

## Grade 9 Pathway Presentation







## **Waterdown** DISTRICT HIGH SCHOOL **Diploma Requirements**

#### Graduation requirements for current Grade 9s:

- 1. Earn 30 credits
- 2. Complete 40 hours of community involvement
- 3. Pass the literacy requirement
- 4. Complete 2 online courses (opt-out available)



# 30 Credit Breakdown

- 17 compulsory credits (mandatory)
- 13 optional credits (electives)



#### The **17** compulsory credits:

- 4 credits in English (1 credit per grade)
- 3 credits in Mathematics (Grade 9, Grade 10 and 1 credit in Grade 11 or 12)
- 2 credits in Science
- 1 credit in French as a second language
- 1 credit in Canadian Geography (Grade 9)
- 1 credit in Canadian History (Grade 10)
- 1 credit in Technological Education (Grade 9 or Grade 10)
- 1 credit in the Arts
- 1 credit in Health and Physical Education
- 0.5 credit in Career Studies
- 0.5 credit in Civics and Citizenship
- 1 credit from the <u>STEM-related course group</u>



#### **STEM** related courses:

- Business Studies
- Computer Studies
- Cooperative Education
- Mathematics (in addition to the 3 compulsory credits currently required)
- Science (in addition to the 2 compulsory credits currently required)
- Technological Education (in addition to the 1 compulsory credit required)





# Community Involvement



#### Goal:

• 20 hours by end of grade 10





# Literacy Requirement

Achieving a minimum grade of 75% on the Ontario Secondary School Literacy Test (OSSLT) which is administered in Grade 10



# **Course Selections for Grade 10**

- In Grade 10, you will take a total of 8 courses:
  - o 5 mandatory courses
    - English
    - Math
    - Science
    - History
    - Careers & Civics
  - o 3 other courses



Grade 9	Grade 10	Grade 11	Grade 12
English	English	English	English
Math	Math	Math	Choice #1
Science	Science	Choice #1	Choice #2
French	Careers & Civics	Choice #2	Choice #3
Geography	History	Choice #3	Choice #4
Choice #1	Choice #1	Choice #4	Choice #5
Choice #2	Choice #2	Choice #5	Choice #6
Choice #3	Choice #3	Choice #6	Choice #7



Bell	Period	Time
Schedule	1	8:00 – 9:15
	2	9:19 – 10:34
	3	10:38 – 11:53
All Grade 10s have Period 4 lunch	4	11:56 – 1:11
	5	1:15 – 2:30



**COURSE CODES** SNC2D1 These three letters The sixth character refers identify the subject. The credit value of the course The letter identifies the This number Stream/destination Identifies the grade:

3 = Grade 11

4 = Grade 12

1 = Grade 9

2 = Grade 10

#### Grade 9

O = Open W = Without Stream

#### Grade 10

D = Academic P = Applied L = Locally Developed O = Open

#### Grade 11 – 12

C = College E = Workplace M = University/College O = Open U = University



# Grade 10 Program Streams





## PATHWAYS





## Waterdown DISTRICT HIGH SCHOOL Destinations





#### **Waterdown** DISTRICT HIGH SCHOOL Academic vs Applied Streams What's Right For You?

	ACADEMIC	APPLIED
Pace	Faster than Grade 9 courses	Similar to Grade 9 courses
Homework	Typically daily	Typically completed in class
Analytical Skills	Emphasis on critical and abstract thinking	More prompting and guided analysis
Independence	Able to manage self-directed learning	More guided learning and check-ins
Notes	Required to take notes from teacher lectures, whiteboards, etc.	Handouts with notes and worksheets generally provided



# Thinking of University?

## Be sure to select Academic English (ENG2D1)



# Academic vs Applied





In the Chemistry Unit of both SNC2D1 and SNC2P1, both streams will explore chemical equations, but the complexity, depth of study, and amount of repetition/scaffolding differs.

SNC2D1 (Academic) SNC2P1 (Applied) **Balancing chemical equations**  $Al_4C_3 + H_2O \rightarrow Al(OH)_3 + CH_4$  $H_2 + O_2 \rightarrow H_2O$ Analyzing chemical equations

For Bromine reacting with potassium iodide NaOH + HCl  $\rightarrow$  NaCl + H<sub>2</sub>O

- Write a word equation for the reaction a) Identify the products a)
- Write a balance chemical equation b)
- Classify the reaction c)

b) Is the equation balanced

c) Classify the reaction



In the Optics Unit of both SNC2D1 and SNC2P1, both streams will explore electromagnetic waves in our society, but the complexity, depth of study, and amount of repetition/scaffolding differs. SNC2D1 (Academic) SNC2P1 (Applied)

For each electromagnetic wave below, explain its use in our society:

- a. X-rays
- b. UV light
- c. Radio waves
- d. Infrared light
- e. Microwaves
- f. Gamma rays
- g. Visible light

Match each electromagnetic wave from column A with the term from column B that is most closely related.

