore the language arts areas directly related to life after high school. The students examine today's labor market and consumer affairs. Job related oral and written skills along with those faced on the job are stressed. Forms of literature most often encountered in the work world are stressed. Students review grammar and usage skills necessary to compete in today's world.

ELA Credit: 0.50
Pre-Requisites: Sophomore Humanities

## AP English Literature \& Composition

AP English Literature is a challenging course that focuses on reading, writing, and critically analyzing literature. This course is designed for the college-bound student with a strong command of reading and writing skills. Students will be evaluated primarily on their ability to read and analyze various pieces of literature. Units will include several novels, poetry, drama, and short stories. Reading will be assigned prior to the start of the course. Students, who elect to take the AP exam in May, will be eligible for college credit. The approximate cost of the exam is $\$ 100$.

ELA Credit: 1.00
Pre-Requisites: Sophomore Humanities; Instructor Consent

## AP English Language \& Composition

This course focuses on building students' understanding and appreciation of how writers use language to convey meaning and impact readers. The course engages students in becoming skilled readers of prose written in a variety of rhetorical contexts and at a varying degree of difficulty. AP Language \& Composition readers can analyze the rhetoric and argumentation of a text to determine deeper layers of meaning and connection. Conversely, this course also develops students to become skilled writers who compose for a variety of contexts and purposes, including writing to rhetorically analyze, argue, and synthesize. This course is skills-based and will prepare students to be successful on the AP Language exam, to be ready for college-level reading and writing, and to think and communicate critically about information.

ELA Credit: 1.00
Pre-Requisites: Sophomore Humanities; Instructor Consent

## College Speech

Fundamentals of Public Address (133) are the examination of the principles of oral message preparation and presentation. Students will prepare and present actual public communication. A University of Wisconsin Green Bay faculty member teaches this course. Students pay a prorated portion of the UW tuition as determined by LCASD to receive college credit. Students may be required to purchase a required text for the course.

ELA Credit: 0.50

Pre-Requisites: Sophomore Humanities; Instructor Consent

## Social Studies Department

## LCCPA SOCIAL STUDIES DEPARTMENT

## Mission Statement:

The Social Studies Department believes that all students have an obligation to become well-informed members of society through the study of politics, history, geography, economics, sociology and psychology. The LCCPA Social Studies Department is committed to providing meaningful learning opportunities through high quality instruction, engaging course materials and authentic, real-world, relevant activities.

Typical Course Progression

| 9th Grade | Freshmen Humanities* |
| :---: | :--- |
| 10th Grade | Sophomore Humanities* |
| 11th Grade | Upper Level Social Studies [Sociology, Current Events, History of Mankind, Political Science, <br> Comparative Religions] |
| Advanced Placement Social Studies [AP U.S. History, A.P. Psychology] |  |$\quad$| Upper Level Social Studies [Sociology, Current Events, History of Mankind, Political Science, |
| :--- |
| Comparative Religions] |
| OR Grade |

## Freshmen and Sophomore Humanities

Freshman and Sophomore English and Social Studies Curriculum at the Little Chute Career Pathways Academy is taught in an integrated format wherein students utilize English skills and concepts as a vehicle for exploring Social Studies.

During Freshman Humanities, students will complete the following three mini-courses courses: "What Would You Die For", "Energy", and "Personal Wellness". Successful completion of these courses result in students earning 1.25 Social Studies credit. For more details on Freshman Humanities, click here.

During Sophomore Humanities, students will complete two mini-courses: "How America Works", and "The Good, The Bad, and The Ugly". Successful completion of these courses result in students earning 1.25 Social Studies credit. For more details on Sophomore Humanities, please click here.

## LCCPA SOCIAL STUDIES COURSE DESCRIPTIONS

## History of Mankind

History of Mankind is a one-semester course that will encompass a wide range of historical factors in civilizations and their influence upon current culture and society. Areas of study will include Prehistoric man, Ancient Egypt, Asia, the Greeks and Romans, the rise of Christianity, the Crusades and Medieval Europe. Students will leave this course with the understanding that history is connected to every academic discipline and everyday life. Students will improve their ability to read, write, think analytically and examine historical documents. They will be able to connect knowledge and themes across history to new information from other academic disciplines. By the end of this course students will have a general understanding of how societies develop, rise and fall across vast spans of time.

Social Studies Credit: . 5
Pre-Requisites: 10th Grade Humanities or Instructor Consent

## Current Events

The Current Events is a one-semester course designed to enhance and develop an awareness and appreciation of the "current events" that shape the world. Students will examine a variety of local, national, and global issues with an emphasis on politics, cultural diversity, social issues, and economics. The course places a high value on the development of research skills, as many of the topics will change in accordance with pressing local, national or global news coverage. The ultimate aim of this course is to foster an appreciation for the current events that impact our world, our country and our communities.

## Social Studies Credit: . 5

Pre-Requisites: 10th Grade Humanities or Instructor Consent

## United States Government and Political Science

United States Government and Political Science is a one-semester course designed to introduce the central features of United States politics and government. By completing this course, students will be able to understand the foundation of the United States government, identify the institutions within the structure of the United States government, analyze the relationships between such institutions, and appreciate the role of government in American political life. The course is designed to provide students with an understanding of the political process as well as to provide them with opportunities to examine their political viewpoints on important issues and political candidates.

