Housing and Design 120

Acknowledgments

Table of Contents

1. Introduction

1.1 Mission and Vision of Educational System

The New Brunswick Department of Education and Early Childhood Development is dedicated to providing the best public education system possible, wherein all students have a chance to achieve their academic best. The mission statement for New Brunswick schools is:

> *Each student will develop the attributes needed to be a lifelong learner, to achieve personal fulfillment and to contribute to a productive, just and democratic society.*

1.2 New Brunswick Global Competencies

New Brunswick Global Competencies provide a consistent vision for the development of a coherent and relevant curriculum. The statements offer students clear goals and a powerful rationale for school work. They help ensure that provincial education systems' missions are met by design and intention. The New Brunswick Global Competencies statements are supported by curriculum outcomes.

New Brunswick Global Competencies are statements describing the knowledge, skills and attitudes expected of all students who graduate high school. Achievement of the New Brunswick Global Competencies prepares students to continue to learn throughout their lives. These Competencies describe expectations not in terms of individual school subjects but in terms of knowledge, skills and attitudes developed throughout the curriculum. They confirm that students need to make connections and develop abilities across subject boundaries if they are to be ready to meet the shifting and ongoing demands of life, work and study today and in the future.

See Appendix 6.1.

2. Pedagogical Components

2.1 Pedagogical Guidelines

Diverse Cultural Perspectives

It is important for teachers to recognize and honour the variety of cultures and experiences from which students are approaching their education and the world. It is also important for teachers to recognize their own biases and be careful not to assume levels of physical, social or academic competencies based on gender, culture, or socio-economic status.

Each student's culture will be unique, influenced by their community and family values, beliefs, and ways of viewing the world. Traditional aboriginal culture views the world in a much more holistic way than the dominant culture. Disciplines are taught as connected to one another in a practical context, and learning takes place through active participation, oral communication and experiences.   Immigrant students may also be a source of alternate world views and cultural understandings. Cultural variation may arise from the differences between urban, rural and isolated communities. It may also arise from the different value that families may place on academics or athletics, books or media, theoretical or practical skills, or on community and church. Providing a variety of teaching and assessment strategies to build on this diversity will provide an opportunity to enrich learning experiences for all students.

Universal Design for Learning

The curriculum has been created to support the design of learning environments and lesson plans that meet the needs of all learners. Specific examples to support Universal Design for Learning for this curriculum can be found in the appendices. The **Planning for All Learners Framework** will guide and inspire daily planning.

See Appendix 6.2

English as an Additional Language Curriculum

Being the only official bilingual province, New Brunswick offers the opportunity for students to be educated in English and/or French through our public education system. The EECD provides leadership from K-12 to assist educators and many stakeholders in supporting newcomers to New Brunswick. English language learners have opportunities to receive a range of instructional support to improve their English language proficiency through an inclusive learning environment. EECD, in partnership with the educational and wider communities offer a solid, quality education to families with school-aged children.

2.2   Pedagogical Guidelines

Assessment Practices

Assessment is the systematic gathering of information about what students know and are able to do. Student performance is assessed using the information collected during the evaluation process. Teachers use their professional skills, insight, knowledge, and specific criteria that they establish to make judgments about student performance in relation to learning outcomes. Students are also encouraged to monitor their own progress through self-assessment strategies, such as goal setting and rubrics.

Research indicates that students benefit most when assessment is regular and ongoing and is used in the promotion of learning (Stiggins, 2008). This is often referred to as formative assessment. Evaluation is less effective if it is simply used at the end of a period of learning to determine a mark (summative evaluation).

Summative evaluation is usually required in the form of an overall mark for a course of study, and rubrics are recommended for this task. Sample rubrics templates are referenced in this document, acknowledging teachers may have alternative measures they will apply to evaluate student progress.

Some examples of current assessment practices include:

• Questioning	• Projects and Investigations
• Observation	• Checklists/Rubrics
• Conferences	• Responses to texts/activities
• Demonstrations	• Reflective Journals
• Presentations	• Self and peer assessment
• Role plays	• Career Portfolios
• Technology Applications	• Projects and Investigations

Formative Assessment

Research indicates that students benefit most when assessment is ongoing and is used in the promotion of learning (Stiggins, 2008). Formative assessment is a teaching and learning process that is frequent and interactive. A key component of formative assessment is providing ongoing feedback to learners on their understanding and progress. Throughout the process adjustments are made to teaching and learning.