X-rays	i) Telecommunications
UV light	ii) Vitamin D
Radio waves Infrared light	iii) Cancer treatment iv) Radar
Microwaves	v) Concert effects
Gamma rays Visible light	vi) Baggage screening vii) TV remote control



#### Academic vs Applied in Math $(x+c)(x-c)=x^2-c^2$ $tg \alpha = \frac{BC}{AC} = \frac{a}{b}$ B $\cos \alpha = \frac{AC}{AB} = \frac{b}{c}$ α 10 $(x+c)(x^2-xc+c^2)=x^3+c^3$ ctg of =AC 0



In the Algebra unit of MFM2P and MPM2D, both streams will explore quadratics, but the depth of study and complexity of questions will differ.

#### ACADEMIC

Write an equation in intercept form for the following parabola.

#### APPLIED

Which of the following equations does the parabola represent? Circle your answer?



a) 
$$y = (x+1)(x+5)$$
  
b)  $y = (x+1)(x-5)$   
c)  $y = (x-1)(x+5)$ 

![](_page_20_Figure_9.jpeg)

![](_page_21_Picture_0.jpeg)

Students in both streams of Grade 10 Math will study Trigonometry. The associated word problems differ in complexity and the number of steps required to solve them.

#### Academic

A speedboat took off from a dock at an angle of 65° from the shore, at a speed of 80 km/h. At the same time, a jet ski took off at an angle of 107°, travelling at 160 km/h. After 30 minutes, how far apart are the two watercraft from each other? Answer to one decimal place.

#### **Applied**

While mountain climbing, one end of a 22m long rope is at the top of a cliff. The angle the rope makes with the ground is 75°. How high is the cliff, to the nearest metre?

![](_page_22_Picture_1.jpeg)

# Academic vs Applied

![](_page_22_Picture_3.jpeg)

![](_page_23_Picture_0.jpeg)

Analytical Writing from APPLIED Stream ENG 2P	Analytical Writing from ACADEMIC Stream ENG 2D		
<ul> <li>SHORT Essay</li> <li>More simple argument</li> <li>Supporting details are mostly paraphrased in student's own words</li> <li>Supporting details are from personal connections and 1- 2 stories from course</li> </ul>	<ul> <li>A FULL Essay</li> <li>more advanced argument</li> <li>Supporting details are mostly quotations</li> <li>Supporting details are only from literature</li> </ul>		
<b>Student Model, Level 4</b> : Difficult choices are a part of growing up. Difficult choices cause tension and conflict but create new learning or strengths. This theme can be seen in examples from my life as well as stories and movies. Three parts of the theme are family, school, and work.	<b>Student Model, Level 4:</b> Literature can provide insight into the world, especially when students consider the different dimensions of setting. An important element in the socio-cultural dimension of a story's setting is the amount and kind of justice that exists. Short stories as well as the novel <i>Gutter Child</i> reveals injustice in social systems, cultural values and beliefs, and personal relationships.		

![](_page_24_Picture_0.jpeg)

#### **Analytical Reading Questions:**

Hold fast to dreams For if dreams die Life is a broken-winged bird That cannot fly.

Hold fast to dreams For when dreams go Life is a barren field Frozen with snow.

# APPLIED STREAM – ENG2P1 1. The writer urges readers to hold "fast" to dreams. What does that word mean when you see it as the root word for the word "fasten"? 2. Why do you think this writer chose this word? 3. How is the writer comparing a person without dreams or goals to a bird? ACADEMIC STREAM – ENG2D1 1. Use vocabulary inference strategies to explain the word "fast" does not mean "quick", and then explain why it is an effective choice. 2. Why do you think this writer chose this word? 3. How is the writer comparing a person without dreams or goals to a bird?

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![](_page_25_Figure_2.jpeg)

![](_page_26_Picture_0.jpeg)

	🖶 Student Account
<b></b>	Gr. 9 🗸 🗸 250 points 🕭 🖾
🔒 Home 🗸 🗸	
Who Am !	Home
<ul> <li>High School</li> <li>Continuing Education</li> </ul>	Dashboard Tasks Class Activities Goals Portfolios
😌 Post-Secondary 🗸 🗸 🗸	
🚔 Work 🗸 🗸	Complete your IPP Tasks Plan Courses for Grade 10
💾 Guides	2 of 8 Completed
Favourites	Individual Pathways Plan (IPP) Tasks help you plan your education and career while earning points for prize draws.
	View All Tasks Show Prizes