## Social Studies Credit: . 5

Pre-Requisites: 10th Grade Humanities or Instructor Consent

## Sociology

Sociology is a one-semester elective course that studies human society and social behavior. Positive human relationships are an essential part of a civilized society and how we interact with each other is important so that we can find answers to questions and solve problems in our world. "Sociology teaches us to look at life in a scientific, systematic way." The way that we view the world comes from what we learn in our everyday activities. "The values, beliefs, lifestyles of those around us, as well as historic events help to mold us into unique individuals who have varied outlooks on social reality." This course deals with the social atmosphere that helps to make us who we are and how we behave. Sociology will cover topics such as culture, violence, deviance, social control, socialization and personality, group behavior, social class, and social institutions. The key component of this course is to study ourselves and the society that influences our behavior.

Social Studies Credit: . 5
Pre-Requisites: 10th Grade Humanities or Instructor Consent

## Comparative Religions

Comparative Religions is a one-semester course designed to provide students with an overview of major world religions and a sampling of their sacred writings. Throughout this course, students will examine the religions of Judaism, Christianity, Islam, Hinduism, Buddhism, Taoism and New Age Spirituality. Generally speaking, topics that will be covered in this course will include but are not limited to:religious origins and histories, creation stories of mankind, religious understandings of life and humanity, ethics/morality of religion, religious language and scriptures, the role of ritual in religious belief, personal religious transformation and conversion, relationship between the natural and supernatural realms.

## Social Studies Credit: . 5

Pre-Requisites: 10th Grade Humanities or Instructor Consent

## Economics

Economics examines what economics are and why it is important. Areas of emphasis include the following units: What is Economics (Scarcity and Factors of Production), Economic Systems (Answering Three Economic Questions and Free Market vs. Other Economies), American Free Enterprise, Demand (Shifts of the Demand Curve and Elasticity of Demand), Supply (Costs of Production and Changes in Supply), and Financial Markets (Saving and Investing, Bonds and Other Financial Assets, and the Stock Market). The course provides students with a good basic understanding of economics and the ability to better deal with economic decisions in life

## Social Studies Credit: . 5

Pre-Requisites: 10th Grade Humanities

## AP United States History

This AP® United States History course is a two-semester survey course designed on the model of college- level surveys. APUSH prepares students for intermediate and advanced level college courses by making demands upon them equivalent to those made by full-year (two semesters) introductory level college courses. Students will learn to assess historical materials and to evaluate the evidence and interpretations presented in historical scholarship. The primary goal of the course is to prepare students to earn college credit by earning a passing score on the AP® United States History exam, which will be administered in May. Solid reading and writing skills, along with a willingness to devote considerable time to independent reading, homework, and study are necessary to succeed. Students and parents should understand that the focus of this course is success on the AP Exam and that all students, whether or not they intend to take the AP Exam, will be required to meet all expectations of the course.

Social Studies Credit: 1.0
Pre-Requisites: 10th Grade Humanities or Instructor Consent

## AP PSYCHOLOGY

The purpose of the AP course in Psychology is to introduce the systematic and scientific study of the behavior and mental processes of human beings and other animals. Included is a consideration of the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. Students also learn about the ethics and methods psychologists use in their science and practice. Coursework in biology and regular psychology are helpful, but not a requirement. Admission to the course is based on teacher approval and an academic history consistent of a student on a college-preparatory path.

Social Studies Credit: 1.0
Pre-Requisites: 10th Grade Humanities or Instructor Consent

## Freshman Humanities Curriculum

Freshman English and Social Studies Curriculum at the Little Chute Career Pathways Academy is taught in an integrated format wherein students utilize English skills and concepts as a vehicle for exploring Social Studies.

Upon completion of all work during Freshman year students will earn the following credits:

- Social Studies: 1.25 credits [ 0.50 Global Studies A, 0.50 Global Studies B, 0.25 Introduction to Psychology A]
- English/Language Arts: 0.50 English 1A, 0.50 English 1B, 0.25 Introduction to Speech A

Freshman Humanities is required of all Freshmen LCCPA students. In order to earn the credits described above, students will complete the following mini-courses courses:

## What Would You Die For?

Much of our lives centers around the give and take. We all have adopted interests, world views, belief systems, etc. that serve as the guiding light for our thoughts and behaviors. In this course, we aim to explore how these concepts have evolved over time as we look into the creation of various Government and Religious Systems, as well as social issues, that human beings throughout time have valued so much that they have been willing to sacrifice their lives for. We begin with a broad view of what we find passion in, and by the end of the course we focus in on individuals that we are willing to sacrifice our lives for with the reading of the Shakespearean class Romeo and Juliet.

## Energy

In this seminar, you will be embarking on a knowledge journey to acquire a better understanding of renewable energies and their impact on society. From a social studies perspective, we will look at the various ways the renewable energies are a topic of political discussion, how advocacy groups are getting involved in pushing for more renewable energies, and the overall impact of renewable energies on society. Each of you will be part of a special interest group representing some form of alternative energy. Your group will complete extensive research of your energy source, create a variety of products to communicate the importance of your source in today's world, and try to convince others that your energy source is the key to solving the world's energy problems.