Students should be encouraged to monitor their own progress through goal setting, co-constructing criteria and other self-and peer-assessment strategies. As students become more involved in the assessment process, they are more engaged and motivated in their learning.

Additional details can be found in the Formative Assessment document.

Summative Assessment

Summative evaluation is used to inform the overall achievement for a reporting period for a course of study. Rubrics are recommended to assist in this process. Sample rubrics templates are referenced in this document, acknowledging teachers may have alternative measures they will apply to evaluate student progress.

For further reading in assessment and evaluation, visit the Department of Education and Early Childhood Development's Assessment and Evaluation site here.

Cross Curricular Literacy

Literacy occurs across learning contexts and within all subject areas. Opportunities to speak and listen, read and view, and write and represent are present every day -in and out of school.

3. Subject Specific Guidelines

3.1 Rationale

Housing and Design 110 is intended for students who wish to increase their awareness of the housing environment and the implications of technological advancement. Housing decisions represents the single largest expenditure of the family income for the majority of households. The course demonstrates the value of creativity and individuality in designing a living environment.

The interdisciplinary skills of observation, reflection, documentation, purposeful/intentional planning, goal setting, decision making, and problem solving.

This course will incorporate using a hands-on approach of both project-based and experiential learning.

3.2 Course Description

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The overall aim of this course is to provide students with lifelong learning skills that are transferable to future learning related to the housing environment and interior décor. Students will:

- raise the students' awareness of architectural aesthetics;
- understand the motivating factors that have an impact on the economy and environment;
- utilize the elements and principles of design as they apply to interior décor;
- encourage individual creativity through interior design;
- incorporate technology options in the living environment; and,
- identify issues related to human needs and their impact on future housing trends.

3.3   Curriculum Organizers and Outcomes

Outcomes

The New Brunswick Curriculum is stated in terms of general curriculum outcomes, specific curriculum outcomes and achievement indicators.

General Curriculum Outcomes (**GCO**) are overarching statements about what students are expected to learn in each strand/sub-strand. The general curriculum outcome for each strand/sub-strand is the same throughout the grades.

Specific Curriculum Outcomes (**SCO**) are statements that identify specific concepts and related skills underpinned by the understanding and knowledge attained by students as required for a given grade.

Learning Outcomes Summary Chart

GCO 1	Students will examine employment practices and Occupational Health and Safety legislation.
SCO 1.1	Students will examine safe and legal workplace procedures.
SCO 1.2	Students will describe ethical and legal workplace behavior.
SCO 1.3	Students examine employment opportunities, trades designations, and the Canadian Red Seal Certification program.

GCO 2	Students will identify and select interdisciplinary hand tools, power tools, and fasteners.
SCO 2.1	Students will identify, select and care for basic hand tools.
SCO 2.2	Students will identify, select and care for basic power tools.
SCO 2.3	Students will identify and select proper fasters for the specific application.

GCO 3	Students will examine architectural styles.
SCO 3.1	Students will identify/and explore the influences of traditional architectural styles and compare them with modern architecture.

GCO 4	Students will examine consumer issues.
SCO 4.1	Students will identify housing options.

GCO 5	Students will examine design and décor.
SCO 5.1	Students will work with color and its elements regarding design.
SCO 5.2	Students will work with design of homes using blueprints and 2D/3D design tools.
SCO 5.3	Students will work with accessories and design treatments.
SCO 5.4	Students will identify, select, and explore landscaping.

GCO 6	Students will examine modern innovations in home building and design
SCO 6.1	Students will explore modern innovations in home building and design.

