



# Grade Ten Course Handbook

WINDSOR PARK COLLEGIATE

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# Windsor Park Collegiate: Credit Check Worksheet

To graduate, all students are expected to complete:

- 17 compulsory credits and 13 Elective credits for a total of 30 credits
- Of the 13 Elective credits, one must be a grade eleven credit, and two must be grade twelve credits.

Grade Nine		Grade Ten		Grade Eleven		Grade Twelve	
English 10F	<input type="checkbox"/>	English 20F	<input type="checkbox"/>	English 30S	<input type="checkbox"/>	English 40S	<input type="checkbox"/>
Math 10F	<input type="checkbox"/>	Math 20S Ess Intro	<input type="checkbox"/>	Math 30S Ess App PreC	<input type="checkbox"/>	Math 40S Ess App PreC	<input type="checkbox"/>
Canada in the Contemporary 10F	<input type="checkbox"/>	Geography 20F	<input type="checkbox"/>	History 30F	<input type="checkbox"/>	Physical Ed. 40F	<input type="checkbox"/>
Science 10F	<input type="checkbox"/>	Science 20F	<input type="checkbox"/>	Physical Ed. 30F	<input type="checkbox"/>	Elective 40	<input type="checkbox"/>
Physical Ed. 10F	<input type="checkbox"/>	Physical Ed. 20F	<input type="checkbox"/>	Elective 30	<input type="checkbox"/>	Elective 40	<input type="checkbox"/>
Reading is Thinking 10S	<input type="checkbox"/>	Elective	_____	Elective	_____	Elective	_____
Elective	_____	Elective	_____	Elective	_____	Elective	_____
Elective	_____	Elective	_____				
Elective	_____						

### Important Notes:

To graduate you must complete all the requirements above. For example, if you have 34 credits, but do not have a grade 12 English credit, you are NOT eligible to graduate because a grade 12 English is a compulsory course.

There can be a big difference between high school graduation requirements and post-secondary (university/college) entrance requirements. You may graduate from high school but be unable to enter the school of your choice because you have not taken the right courses.

Remember to include special language or music credits, credits earned at Manitoba Institute of Trades and Technology (MITT) or Louis Riel Arts and Technology Centre (LRATC), distance education courses and/or summer school courses.

# Course Registration Instructions:

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The following are the details of what you need to know the day that you sit down to sign up for your courses for next year.

**Step One:** Write down on the worksheet all the courses that you have successfully completed or will complete by the end of this year.

**Step Two:** On your worksheet, check off the compulsory courses that you must take next year. (Remember if you have failed a compulsory course, you must take it again.)

**Step Three:** Read through the list of elective courses on the following pages of the handbook.

**Step Four:** List five Electives in order of priority from your 1st choice to your 5<sup>th</sup> choice. (Not all choices will be scheduled.)

- 1) \_\_\_\_\_
- 2) \_\_\_\_\_
- 3) \_\_\_\_\_
- 4) \_\_\_\_\_
- 5) \_\_\_\_\_

**Step Five:** Bring these worksheets with you on course selection day so that you can easily sign up for next year. You will be signing up for your courses online with a Student Services Teacher.

**Step Six:** Look for the Course Selection Sheet

**Step Seven:** Sign and return your Course Selection Sheet with Registration Fees of \$90.00 and any extra fees. This will determine your official registration. Fees can now be paid online on the Portal.