## Personal Wellness

This seminar is an integrated study of health, wellness, and nutrition. In the social sciences, students will study various aspects of psychology including psychological research, psychological disorders, and the impact of stress on emotional wellness. From a language arts perspective, students will form book clubs requiring the reading of a fictional text related to some aspect of wellness, write formal research papers on a psychological disorder [including formal citations], and give a four-minute informational speech on their disorder. General aspects of wellness will also be discussed, including the various forms of wellness [physical, emotional, intellectual, social, and spiritual]. We will also read parts of the "USDA Dietary Guidelines for Americans 2010" and use this document to analyze our own eating habits. Finally, we will take time to participate in a variety of wellness activities, including physical exercise, meditation, and social interaction.

## Sophomore Humanities Curriculum

Sophomore English and Social Studies Curriculum at the Little Chute Career Pathways Academy is taught in an integrated format wherein students utilize English skills and concepts as a vehicle for exploring Social Studies.

Upon completion of all work during Sophomore year students will earn the following credits:

- Social Studies: 1.25 credits [0.50 U.S. History A, 0.50 U.S. History B, 0.25 U.S. Politics and Government]
- English/Language Arts: 1.25 credits [0.50 English 2A, 0.50 English 2B, 0.25 Introduction to Speech B]

Sophomore Humanities is required of all Sophomore LCCPA students. In order to earn the credits described above, students will complete the following mini-courses courses:

## How America Works

In this course, students go back to the very onset of the United States and analyze how and why it began. Students then jump to the present and analyze how early laws and rights, put in place by our founding fathers, are being used in present-day society. Lastly, we will end by looking specifically at elections, and discovering how political parties shape our government, the issues that impact society today, and the stances of current candidates on these issues.

## The Good, The Bad, and The Ugly

From the time of Revolution and the founding of this new nation, we will jump forward in time to the period that has most shaped this country into what it is today. During the era ranging from the late 1800s to the end of WWII in the late 1940s, our country experienced the greatest of prosperity and the deepest of depressions, filled our hands with martini glasses one minute and Tommy guns the next, and were led by the most influential of presidents and the most corrupt of politicians. However, regardless of how good or bad things became, our country was learning more and more about itself by the minute, and it is because of this period that the country as you know it to be today came to exist.

Part 1 of this seminar will focus on The Gilded Age and The Harlem Renaissance. The term "gilded" means something covered in gold. As this word may suggest, it is used to describe something that appears to be gold, but the gold is uncovered, something far less valuable remains. In terms of American History, this was very much true of the late 1800s and early 1900s. While this was the era of booming business, glorious innovations, and a growing upper class, the lower classes for struggling, immensely, due to a lack of resources, regulations, and people who understood their problems. Near the same time, The Harlem Renaissance was a period that gave American culture some of the most influential literature, jazz music, and artwork to ever be produced. Each and every piece speaks to the audience in a different manner, and expresses a deep cultural connection.

## Mathematics Department

## Mission/Philosophy

The Little Chute Career Pathways Academy math department employs a "work-at-your-own-pace" math curriculum. This means that each individual student can progress through the course sequence at a speed that is most comfortable for the student. In order to graduate from LCCPA, students must earn a total of 3.0 math credits. The main math sequence is pictured below:


Typical Course Progression

| 9th Grade | Algebra 1 or Geometry |
| :--- | :--- |
| 10th Grade | Geometry or Algebra 2 |
| 11th Grade | Algebra 2 or Trigonometry or A.P. Statistics |
| 12th Grade | Algebra 2 or Trigonometry or A.P. Calculus or A.P. Statistics |

Note: There are several math courses that fall out of the traditional sequence that a student can take as a junior or senior in order to fulfill their math requirement. These include Math For The Trades, Personal Finance, and College Technical Math.

Please see the following pages for course descriptions

## LCCPA MATH COURSE DESCRIPTIONS

## Algebra 1

Algebra 1 begins by reviewing important Pre-Algebra concepts such fractions and decimals, percentages, exponents, roots, and negative numbers. Then, the concept of the variable is explored in depth as the students learn how to evaluate and simplify variable expressions. The study of variables is then followed by units on solving linear equations and inequalities. Armed with this fundamental algebraic understanding, students then explore linear functions, systems of equations, and quadratic expressions.

## Math Credit: 1 credit

Prerequisite: None

## Geometry

Geometry is generally considered to be the study of the properties of shapes such as points, lines, triangles, quadrilaterals, and circles. This course focuses mainly on developing an intuitive understanding of these properties through the integration of algebraic type problems. Deductive reasoning is included, but formal proof is not a part of the course. A unit on coordinate geometry and transformations is also part of the course, and students are given an introduction to basic concepts from trigonometry including the three basic trigonometric ratios and special right triangles.

Math Credit: 1 credit<br>Prerequisite: Algebra 1

## Algebra 2

Advanced Algebra consists of quick review of major topics from Algebra 1, including basic math skills, working with variables, and solving equations and inequalities. Each of these topics is also extended beyond the scope of Algebra 1 [for example, students learn how to simplify variable expressions involving exponents and roots]. The remainder of the course focuses on the concept of the function. General function skills and concepts are introduced, and then students apply that knowledge as they study Linear, Quadratic, Polynomial, Rational, Exponential, and Radical Functions.

## Math Credit: 1 credit

Prerequisite: Geometry

## Trigonometry

Trigonometry consists of an in-depth study of trigonometric functions. Topics covered in this course include triangle trigonometry, circular functions, graphs of circular functions, trigonometric identities, and solving trigonometric equations. Applications of trigonometric functions to periodic phenomena are also emphasized.