4. Curriculum Outcomes

GCO 1	Students will examine employment practices and Occupational Health and Safety legislation.	
SCO 1.1	**Students will examine safe and legal workplace procedures.**	
Concepts and Content	**I Can – exemplars:**	

Concepts and Content	I Can – exemplars:
New Brunswick Construction Safety Association (NBCSA) online training courses in Workplace Hazardous Materials Information Systems (WHMIS) and Safety Orientation to learn safe work practices regarding WHMIS and the Employment Standards Act. Safe body mechanics (i.e. back safety, lifting, etc.). Basic First Aid.	I can identify potential consequences for unsafe procedures. I can interpret WHIMS symbols as identification for hazardous products. I can locate and properly use safety equipment. I can use Personal Protective Equipment (PPE). I can lockout and tag-out equipment with proper procedures. I can give examples of potential hazards with inappropriate clothing, footwear, and jewellery. I can understand back safety. I can use proper lifting techniques. I can demonstrate safe working loads. I can understand the importance of ergonomics and body mechanics. I can use proper body position when using tools.

	I can respond to potential hazard or injury.
Resources	

Video	Website	Document
	New Brunswick Construction Safety Association https://www.worksafenb.ca/	

SCO 1.2	Students will describe ethical and legal workplace behavior.
Concepts and Content	**I Can – exemplars:**
Interacting with customers' property regarding appropriate responsible resource management. Obligations to an owner (e.g. bonding, liability, privacy). Examine codes of ethics of organizations and companies.	I can co-construct a description of appropriate workplace behavior based on my own and my peers' experiences.

Resources		
Video	**Website**	**Document**
	https://www.eca.nb.ca/about/code-of-ethics/ http://www.cba.org/Publications-Resources/Practice-Tools/Ethics-and-Professional-Responsibility-(1)/Codes-of-Professional-Conduct http://www.cips.ca/ethics	

SCO 1.3	Students will examine employment opportunities, trades designations, and the Canadian Red Seal Certification program.	
Concepts and Content	**I Can – exemplars:**	
Job descriptions and employment opportunities in the skilled trades. Post secondary training options have grown in New Brunswick. There are some trades that are designated. The red seal certification program has a professional designation.	I can discuss employment opportunities and statistics for tradespeople. I can explore post secondary options or apprenticeship programs for trade training. I can identify a designated trade. I can explain the Red Seal Certification Program and its professional designation RSE.	
Resources		
Video	**Website** http://nbcc.ca/ www.eastcoasttrades.com https://www2.gnb.ca/content/gnb/en/departments/post-secondary_education_training_and_labour/Skills/content/ApprenticeshipAndTrades.html http://www.red-seal.ca/w.2lc.4m.2-eng.html https://www.eca.nb.ca/about/code-of-ethics/	**Document**

GCO 2	Students will identify and select interdisciplinary hand tools, power tools, and fasteners.	
SCO 2.1	**Students will identify/select and care for basic hand tools.**	
Concepts and Content		**I Can – exemplars:**
Hand tool selection, use, and care.		I can identify, care for and safely use the appropriate: clamping devices, pliers, wrenches, screwdrivers, striking tools, chisels, saws, and files.
Resources		
Video	**Website**	**Document**

SCO 2.2	Students will identify/select and care for basic power tools.	
Concepts and Content		**I Can – exemplars:**
Hand tool selection, use, and care.		I can identify, care for, and safely use the appropriate: electric saws, drills, and fastening devices. I can choose the appropriate pneumatic, electric, or battery-operated tool for the task at hand.
Resources		
Video	**Website**	**Document**

SCO 2.3	Students will identify and select proper fasters for the specific application.
Concepts and Content	**I Can – exemplars:**
Fastener selection, use, and care.	I can identify and safely use the appropriate temporary, removable, or permanent fasteners for the application (nails, screws, bolts and nuts, clips, glues, and epoxies).
Resources	
Video **Website** **Document**	

GCO 3	Students will examine architectural styles.	
SCO 3.1	**Students will identify/and explore the influences of traditional architectural styles and compare them with modern architecture.**	
Concepts and Content		**I Can – exemplars:**
Influences of traditional architectural styles and modern architecture styles.		I can identify the significant contributions in architecture made by the Greeks and Romans (Doric, Ionic Corinthian, Roman arch, Domed construction). I can describe the characteristics and principal building types of other early classic influences in interior design and architecture (Romanesque, Gothic, Renaissance, Baroque). I can recognize the first shelters built by European settlers in America. I can compare characteristics of traditional houses that set them apart from other styles (Spanish, Dutch, Scandinavian, German, French, English). I can give examples of modem and contemporary exterior housing styles (Ranch, Bungalow, Prairie, Split-level, Solar Earth-shelter, Industrial).
Resources		
Video	**Website**	**Document**

GCO 4   Students will examine consumer issues.