**Step Eight:** Timetables and opening day information will be posted on the Portal in late August.

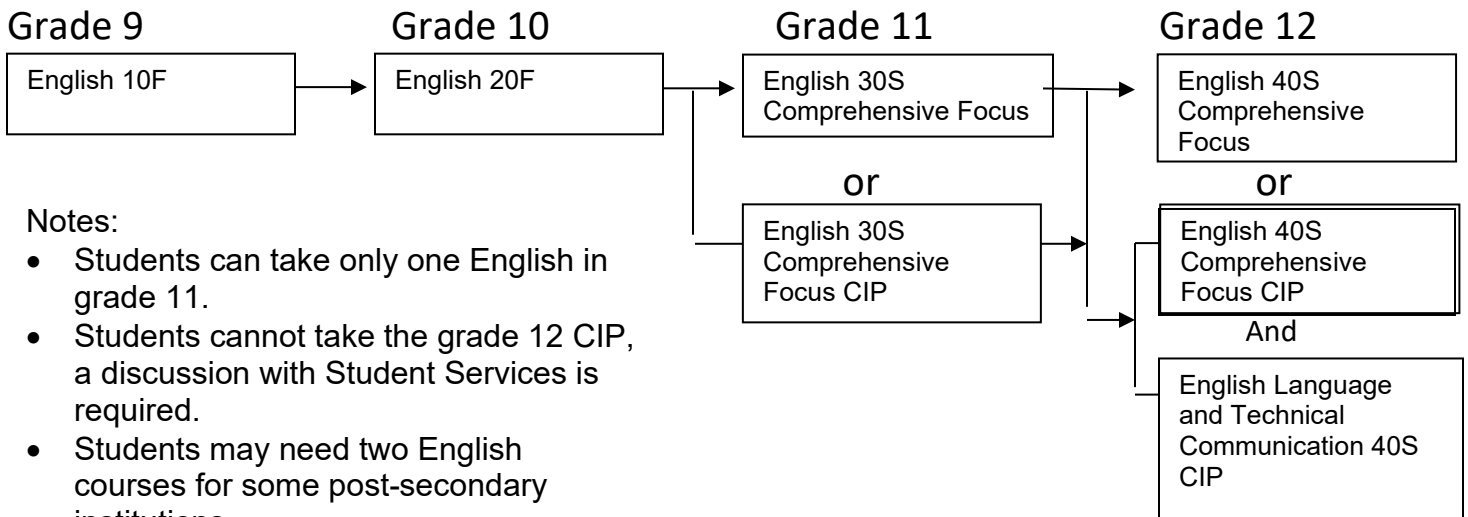
**Important Note:**

Once choices have been made and finalized, classes will be organized, and staff determined. Courses that have very low enrollment may not be offered or combined with others. It is important that you put a lot of thought into the courses that you want as it will be very difficult to make changes to course requests later.

# Compulsory Courses: English Language Arts:

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## English Language Arts Flow Chart:



### Notes:

- Students can take only one English in grade 11.
- Students cannot take the grade 12 CIP, a discussion with Student Services is required.
- Students may need two English courses for some post-secondary institutions.
- For more info on CIP contact Student Services

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## ENGLISH LANGUAGE ARTS 20F

**1 credit**

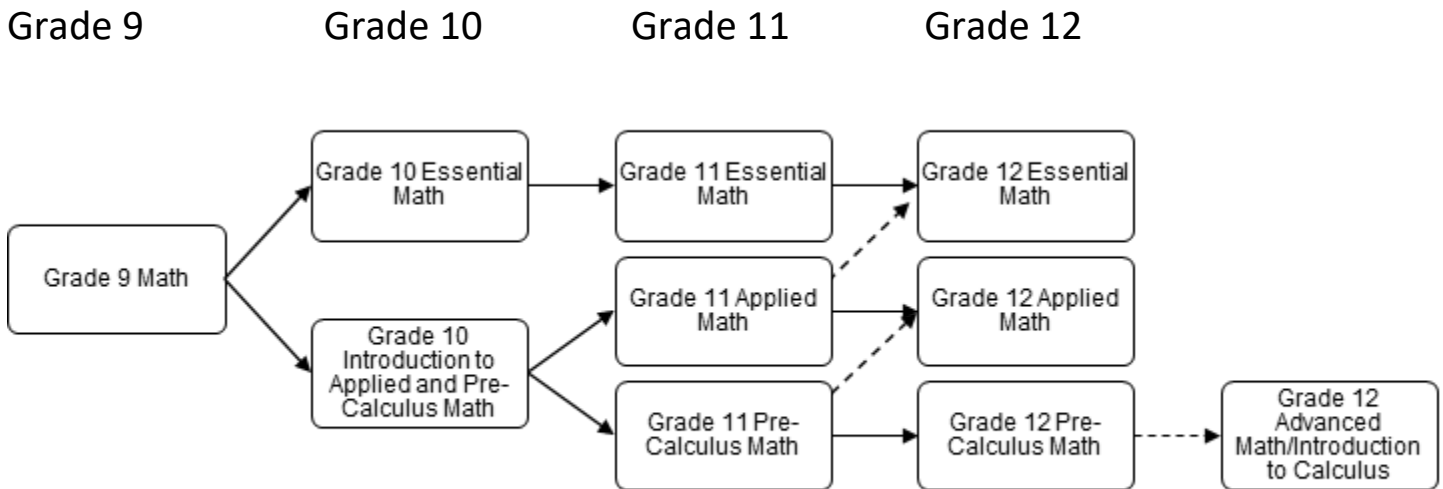
**PREREQUISITE:** English Language Arts 10F

This course is designed to increase students' knowledge of reading, writing, listening, speaking, viewing, and representing. This course helps students become more skillful language users in a variety of tasks and assignments that emphasize purpose and audience. Students expand their knowledge of literary concepts as they continue to build their skills and knowledge of informal and formal essays.