Math Credit: . 5 credit
Prerequisite: Algebra 2

## A.P. Statistics

AP Statistics is the high school equivalent of an introductory college statistics course. The course focuses on four major themes: exploratory data analysis, designing studies, probability models and simulation, and statistical inference. Emphasis is placed on developing strategies for collecting, organizing, analyzing, and drawing conclusions from data. Students design, administer, and tabulate results from surveys and experiments. Furthermore, probability and
simulations aid students in constructing models for chance phenomena, while sampling distributions provide the logical structure for confidence intervals and hypothesis tests.

Math Credit: 1 credit
Prerequisite: Algebra 2

## A.P. Calculus

AP Calculus investigates the key mathematical concepts of the function, the limit, the derivative, and the integral. These concepts are discussed from a geometric, numerical, and analytical perspective. These concepts are used to explore applications within the fields of mathematics, the physical sciences, engineering, the social sciences, and the biological sciences.

Math Credit: 1 credit
Prerequisite: Trigonometry

## COLLEGE TECHNICAL MATH**

College Technical Math includes solving linear, quadratic, and rational equations; graphing; formula rearrangement; solving systems of equations; percents; proportions; measurement systems; computational geometry; right and oblique triangle trigonometry; trigonometric functions on the unit circle; and operations on polynomials. Emphasis will be on the application of skills to technical problems.
**=FVTC Advanced Standing Course

Math Credit: 1 credit
Prerequisite: Geometry

## Science Department

## Mission/Philosophy:

The science department provides all students with a self-paced, teacher-guided, online approach to learning the core science topics of biology and chemistry. Assignments, lectures, and formative quizzes are all available for students online; while lab experiences and summative tests will be handled in class. One of our key philosophies is the view of the "teacher as a coach". We work with students to master the material at their own pace, while helping them to organize materials and track their progress through the course.

## Science Sequencing (*Requirement)

3 Credit


## Biology

Biology investigates the facts of biology, concepts, and processes of life through a survey of general biology, and encourages critical thinking, decision making, and relating of modern biological concepts to the world in which we live, including current events and problems. Topics discussed include ecology, cells, genetics, evolution, energy and behavior and response.

## Science Credit: 1 credit

Pre-Requisites: None (required of all first year LCCPA students)

## Chemistry

Chemistry is a science commonly taken for granted. Many materials we use on a daily basis result from basic chemistry. As such, this course is designed to introduce students to the field of chemistry and its applications. For some, this course also marks the foundation of future educational experiences. Topics covered in this course include a basic review of fundamental chemistry topics, Atomic Structure, The Periodic Table, Ionic and Covalent Bonding, Chemical Reactions and Equations, and The Mole and Stoichiometry.

## Science Credit: 1 credit

Pre-Requisites: Biology (required of all second-year LCCPA students)

## ECOLOGY \& ENVIRONMENTAL SCIENCE

Ecology and Environmental Science explores the relationships between organisms and their non-living environment. Emphasis is on exploring the influence of human activity (i.e., pollution, fertilizer run-off, etc.) on local waterways with a discussion of how to make smart environmental decisions. Specific course topics include: General ecology and biomes, nutrient cycles, aquatic ecosystems, water pollution, and environmental ethics. Student evaluation is based on participation in field trips, exams, projects, current event presentations, labs, papers, debates, service projects, and final group research presentation. PLEASE NOTE: SINCE FIELDWORK IS SUCH AN IMPORTANT AND UNIQUE ASPECT OF THIS COURSE, ATTENDANCE ON ALL FIELD TRIPS IS REQUIRED. FURTHERMORE, SOME FIELD TRIPS MAY REQUIRE STUDENTS TO PROVIDE AQUA SHOES OR KNEE-HIGH RUBBER BOOTS FOR THEIR OWN USE. Fall and spring sports participants must consult their instructor before enrolling to discuss potential early release/field trip conflicts.

Science Credit: 0.50 credit

Pre-Requisites: Biology

## HUMAN ANATOMY \& PHYSIOLOGY

Human Anatomy and Physiology presents the structure and function of the human body, designed particularly for students interested in a career in the health or medical field. Emphasis on specific body organ systems is explored through a variety of hands-on dissections, including a semester-long dissection of the fetal pig. Furthermore, enrolled students will have the opportunity to work with real human cadavers at St. Norbert College. Student assessment is based on exams, projects, debates, current event presentations, group presentations, labs, web quests, dissections, a fetal pig photo journal, a research paper, and a life-size paper human paper model.

Science Credit: 1.00 credit
Pre-Requisites: Biology, Algebra 1, Chemistry

## FOOD \& EXERCISE SCIENCE

This course is designed for any student with the desire to learn more about the science behind food, in addition to exercise physiology. Students will learn about various nutrition topics, including food energy; the biochemistry of proteins, lipids and carbohydrates; the efficacy of fad diets; and the scientific basis of a variety of exercise regimens. Assessment is based on a constructivist model, wherein students become active participants in their learning by participating in various health and fitness activities, delivering superfood and workout presentations, and completing various projects that have students demonstrate what they're learning.