SCO 4.1	Students will identify housing options.	
Concepts and Content		**I Can – exemplars:**
Types of housing and options of attainment Healthy housing environments, safety, and security		I can identify housing needs, characteristics of community environments, personal resources and their availability. I can list the advantages and disadvantages of renting a home (rental units, rental agencies, Rentals man's Office). I can identify the advantages and disadvantages of purchasing a home. (appraisals, mortgages, equity, market value). I can describe ways to provide a healthy housing environment (occupant, health, energy efficiency, resource efficiency, environmental responsibility, affordability). I can explain housing safety and security (crime prevention programs, alarm systems, insurance).
Resources		
Video	**Website**	**Document**

GCO 5   Students will examine design and décor.

SCO 5.1	Students will work with color and its elements regarding design.
Concepts and Content	**I Can – exemplars:**
Design principles and colours	I can identify the elements of design (colour line, form, space, texture). I can identify the principles of design (balance, rhythm, proportion, emphasis, harmony). I can define and explain how each element can be used effectively (psychology of colour). I can describe common colour association and colour's effect on mood. I can explain how colour is produced (i.e. prism, colour wheel). I can Identify and use accurately the vocabulary of colour (primary, secondary, tertiary, hue value tint, shade, intensity, warm / cool colours).

Resources		
Video	**Website**	**Document** Activities: Have students mix acrylic paints to form colours from the primary hues. Make a colour wheel and use to demonstrate the six colour schemes.

SCO 5.2	Students will work with design of homes using blueprints and 2D/3D design tools.
Concepts and Content	**I Can – exemplars:**
Blueprints, floorplans, layouts, and 3D modeling	I can interpret a floor plan (floor plan, blueprint, symbols, production). I can identify, describe, and evaluate the three space zones (quiet zone, work zone, social zone), storage areas, traffic patterns, and furniture templates. I can describe basic kitchen layouts and work triangle implications (One Wall, L- Shaped, U-Shaped, Corridor Island, Work triangle). I can learn techniques that will extend space within a home (illusion, repetition, lighting). I can explain what backgrounds are and why they are important (Floors: Resilient and Non-resilient. Walls: Paint, wallpaper, paneling. Ceilings, Moldings).

Resources		
Video	**Website**	**Document**
	Google Sketchup (web application) https://www.sketchup.com/download Ikea Kitchen Design https://www.ikea.com/ms/en_CA/customer-service/about-our-products/planning-tools/index.html?icid=itl|ca|en_planning_tools_navtop|201706292245011519_5	

SCO 5.3	Students will work with accessories and design treatments.
Concepts and Content	**I Can – exemplars:**
Accessories and styles for functional, decorative, and dual-purpose purposes.	I can describe six types of window treatments (curtains, draperies, shutters, shades, blinds, stained glass). I can identify and classify decor styles (Contemporary, Traditional, Provincial, Country, Eclectic). I can differentiate among the three types of accessories (Functional, Decorative, Dual-purpose).

Resources

Video	Website	Document
	https://kent.ca https://www.homehardware.ca/en https://www.homedepot.ca	

SCO 5.4	Students will identify, select, and explore landscaping.	
Concepts and Content		**I Can – exemplars:**
Landscaping purposes and elements.		I can list natural and manufactured landscape elements. I can identify the goals of landscaping (privacy, comfort, beauty, recreation, entertainment, safety, creativity, ease of maintenance).
Resources		
Video	**Website**	**Document**

GCO 6   Students will examine design and décor.