Students study news and magazine articles, short stories, film, poetry, novels, and complete projects throughout the semester, as they juxtapose personal views/reactions with larger perceptions and truths within the world. Grade 10 places importance on the proper use of grammar, punctuation, spelling, and vocabulary in all assignments.

# Compulsory Courses: Mathematics:

## Mathematics Flow Chart:



### Note:

- Dashed lines - - - - indicate other possible choices.
- Taking at least one Math course is required at each grade level.
- Grade 12 Essential, Applied and Pre-calculus courses have final provincial achievement tests.

## A GUIDE TO MATHEMATICS COURSE SELECTION

In grade 10, students may choose from TWO mathematics programs: Introduction to Applied /Pre-Calculus or Essential Mathematics. They must take a minimum of ONE credit in mathematics in each of their grade 10, 11 and 12 years to graduate. However, students may choose to take two mathematics credits each year as students can obtain credits for more than one mathematics course at the same level, provided there are spots available in the courses. (For example: Grade 10 IAPC Math and Grade 10 Essentials).

Each of these programs is sequential, and is designed to meet different interests, learning needs and education/career goals of students. Students and parents are advised to follow recommendations of grade nine math teachers and to consult with mathematics teachers and/or Student Services staff in making this choice at the grade 10 level. When students choose courses which best suit their needs and abilities, they have the greatest chance for success, now and in the future. Please check websites for the mathematics and science prerequisites for entry into various programs at universities and colleges.

## ESSENTIAL MATHEMATICS 20S

**1 credit**

**PREREQUISITE:** Math 10F

Grade 10 Essential Mathematics 20S is intended for students whose post-secondary planning includes everything except a focus on mathematics and science-related fields. Grade 10 Essential Mathematics emphasizes consumer applications, problem-solving, decision making, as well as number sense and number use. This course centers on the connections to mathematics that we face in our day-to-day lives.

### UNITS BY PROVINCIAL STRANDS:

- Number – Analysis of Games and Numbers, Personal Finance, Consumer Decisions.

- Shape and Space – Transformations, 2D Geometry, Trigonometry

EQUIPMENT / PERSONAL SUPPLIES: Students will be required to have a scientific calculator.

**SPECIAL NOTES:**

Essential Mathematics is accepted as a required Math credit for entry into some post-secondary programs, but not all. Please discuss your math choice with student services to ensure that it will be accepted by your chosen post-secondary institution.

**INTRODUCTION TO APPLIED AND PRE-CALCULUS MATHEMATICS 20S**

**1 credit**

**PREREQUISITE:** Math 10F (80% recommended)

Grade 10 Introduction to Applied and Pre-calculus mathematics (20S) is intended for students considering post-secondary studies that require a math pre-requisite. This pathway provides students with the mathematical understanding and critical-thinking skills that have been identified for specific post-secondary programs of study. The topics studied form the foundation for topics to be studied in both Grade 11 Applied Mathematics and Grade 11 Pre-calculus Mathematics and include both calculator-based and non-calculator-based calculations.

**UNITS BY PROVINCIAL STRANDS:**

- Number: Factoring, Polynomials, Irrational numbers, Radicals and Rational Exponents
- Patterns & Relations: Graphs and Relations, Linear Functions, Systems of Linear Equations
- Shapes & Space: Measurement, Surface Area and Volume, Trigonometry

EQUIPMENT / PERSONAL SUPPLIES: Students will be required to have a scientific calculator.