Science Credit: 0.50 credit
Pre-Requisites: Biology

## AP BIOLOGY

AP Biology is for those students intending to major in this field or related areas. This course differs significantly from the "regular" biology course with respect to the range and depth of material to be covered. The textbooks and required laboratory activities are equivalent to those found in today's college classrooms, and the workload should be understood to be up to a college standard. Students will spend at least $25 \%$ of class time completing lab investigations. AP Biology will provide students with the factual knowledge, conceptual framework, and analytic skills necessary to deal critically with the rapidly changing science of biology. Students who obtain a score of 3 or better on the AP exam in May could receive college credit for the class.

Science Credit: 1.00 credit
Pre-Requisites: Biology, Algebra 1, Chemistry

## AP CHEMISTRY

The AP Chemistry course covers all first-year college general chemistry concepts. Chemical concepts from high school chemistry are expanded upon. New topics include rate law, chemical equilibria, acid-base chemistry, thermodynamics, and electrochemistry. This course will prepare students for college-level rigor, keeping a lab notebook, and conducting advanced analytical chemical experiments. Students interested in entering the scientific, medical, and engineering fields are encouraged to take the course. The course culminates in the AP Chemistry national test in early May.

Science Credit: 1.00 credit
Pre-Requisites: Chemistry, Algebra 2

## PHYSICS

Physics relates to the physical everyday world and the general laws and forces, which govern the universe. Physics is taught from a mathematical and conceptual perspective, balanced in a way to benefit both those interested in the subject itself. Areas of study include: Kinematics (describing motion), dynamics (forces and projectiles), universal gravitation, energy propagation (heat transfer and waves), and some modern physics including relativity. Lab investigations include a variety of materials ranging from computer probes to water balloon launchers. Student evaluation is based on daily assignments, lab research, lecture, discussion, quizzes, chapter tests, and term projects

Science Credit: 1.00 credit
Pre-Requisites: Algebra 2, Biology

## Pillar \#3: 21st Century Skills

"Twenty-first Century Skills" is an educational catchphrase that is used to describe the types of competencies that individuals will need to succeed in our ever changing "real world" work environment. Throughout the development of the academy, we have found that employees who possess these non-academic skills are held in equal regard to those who demonstrate high level academic ability. Because of this, we have made teaching and evaluating these skills a major part of our purpose. The ten skills that we emphasize at LCCPA are as follows:

1. Teamwork and Collaboration
2. Productivity, Self Direction, and Initiative
3. Accountability and Quality of Work
4. Flexibility and Adaptability
5. Tenacity and Perseverance
6. Punctuality Attendance
7. Dress
8. Respect, Integrity, and Ethical Behavior
9. Attitude
10. Appropriate and Ethical Use of Technology

These skills are emphasized daily by all teachers in our classrooms. Furthermore, these skills are reinforced and, in many cases, taught during the career experiences that students participate in as part of our career exploration pillar. We consider our industry partners to be part of our faculty, and we consider their businesses to be an extension of our classroom. This is especially true when we consider how we implement our 21st century Skills curriculum. Our industry partners consistently emphasize the importance of most of the skills mentioned above, and the consistency of their message provides credibility to the message that we send in school on a daily basis.

While 21st Century Skills are emphasized throughout the curriculum, a significant amount of time is spent developing these skills within our seminar courses. These courses provide a natural way to tie together our three pillars of Career Exploration, Core Academics, and 21st Century Skills. Descriptions of each of our seminar topics can be found on the following pages.

## Freshman Seminar Topics

## Portfolio and PLP Development

The purpose of the Portfolio and PLP Seminar is to begin to develop the culture of learning that is expected of LCCPA students. Academy students are expected to take control of their own learning in the areas of core academics, career exploration, and 21st-century skills. This seminar will help develop the skills and habits of mind that are essential for becoming an effective and successful learner who is willing and able to face challenges in all three areas. Through this seminar, students will learn about the structure and purpose of the LCCPA portfolio and Personal Learning Plan, investigate and discuss the concept of professionalism and why professionalism is important, develop their personal mission statements and five-year plans, and learn how to analyze their academic testing data. Students also learn about the LCCPA 21st Century Skills evaluation system.

Seminar Credit: 0.25 credit [Awarded on a Pass/Fail basis]
Pre-Requisites: Required of all first-year LCCPA students

## Genius Hour

The research of author Daniel Pink suggests that individuals who possess intrinsic motivation are far more likely to be successful in the careers of the 21st Century. Pink suggests that intrinsic motivation consists of the inherent desire of human beings to achieve autonomy, purpose, and mastery. In order to encourage these qualities, students in the Genius hour seminar are required to design and implement a personal project of their choice. Students complete background research on their project idea, pitch their project idea to their peers and a faculty advisor, create a product of their choice related to their project, and summarize what they have learned in a final project presentation. Genius Hour is modeled after the concept of " $20 \%$ Time" that is implemented in many large companies, including Google.

Seminar Credit: 0.25 credit [Awarded on a Pass/Fail basis]
Pre-Requisites: Required of all first-year LCCPA students

## Myers-Briggs Career Research

At Little Chute Career Pathways Academy, our goal is to help you to identify your personal mission in life, and then provide you with experiences that allow you to develop the knowledge, skills, and abilities to pursue that mission with a passion. The Myers-Briggs Career Research Seminar is a critical component of that process. During this seminar, you will learn about the Myers-Briggs Type Indicator, and you will learn about how an understanding of your personality preferences can help you identify a career that you may have a passion to pursue. As part of this seminar, you will also learn about several important tools that you will use throughout your time at LCCPA to learn more about a variety of careers.