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Course Selection is now Closed Grade 9 Grade 10 Grade 11 Grade 12 • Current Year Next Year Plan Ahead Plan Ahead Grade 9 English English English English ENL1W1 • 1 Credit Grade 9 Mathematics Mathematics Mathematics Course MTH1W1 • 1 Credit Grade 9 Science Science Course Course SNC1W1 • 1 Credit Grade 9 Core French History Course Course FSF1D1 • 1 Credit Grade 9 Exploring Canadian Careers Course Course CGC1W1 • 1 Credit Grade 9 Visual Arts Civics Course Course AVI101 • 1 Credit Grade 9 Building the Entrepr. Course Course Course BEM101 • 1 Credit Grade 9 Healthy Active Livin.. Course Course Course PPL1O1M • 1 Credit Course Alternates Alternate

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#### Graduation Progress

8 required credits planned required	<b>O</b> required credits earned		<b>30</b> total required for graduation	
Compulsory 0/17 Credits				
	Planned	Earned	Required	
4 Credits in English (1 credit per grade)	1	0	1/4	
I Credit in French As a Second Language	1	0	1/1	
<ul> <li>3 credits in mathematics (Grade 9, Grade 10 and 1 credit in Grade 11 or 12)</li> </ul>	1	0	1/3	
2 Credits in Science	1	0	1/2	
I Credit in Technological Education (Grade 9 or 10)	0	0	0/1	
✓ 1 Credit in Arts	1	0	1/1	

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I Credit in Technological Education (Grade 9 or 10)	0	0	0/1
✓ 1 Credit in Arts	1	0	1/1
✓ 1 Credit in Health and Physical Education	1	0	1/1
<ul> <li>0.5 Credit in Civics</li> </ul>	0	0	0/0.5
0.5 Credit in Guidance and Career Education	0	0	0/0.5
I Credit in History	0	0	0/1
1 Credit in Geography	1	0	1/1
1 Credit from the STEM-related Course Group (Business Studies, Computer Studies, Cooperative Education, Mathematics, Science, or Technological Education)	0	0	0/1

![](_page_29_Figure_3.jpeg)

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# TECH CRERIT REMINRER

TECHNOLOGICAL EDUCATION	GRADE 9	GRADE 10
Technology and the Skill Trades	TAS101	TAS2O1
Communications Technology		TGJ2O1
Green Industries		THJ2O1
Computer Technology		TEJ2O1
Construction Technology		TCJ2O1
Construction Technology/SHSM Construction		
Custom Woodworking		
Construction Technology – Home repair		
Technological Design		TDJ2O1
Transportation Technology		TTJ2O1
Hairstyling and Aesthetics	TXJ101	TXJ2O1
Hairstyling and Aesthetics (Dual Credit/Niagara College)		

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## ART CRERIT REMINDER

ARTS	GRADE 9	GRADE 10	GRADE 11	GRADE 12
Drama	ADA101	ADA2O1	ADA3M1	ADA4M1
Music-Instrumental	AMU1O1	AMU2O1	AMU3M1	AMU4M1
Music-Instrumental & Repertoire (2 credit package)				AMU4M1 & AMR4M1
Note: Repertoire will occur outside the school day	AMUIUI & AMKIUI	AMUZUI & AMRZUI		
Music-Vocal/Choral	AMV101	AMV2O1	AMV3M1	AMV4M1
Music – Studio Production			AMC3O1	
Visual Arts – Crafts	AWA1O1			
Visual Arts	AVI101	AVI2O1	AVI3M1	AVI4M1
Visual Arts-Digital Media		AWS2O1		
Visual Arts-Drawing and Painting		AWM2O1	AWM3M1	
Visual Arts-Interior Design			AWH3O1	
Visual Arts-Photography			AWQ3M1	
Visual Arts-Non-Traditional (Portfolio)				AWT4M1
				•

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# PHYS. ER. CRERIT REMINRER

HEALTH & PHYSICAL EDUCATION	GRADE 9	GRADE 10	GRADE 11	GRADE 12
Hockey/Lacrosse Focus (course fee applies)	PAL1O1 (all-genders)			
Sports and Games (F-Female, M-Male)	PPL101F, PPL101M	PPL2O1F, PPL2O1M	PPL3O1F, PPL3O1M	PPL4O1F, PPL4O1M
Recreational Physical Education	PAI1O1 (all-genders)	PAI2O1 (all-genders)		
Personal Fitness Activities (F-Female, M-Male)		PAF2O1F, PAF2O1M	PAF3O1F, PAF3O1M	PAF4O1F, PAF4O1M
Football Focus	PAR1O1 (all-genders)	PAR2O1 (all-genders)	PAR3O1 (all-genders)	PAR4O1 (all-genders)
Basketball Focus			PAL3O1 (all-genders)	PAL4O1 (all-genders)
Introductory Kinesiology				PSK4U1(all-genders)
Recreation & Healthy Active Living Leadership				PLF4M1 (all-genders)

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