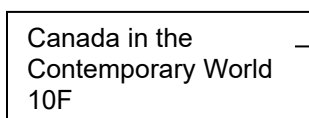
\*Info about AP Calculus (for Grade 11 and 12 future planning):

<b>AP MATHEMATICS 42S 1 credit</b>		
Windsor Park is proud to offer AP Calculus Math. Mathematically talented students can obtain a university credit in mathematics before they finish high school if they follow the following schedule.		
<b>Grade</b>	<b>Semester One</b>	<b>Semester Two</b>
Nine	Math 10F – Year Long	
Ten	Introduction to Pre-Calc and Applied (in either semester)	
Eleven	Pre-Calc 30S	Pre-Calc 40S
Twelve	Advanced Math	AP Calculus
*A minimum mark of 75% is required in math 10F to take AP math.		
**A minimum mark of 75% is required in Introduction to Pre-Calc and Applied		
***A minimum mark of 75% is required in both Pre-Calc 30 and 40 in order to take AP math.		

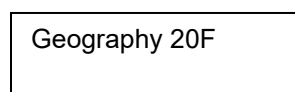
# Compulsory Courses: Social Studies:

## Social Studies Flow Chart:

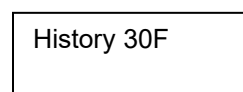
Grade 9



Grade 10



Grade 11



Grade 12

*\*although there are no compulsory courses in Social Studies in grade 12, students are encouraged to consider the many Social Studies electives*

### **GEOGRAPHIC ISSUES 20F**

**1 credit**

**PREREQUISITE:** Canada in the Contemporary World 10F

This course is designed to help students:

- Gain perspective on physical, social, and political events and processes.
- Understand the processes that shape the earth and how living things interact with the environment.
- Understand interactions among groups of people.
- Engage in decision making and problem solving in planning, development, and environmental and resource management.
- Comprehend global interdependency.
- Make informed judgments about environmental and social issues.

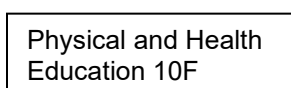
Units of Study:

- Geographic Literacy
- Natural Resources
- Food from the Land
- Industry and Trade
- Urban Places

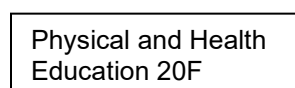
# Compulsory Courses: Physical and Health Education:

## Physical and Health Education Flow Chart:

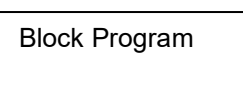
Grade 9



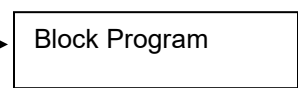
Grade 10



Grade 11



Grade 12



Notes:

- All students will need 4 credits Grade 9-12 of Physical and Health Education to graduate.

### **PHYSICAL EDUCATION AND HEALTH 20F**

**1 credit**

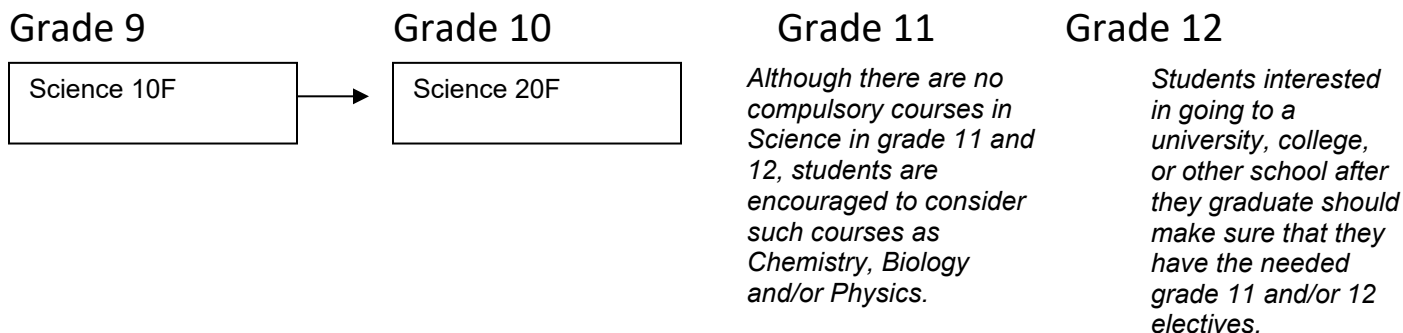
**PREREQUISITE:** Physical Education and Health 10F

The course's general outcomes include development of movement skills, fitness management, safety, personal and social management, and healthy lifestyle practices. Activities will include team, dual and individual sports, fitness programming, theory, and classroom work.