SCO 6.1	Students will explore modern innovations in home building and design.	
Concepts and Content		**I Can – exemplars:**
Super insulation, reclaimed/ recycled materials, environmental impact, carbon footprint, passive solar.		I can explain the role of government in housing decisions (Legislation Housing Standards Building Codes Zoning Regulations). I can describe social trends that currently affect housing (housing for Canadians with disabilities, choices for aging Canadians, baby boom, echo boom, homes for the homeless). I can analyze the relationship between housing and the economy (economic trends, regional differences, affordability). I can identify the impact of technology on the housing environment (micro-electronics, system monitors, robotics, the "Smart House"). I can describe career clusters in the housing construction and home design field (design, building, home furnishings, interior design, home care & maintenance, modular construction and real estate).
Resources		
Video	**Website**	**Document**

5.   Bibliography

Common Content

Universal Design for Learning, Center for Applied Special Technology (CAST) http://www.cast.org/

Nelson, Louis Lord (2014). Design and Deliver: Planning and Teaching Using Universal Design for Learning. 1st Edition, Paul H. Brooks Publishing Co.

Subject Specific

Housing and Design 110 Course Outline (1996)

New Brunswick Construction Safety Association

https://www.worksafenb.ca/

https://www.eca.nb.ca/about/code-of-ethics/

http://www.cba.org/Publications-Resources/Practice-Tools/Ethics-and-Professional-Responsibility-(1)/Codes-of-Professional-Conduct

http://www.cips.ca/ethics

http://nbcc.ca/

https://www2.gnb.ca/content/gnb/en/departments/post-secondary_education_training_and_labour/Skills/content/ApprenticeshipAndTrades.html
http://www.red-seal.ca/w.2lc.4m.2-eng.html

https://kent.ca

https://www.homehardware.ca/en

https://www.homedepot.ca

Google Sketchup (web application) https://www.sketchup.com/download

Ikea Kitchen Design https://www.ikea.com/ms/en_CA/customer-service/about-our-products/planning-tools/index.html?icid=itl|ca|en_planning_tools_navtop|201706292245011519_5

6. Appendices

6.1 New Brunswick Global Competencies

Critical Thinking and Problem-Solving	Innovation, Creativity, and Entrepreneurship	Self-Awareness and Self-Management
• Engages in an inquiry process to solve problems • Acquires, processes, interprets, synthesizes, and critically analyzes information to make informed decisions (i.e., critical and digital literacy) • Selects strategies, resources, and tools to support their learning, thinking, and problem-solving • Evaluates the effectiveness of their choices • Sees patterns, makes connections, and transfers their learning from one situation to another, including real-world applications • Analyzes the functions and interconnections of social, ecological, and economic systems • Constructs, relates and applies knowledge to all domains of life, such as school, home, work, friends, and community • Solves meaningful, real-life, and complex problems by taking concrete steps to address issues and design and manage projects • Formulates and expresses questions to further their understanding, thinking, and problem-solving	• Displays curiosity, identifies opportunities for improvement and learning, and believes in their ability to improve • Views errors as part of the improvement process • Formulates and expresses insightful questions and opinions to generate novel ideas • Turns ideas into value for others by enhancing ideas or products to provide new-to-the-world or improved solutions to complex social, ecological, and economic problems or to meet a need in a community • Takes risks in their thinking and creating • Discovers through inquiry research, hypothesizing, and experimenting with new strategies or techniques • Seeks and makes use of feedback to clarify understanding, ideas, and products • Enhances concepts, ideas, or products through a creative process	• Has self-efficacy, sees themselves as learners, and believes that they can make life better for themselves and others • Develops a positive identity, sense of self, and purpose from their personal and cultural qualities • Develops and identifies personal, educational, and career goals, opportunities, and pathways • Monitors their progress • Perseveres to overcome challenges • Adapts to change and is resilient in adverse situations • Aware of, manages, and expresses their emotions, thoughts, and actions in order to understand themselves and others • Manages their holistic well-being (e.g., mental, physical, and spiritual) • Accurately self-assesses their current level of understanding or proficiency • Advocates for support based on their strengths, needs, and how they learn best • Manages their time, environment, and attention, including their focus, concentration, and engagement