Seminar Credit: 0.25 credit [Awarded on a Pass/Fail basis]
Pre-Requisites: Required of all first-year LCCPA students

## Aspire Test Prep

The mission of LCCPA is to provide students with high quality academic and career preparation. These goals often run in separate lanes, but they are also often completely intertwined because a student's ability to pursue a career of their choice often requires a high level of academic performance in order to attend a post-secondary institution of their choice. In this seminar, we begin to prepare students to achieve at their highest levels on the ACT college entrance exam by helping them become familiar with the structure and content of the exam. Students are given a pre-test in each area [English, Math, Reading, and Science], complete class activities to become familiar with the test structure and content, and take a post-test to measure their growth over the course of the seminar.

## Wellness

One of the eight graduation outcomes of the Little Chute Area School District is for students to be responsible for their own personal wellness. In this seminar, we spend time researching and discussing the various dimensions of wellness [Physical, Social, Mental/Emotional, Financial, Intellectual, Spiritual, Environmental], specifically focusing on each dimension from a cause and effect perspective. The seminar is tied back into the overall mission of LCCPA as students are asked to identify how wellness impacts their ability to achieve their personal academic and career mission. Students define each dimension of wellness, identify activities that can cause them to be well in each dimension, and identify the impact that the dimension can have on their personal goals. Students conduct a wellness self-assessment and make wellness goals. Through this seminar, students also work on creating their freshman exit interview presentations.

Seminar Credit: 0.25 credit [Awarded on a Pass/Fail basis]
Pre-Requisites: Required of all first-year LCCPA students

## Sophomore Seminar Topics

## Holland Code

The purpose of the Holland Code Seminar is to continue the process of identifying your personal missions that you began during your freshman year in the Portfolio/PLP and Myers-Briggs seminars, career exploration events, volunteer opportunities, and career-related coursework. In this seminar, you will continue to explore your areas of interest by learning about the Holland Code assessment, completing several online assessments, and exploring careers related to your personal interests. You also begin the process of examining and understanding the various aspects of choosing a college to attend after high school. This includes examining what you are looking for in a college and understanding what colleges are looking for in you! Finally, you will learn about the process of continuing your career exploration and the resources available to you to personalize your exploration to fit your needs.

Seminar Credit: 0.25 credit [Awarded on a Pass/Fail basis]
Pre-Requisites: Required of all second-year LCCPA students

## Wisconsin History

In the Wisconsin History Seminar, students identify the cultural features that make Wisconsin unique and then complete three mini-projects on aspects of Wisconsin history that impacted the development of that culture. This is dual purpose seminar. The first purpose is clearly to learn about Wisconsin history and culture. The second, perhaps more important purpose, is to explicitly focus on the development of 21st Century Skills including project management, communication, teamwork, creativity, and effective use of technology. Students are divided into project teams and must define and execute specific roles. Teams must choose a different technology to use to present each of their three projects, and students must engage in deep and detailed historical research using primary sources.

Social Studies Credit: 0.25 credit [Awarded on a Pass/Fail basis]
Pre-Requisites: Required of all second-year LCCPA students

## Junior Seminar Topics

## ACT Prep

All juniors in the state of Wisconsin are required to take the ACT college entrance exam in late February. Scores on this test can have an impact on the type of college that a student is able to attend. This seminar is designed to re-familiarize students with the structure and content of the ACT test, a process that began in the Aspire Test Prep Seminar during freshman year.

Seminar Credit: 0.25 credit [Awarded on a Pass/Fail basis]

## Personal Finance

Personal Finance is the final seminar of three [Portfolio/PLP and Holland Code] that focus on a student's pursuit of their personal mission. This seminar begins with a discussion of student loan debt and the impact it can have on an individual's financial future. From this discussion, students begin planning their financial future around their own personal academic and career mission. They research the education required to obtain their desired career, the post-secondary education required to obtain that career, the likely amount of debt required to obtain that education, and the salary that they are likely to earn in that career. That information is then used to develop an 11-year financial plan that includes a budget that reflects student loan debt, housing, transportation, food, entertainment, utilities and other spending. Through this planning process, students are introduced to a variety of online tools that they can use to control their own financial well-being, learn important financial concepts and terms, and develop a clear connection between the decisions they make today and the lifestyle they will be able to live in the future.

Math Credit: 0.50 credit [Awarded on a Pass/Fail basis]

## LCCPA Graduation Credit Requirements

| Required Courses | Credits Needed |
| :--- | :---: |
| Language Arts | 4.0 |
| Math | 3.0 |
| Science | 3.0 |
| Social Studies | 3.5 |
| Physical Education | 1.5 |
| Elective Credits | 9.0 |
| TOTAL CREDITS** | $\mathbf{2 4 . 0}$ |

In addition to the credit requirements described above, LCCPA students must successfully complete the required Portfolio and Exit Interview requirements described below.

## REQUIRED PORTFOLIO

Prior to graduation, students are required to complete a portfolio that reflects each individual's continuing mastery of the district's eight graduation outcomes.