## Compulsory Courses: Science:

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### Science Flow Chart:



### **SCIENCE 20F**

**1 credit**

**PREREQUISITE:** Science 10F

Science 20F is a required course which prepares the student for further study in Biology, Chemistry, and Physics. The course is broken down into four Units.

- Chemistry in Action – Examine the interactions among chemical elements in chemical reactions, the formation of chemical compounds, balancing and classifying chemical reactions.
- Dynamics of Ecosystems – Examine the complex relationships in ecosystems to investigate sustainability, the cycling of nutrients and population dynamics.
- In Motion – Examine the physics of motion; specifically, displacement, velocity, acceleration, and forces experienced in types of motion. Relationships are analyzed graphically and numerically and applied to the motion of automobiles.
- Weather Dynamics Examine climate, weather, and the creation of severe weather phenomenon.

**EQUIPMENT / PERSONAL SUPPLIES:** Students will be required to have a scientific calculator.

### **COMPUTER SCIENCE 20S**

**1 credit**

**PREREQUISITE:** None

This introductory course in computer science is intended for students interested in learning a programming language. Students will develop knowledge, attitudes, and skills applicable to coding and problem solving beyond computer science. Students will learn programming skills and apply them to visual design, animation, and the foundations of game design through both independent tasks and collaborative projects. Students will focus on the Java programming language and use interactive software such as Scratch and Processing to produce original interactive designs and games that can be shared with a global audience. Confidence in basic Math skills and spatial reasoning is strongly recommended for enrollment in Computer Science.



## Grade 10 Elective Courses:

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### **FRENCH: COMMUNICATION AND CULTURE 20F**

**1 credit**

**PREREQUISITE:** French 20F

This course is a participation-based course where students acquire French communication skills such as reading, writing, listening, and speaking while learning about French culture in Canada and around the world. A heavier emphasis is placed on the acquisition of spoken language. Be ready to speak and interact with your peers daily through small group activities, songs, and lots of games.

### **CLOTHING, HOUSING, & DESIGN 20G**

**1 credit**

**PREREQUISITE:** None

This is a hands-on course where the projects will be based on the experience the student has in the sewing lab. There are four required projects to ensure that each student can complete required skills in the lab and the remainder of the course consists of choice projects. The focus of the class will be design and construction of textiles and textile products. Supplies for required projects are available to students in the classroom. Many supplies are also available for choice projects but if specific materials or patterns are needed, they are the student's responsibility.

### **FAMILY STUDIES 20F**

**1 credit**

**PREREQUISITE:** None

This course involves the examination of pregnancy, birth and the first year of life, including an infant's emotional, social, intellectual, and physical development. A special project includes caring for a "computerized baby".

*Specific topics include:*

Readiness for Parenting, Parenting Styles, Conception, Pregnancy, Labor and Delivery, The Newborn, Feeding the Infant, The Infant's First Year, and Positive and Negative Aspects of Parenting.

### **FOOD AND NUTRITION 20G**

**1 credit**

**PREREQUISITE:** None

In this course, students gain a greater understanding of the role of the 6 nutrients groups and explore the most current, science-supported advice about what to eat more of, and what to limit. They will discover the strong link between eating habits and lifelong health and wellness. Cooking days offer numerous opportunities to improve recipe reading abilities, measuring and knife skills. The recipes chosen are varied, with an emphasis on healthy, whole, everyday food. Students also have opportunities to create their own variations of recipes.

### **GRAPHIC COMMUNICATION TECHNOLOGY 20G**

**1 credit**

**PREREQUISITE:** None

This area of study is designated to allow student to work effectively with materials, applications, equipment, and technology in the graphics field to communicate visually.

This course offers hands-on experiences and problem solving daily. Evaluation will be biased on individual assignments, projects, group problem-solving activities, and self reflection. This course will be of interest to students who are considering a career in commercial art, architecture, interior design, fine arts, drafting and design, electronic imagery, photography or other related fields.

**Areas of study:** Computer generated design, Desktop publishing, DSLR photography, introduction to airbrushing, Advertising and design.

**Possible Projects:** Magazine cover, Multicoloured decals, Digital drawings, Photography challenges, T-shirt design, and much more.