Collaboration	Communication	Sustainability and Global Citizenship
• Participates in teams by establishing positive and respectful relationships, developing trust, and acting interdependently and with integrity • Learns from and contributes to the learning of others by co-constructing knowledge, meaning, and content • Assumes various roles on the team and respects a diversity of perspectives • Addresses disagreements and manages conflict in a sensitive and constructive manner • Networks with a variety of communities/groups • Appropriately uses an array of technology to work with others • Fosters social well-being, inclusivity, and belonging for themselves and others by creating and maintaining positive relationships with diverse groups of people • Demonstrates empathy for others in a variety of contexts	• Expresses themselves using the appropriate communication tools for the intended audience • Creates a positive digital identity • Communicates effectively in French and/or English and/or Mi'kmaq or Wolastoqey through a variety of media and in a variety of contexts • Gains knowledge about a variety of languages beyond their first and additional languages • Recognizes the strong connection between language and ways of knowing the world • Asks effective questions to create a shared communication culture, attend to understand all points of view, express their own opinions, and advocate for ideas	• Understands the interconnectedness of social, ecological, and economic forces, and how they affect individuals, societies, and countries • Recognizes discrimination and promotes principles of equity, human rights, and democratic participation • Understands Indigenous worldviews, traditions, values, customs, and knowledge • Learns from and with diverse people, develop cross-cultural understanding • Understands the forces that affect individuals and societies • Takes action and makes responsible decisions that support social settings, natural environments, and quality of life for all, now and in the future • Contributes to society and to the culture of local, national, global, and virtual communities in a responsible, inclusive, accountable, sustainable, and ethical manner • Participates in networks in a safe and socially responsible manner.
Foundation of Literacy and Numeracy		

6.2 Universal Design for Learning (UDL)

UDL helps meet the challenge of diversity by suggesting flexible instructional materials, techniques, and strategies that empower educators to meet these varied needs. UDL research demonstrates that the challenge of diversity can and must be met by making curriculum flexible and responsive to learner differences. UDL provides guidelines to minimize barriers and maximize learning for all.

Is there a form of **assistive technology** that could be used to enhance/facilitate this lesson?	General Examples	Example in your subject area
Are there **materials which can appropriately challenge** readers to enhance this learning?	Audiobooks, EBSCO, Worldbook Online	
Are there students in this group who cannot **access this learning (PLP background)** and whose needs I must revisit before teaching?	PLP information/considerations	
Are there other **choices** that can be provided in this learning opportunity?	Differentiation models (RAFTs…)	
Is there another/a **variety of media** available? Only paper-based? Can it be listening? Can I add a visual component?		
Can **movement** be involved?	Quantum techniques	

Grouping and regrouping?	Cooperative learning; team games and tournaments	
Teacher versus non- teacher centered? **Instructional design strategies** –…	web based lesson… project-based, student research based	
Contracts?		
Opportunities for students to **propose variations** to the assignments/projects?	Tic Tac Toe	
Use of **art /music / technology**?	Songs, Videos, URL, YouTube	
Can I use **drama**? Art….	Use of improvisation; Skits; reader's theater; Can we make something? Demonstrate understanding visually? Paint a painting?	
Is there a plan to support the student/s who might already know this subject matter? **Enrichment**	Triad Model	
Does the **language level** need to be adjusted for the student to access this learning?	Link to adjust language level of text; CEFR information… SIOP techniques for EL learners; use of alternate texts…	

Is there an **independent or collaborative activity-project** that would be better meet the needs of one or more students?		
Are there any **experts** that I could bring into the classroom electronically or as a guest speaker?	Speakers list, Skype contacts, media links, television documentary, archived historical documents	
Have I linked the goal to as current event or a cultural event in the student's lives? Can I make the learning more **relevant**?	Can this be applied in real life? TED talk, news item; societal trend, popular song? Can we start the unit and adjust or create it based on the students, interests or direction?	
Is there a **hands-on experience** that we could do to launch this lesson or this learning?		

7.   Resources

https://kent.ca

https://www.homehardware.ca/en

https://www.homedepot.ca

Google Sketchup (web application) https://www.sketchup.com/download

Ikea Kitchen Design https://www.ikea.com/ms/en_CA/customer-service/about-our-products/planning-tools/index.html?icid=itl|ca|en_planning_tools_navtop|201706292245011519_5