* Artistic Appreciator
* Cooperative Societal Contributor
* Effective Communicator
* Global Cultural Participant
* Problem Solver/Critical Thinker
* Responsible for Personal Wellness
* Self-Directed Learner
* Technological Quality Producer

In addition to including artifacts related to the eight district outcomes, students must include artifacts that demonstrate regular progress in the area of school-to-career-transition.

## Advisory

All students are assigned a specific LCCPA Teacher as their academic advisor. The academic advisor is responsible for guiding students through the portfolio creation process and evaluating portfolios to make sure that they meet graduation requirements.

Each year, students are required to place a minimum of two work samples per district outcome and two work samples in the school-to-career transition section. Each of these nine areas must be accompanied by a yearly reflection describing the student's achievement and growth within each area.

## REQUIRED EXIT INTERVIEWS

## The Basics

Each spring, every LCCPA student is required to complete a 30 minute presentation detailing their progress in our school's three "pillars" of Core Academics, Career Exploration, and 21st Century Skills. This presentation revolves the student's portfolio and PLP. As described above, the portfolio is a collection of artifacts that give evidence of the different activities/projects/assignments that students have completed, and the PLP is a fluid document that houses a student's personal mission statement, five-year plan, academic data, and other items related to short and long term goals. The presentation takes on a slightly different form each year.

## Goal

The reason that we require students to participate in an exit interview each year is to put them into a position where they have to be accountable for demonstrating growth in the areas of Core Academics, Career Exploration, and 21st Century Skills as they establish and pursue their own personal mission.

It is often easy for students in high school to go through the motions of education without really focusing on how their education is connected to their future. They show up to class, participate in varying degrees in their lessons, and jump through the hoops that they know they have to jump through in order to get their diploma. It can be easy for students to pass through the system without ever having to take true ownership of their learning. The annual LCCPA exit interviews require students to take ownership and responsibility for their own success and also prepares students to be successful in future interviewing situations.

## FORMAT

Each "interview" is scheduled for 30 minutes. Our goal is to have three adults who can analyze and critique each student, providing them with advice and feedback that they can use to help them grow in the future. Two of the adults are LCCPA faculty or staff members, and one of the adults is an outside guest. The LCCPA staff members provide a level of comfort and familiarity for the students, while the outside guest raises the level of accountability and relevance for the students.

The format of the interview varies slightly from year to year. Freshman, Sophomore, and Junior interviews begin with a 20 -minute student presentation which is followed by 5-10 minutes of guest questions and comments. Below are details in the exit interview format at each grade level.

## Freshmen

Freshmen give a 20-minute presentation using their two documents and simply share what they have learned in each of the three pillars during their first year in the school. These presentations end up looking fairly similar as students are drawing on many of the same sets of experiences. We follow up with different questions to hold their feet to the fire, and then we give them a little critique of what we liked and what we felt they could improve.

## Sophomores

Sophomores give a similar presentation as the freshman, but they focus on how they have changed and grown in each of the three pillars from year one to year two. The freshman presentation provides closure to a student's first year at the Academy, and it also serves as a springboard for the student's second year. The sophomore presentation should focus on growth toward goals that were set as the result of the freshman presentation and provide an indication about how the student plans to achieve their mission in their final years of high school.

## Juniors

The Junior exit interview process is completely different than the first two years. By the end of their junior year, students often have a pretty good idea of the type of career they want to pursue. Our goal is to make juniors really think
about the connection between the knowledge, skills, and abilities they acquire in school and the knowledge, skills, and abilities that are required to get a job in the "real world".

In order to make this connection, juniors select an actual job description from a source such as CareerBuilder and are required to analyze the description and develop a presentation, using their two documents as evidence, to sell themselves as "the best person for the job." We still want students to focus on their growth in Core Academics, Career Exploration, and 21st Century Skills, but at this level we want to force them to see the connection between the skills that they are developing in school and the skills that employers are looking for in the people that they hire.

## Seniors

Seniors have a similar setup has juniors, but they don't get to prepare a presentation ahead of time. They are given the job description and need to prepare as if they were going to interview for a real job. In this case, we treat the exit interview as much as possible like an actual job interview. We ask typical job interview questions, but we deviate from a traditional interview in that we ask students to use their electronic documents to provide evidence to support their answers. This format requires students to know themselves and their body of work well and to be able to think on their feet as they are asked a variety of questions related to job qualifications.

## Post Secondary Education Admission Tips and Readiness

High school graduation requirements may be different from the entrance requirements for specific colleges and universities. The requirements listed below are minimum requirements for students to be eligible for admission to these institutions. Students are encouraged to exceed these minimum requirements and to challenge themselves by taking rigorous courses, including Advanced Placement courses, to be competitive in the collegiate admissions process.

## COLLEGE/UNIVERSITY PLANNING

## College Entrance Tests

College entrance tests are given by two testing agencies. The College Board administers the PSAT/NMSQT (Preliminary Scholastic Aptitude Test/National Merit Scholarship Qualifying Tests) and SAT (Scholastic Aptitude Tests) for juniors. The American College Testing Program administers the PLAN for sophomores and the ACT for juniors. The ACT test is recommended by the University of Wisconsin System. Detailed information concerning these tests is provided to students as part of the college counseling program beginning in their sophomore year.

## College Entrance Requirements

College entrance requirements differ with each institution and must be looked at individually. Generally speaking, you have a good chance to be admitted if you meet the following two requirements.