## **METALWORK TECHNOLOGY 20G**

**1 credit**

**PREREQUISITE:** None

Metalwork Technology allows students to explore the processes involved in the manufacturing and fabrication of metal products with a “hands on” approach. Small engine repair included and a strong focus of career explorations in related trades.

**Areas of study:** Oxy acetylene welding, Mig welding, Plasma cutting, CNC operations, Aluminum sublimation, Layout and design, Problem solving, General metal working

**Possible Projects:** Motorized go carts, power scooters, tree stands, mig cube, screwdrivers, skateboard rails, outdoor firepit, wood burning meat smokers, pizza cutters, magnetic pick-up tools to name a few.

## **PRE-ENGINEERING 21G**

**1 credit**

**PREREQUISITE:** None

This course builds upon Pre-Engineering 15g but no previous experience is required! We continue the Project Based Learning approach and refine and hone our skills to create more advanced machines and projects. Students use experimental and self-directed research to solve problems and use multiple manufacturing methods to bring their ideas to fruition. Students will also use machines such as 3D printers more independently and use more advanced features.

**Areas of study:** Mechanical engineer, Structural Engineering, Electronics, and Pneumatics/Hydraulics, Alternative Energies

**Possible Projects:** Hydraulic arm, sumo bots, LED guided glasses, wind powered phone chargers, and much more.

## **WOODWORK TECHNOLOGY 20G**

**1 credit**

**PREREQUISITE:** None

Woodworking Technology allows students to explore the processes involved in the manufacturing and fabrication of wooden products with a “hands on” approach. Students will learn a variety of skills. Students will learn to use a variety of Hand tools, Power Tools, and Computer Aided Technologies to design and construct projects. By the end of this course, you'll not only have a collection of new skills but also a set of tangible creations that you've personally designed and crafted.

**Areas of study:** Safety, Hand tools, Power Tools and Machinery, Wood Joinery, Finishing Techniques, CNC technologies and Measurement.

**Possible Projects:** Cutting Boards, Knife Blocks, Musical instruments, Chess boards, Wooden bowls, Acrylic pens, Lamps, Chairs, Boxes, Signs, lawn games.

## **Electronics/Robotics 20G**

**1 credit**

**PREREQUISITE:** None

This course provides both theory and practical experiences, as well as 3D modeling and problem-solving opportunities.

For the robotics portion students will build various robots; both user controlled and autonomous (coded); for classroom-based competitions. Using an Engineering notebook to record data, game strategies and iterations to effectively reflect on their learning, students will exercise soft skills to share ideas and collaborate. Utilizing the Engineering design loop, students will adapt base robot builds to make the experience their own.

### **Competitions Include:**

**Freeze Tag:** Robots will drive in an arena and attempt to 'tag' opponents to make the robot freeze in place.

**Ring Leader:** Students will design and construct a manipulator to place rings overtop of pillars. Both user controlled and autonomous elements are used for this challenge.

**Castle Crasher:** Students will explore optical and distance sensors to seek, crash and clear balls out of a castle. Coding is heavily utilized in this competition.

The electronics portion has students building simple circuit boards to create various projects including an "Operation" game and a neon rope light sign.

## **EAL 211G/21G/31G**

**1 credit**

**PREREQUISITE:** None

Students will work towards improving their listening, speaking, reading, and writing skills for English as an Additional Language for academic purposes. Each course code represents one stage or level the student has achieved beginning with Stage 1 (11G) up to Stage 3 (31G) with the possibility of earning 3 credits for English. Multilanguage Learners (MLL) are encouraged to read and write to expand their vocabulary and are given the opportunity to practice oral skills through presentations to increase confidence. After students have completed the 3 stages (11G, 21G,31G), they are ready to function independently in all academic courses.

## **INDIGENOUS STUDIES 20S**

**1 credit**

**PREREQUISITE:** None

Indigenous Studies focuses on the unique perspectives of Indigenous peoples. These perspectives include an understanding of Indigenous philosophies of life. This course creates an awareness of issues, priorities, and events as they relate to Indigenous peoples.

## **YEARBOOK 20S**

**1 credit**

**PREREQUISITE:** None

Yearbook 20S immerses students in DSLR photography, providing tips to master the craft. From sporting events to classroom activities, students document high school's diverse moments. The course emphasizes photography

skills, layout, and design, teaching the artful arrangement of photos, color selection, and text integration for a visually appealing yearbook. The practicum project involves students collaboratively creating and publishing the school's yearbook.