1. Meet the class rank requirement according to GPA and/or ACT requirement as listed in the Intro to UW-System and Wisconsin Independent Colleges guides, which are available in the guidance office.
2. Upon graduation, have successfully completed a minimum of 17 academic credits:

## University of Wisconsin System

Students must meet the following minimum requirements in order to be eligible for admission:
English: 4 credits
Mathematics: 3 credits (minimum of Algebra 2)
Science: 3 credits
Social Studies: 3 credits
FA/Electives/Language: 4 credits
Two years of a single foreign language are required for admission to UW-Madison, and strongly recommended at other UW System campuses. For those students interested in attending a four-year college or university, it is recommended you discuss a four year academic plan with your counselor.

## Nation's Top Universities

Student's must meet the following minimum requirements in order to be eligible for admission:

English*: 4 credits
Mathematics: 4 credits
Science: 3-4 credits
Social Studies**: 3 credits
World Language***: 3-4 credits

* Intensive work in writing
** Includes American and European History
*** At least one world language


## TECHNICAL COLLEGE PLANNING

Little Chute High School has an agreement with Fox Valley Technical College whereby certain classes taken at Little Chute High can provide eligibility for advanced standing for a student who pursues an associate degree or a technical diploma at FVTC.

## Schedule for 19-20

| LCCPA/Period Sched | Block | Wednesday Periods | Wed Block |
| :---: | :---: | :---: | :---: |
| $\begin{gathered} 1 \\ 7: 50-8: 37 \\ 47 \text { minutes } \end{gathered}$ | $\begin{gathered} 1 \\ 7.50-9.24 \\ 94 \text { minutes } \end{gathered}$ | $\begin{gathered} 1 \\ 7: 50-8: 24 \\ 34 \text { minutes } \end{gathered}$ | $\begin{gathered} 1 \\ 7.50-8.58 \\ 68 \text { minutes } \end{gathered}$ |
| $\begin{gathered} 2 \\ 8: 37-9: 24 \\ 47 \text { minutes } \end{gathered}$ |  | $\begin{gathered} 2 \\ 8: 24-8.58 \\ 34 \text { minutes } \end{gathered}$ |  |
| $\begin{gathered} \mathrm{RtI} \\ \text { 9:30-10:00 } \\ 30 \text { minutes } \end{gathered}$ | $\begin{gathered} \mathrm{RTI} \\ 930-10 \\ 30 \text { minutes } \end{gathered}$ | $\begin{gathered} \mathrm{RTI} \\ \text { 9:03-9:33 } \\ 30 \text { minutes } \end{gathered}$ | $\begin{gathered} \mathrm{RTI} \\ 9.03-9.33 \\ 30 \text { minutes } \end{gathered}$ |
| $\begin{gathered} 3 \\ \text { 10:06-10.52 } \\ 46 \text { minutes } \end{gathered}$ | $\begin{gathered} 2 \\ 10.06-11.38 \\ 92 \text { minutes } \end{gathered}$ | $\begin{gathered} 3 \\ 9: 38-10: 12 \\ 34 \text { minutes } \end{gathered}$ | $\begin{gathered} 2 \\ 9.38-10.46 \\ 68 \text { minutes } \end{gathered}$ |
| $\begin{gathered} 4 \\ 10.52-11.38 \\ 46 \text { minutes } \end{gathered}$ |  | $\begin{gathered} 4 \\ 10: 12-10.46 \\ 34 \text { minutes } \end{gathered}$ |  |
| $\begin{aligned} & \text { Lunch } \\ & 11.38-12.18 \\ & 40 \text { minutes } \end{aligned}$ | $\begin{aligned} & \text { Lunch } \\ & 11.38-12.18 \\ & 40 \text { minutes } \end{aligned}$ | 10.46-11:26 <br> 40 minutes | $\begin{aligned} & \text { Lunch } \\ & \text { 1046-11.26 } \\ & 40 \text { Minutes } \end{aligned}$ |
| $\begin{gathered} 5 \\ 12: 18-1: 03 \\ 45 \text { minutes } \end{gathered}$ | $\begin{gathered} 3 \\ 12.18-1.48 \\ 90 \text { minutes } \end{gathered}$ | $\begin{gathered} 5 \\ \text { 11:26-12:00 } \\ 34 \text { minutes } \end{gathered}$ | $\begin{gathered} 3 \\ 11.26-12.33 \\ 67 \text { minutes } \end{gathered}$ |
| $\begin{gathered} 6 \\ 1: 03-1.48 \\ 45 \text { minutes } \end{gathered}$ |  | $\begin{gathered} 6 \\ \text { 12:00-12.33 } \\ 33 \text { minutes } \end{gathered}$ |  |
| $\begin{gathered} 7 \\ 1.52-2.37 \\ 45 \text { minutes } \end{gathered}$ | $\begin{gathered} 4 \\ 1.52-3.23 \\ 91 \text { minutes } \end{gathered}$ | $\begin{gathered} 7 \\ 12.38-1: 12 \\ 34 \text { minutes } \end{gathered}$ | $\begin{gathered} 4 \\ 12.38-1.45 \\ 67 \text { minutes } \end{gathered}$ |
| $\begin{gathered} 8 \\ 2.37-3.23 \\ 46 \text { minutes } \end{gathered}$ |  | $\begin{gathered} 8 \\ 1.12-1.45 \\ 33 \text { minutes } \end{gathered}$ |  |

