# Housing and Design 12 Guide



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# Housing and Design 12

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# Housing and Design 12

# **Learning Outcomes**

Students will be expected to

- 1. collect and reflect on artifacts which exemplify their skill development as prescribed in the Housing and Design 12 Curriculum Outcomes.
- 2. to identify life/work benefits of developing skills related to housing and living environments.
- 3. analyze the functions of housing and the factors affecting decisions about living spaces.
- 4. explore the innovations in planning and development of housing ecosystems.
- 5. develop an awareness of the process involved in planning and analyzing physical living spaces.
- 6. identify and explore the elements and principles of design and their application in housing and interior design.

7.

# **Specific Curriculum Outcomes**

Students will be expected to:

# Unit 1: Housing and Design Skills Portfolio

- 1.1 maintain and share a portfolio of artifacts reflective of the knowledge, skills and understandings developed throughout Housing and Design 12.
- 1.2 plan, produce and present an innovative housing and design project that reflects personal expression, technological skills and resource management.

#### Unit Outcome 2: Career Options related to Housing and Living Environments

- 2.1 analyze how an understanding of the art, science and technology of housing can contribute to exploration of possible career opportunities as well as being a knowledgeable housing consumer.
- 2.2 analyze the career paths related to housing in Nova Scotia, reporting on the education/training, skills required and the nature of the work involved.
- 2.3 identify the entrepreneurial opportunities in the housing and design industry in Nova Scotia, reporting on how the skills required might be developed.
- 2.4 complete a community based learning experience related to a career path in housing.

## Unit Outcome 3: Living Spaces- Choices and Decisions

- 3.1 identify and reflect on the functions of housing.
- 3.2 assess how personal priorities, space, roles, cost, life cycle, and lifestyle are factors in the selection of living spaces.
- 3.3 evaluate the impact of external influences on personal housing decisions.

## Unit Outcome 4: Innovations in Housing Ecosystems

4.1 analyze the impact of technology on the housing environment today.

- 4.2 compare and contrast trends that espouse sustainable housing ecosystems.
- 4.3 investigate the scope and skills required for maintenance and upkeep of living spaces.
- 4.4 analyze design components and their impact on the operation of a healthy home for self and environment.
- 4.5 critique the ecological impact of urban/community planning, landscaping, and architecture on housing options.

# Unit Outcome 5: Components of Housing Design and Layout

- 5.1 match housing needs, wants, resources with available housing options.
- 5.2 read and interpret floor plans for efficiency of layout and design.
- 5.3 develop manual and technological skills in creating floor plans in both two and three dimensions.
- 5.4 develop a consumer awareness of the mandatory requirements in the design and construction process.
- 5.5 become knowledgeable about local available resources and support for new renovation technologies in our Nova Scotia economy.

# Unit Outcome 6: Interior Design

- 6.1 apply the principles of design to creating functional, universal and aesthetically pleasing spaces for home and work.
- 6.2 demonstrate how design elements are used in the application of the principles of interior design.
- 6.3 develop an awareness of furnishing, textiles, material necessary in making a home liveable for its dweller.
- 6.4 collaborate in the development of a remodelling or renovation proposal for a living or work space to accommodate the needs and wants of a potential client in Nova Scotia.

# Unit 1: The Housing and Design Skills Portfolio

# Unit Outcome 1: The Housing and Design Skills Portfolio

Students will be expected to collect and reflect on artifacts which exemplify their skill development as prescribed in the Housing and Design 12 Curriculum Outcomes.

# **Specific Curriculum Outcome 1.1**

Students will be expected to maintain and share a portfolio of artifacts reflective of the knowledge, skills and understandings developed throughout Housing and Design 12.

## **Suggestions for Assessment**

Students can:

- reflect on the inclusion of individual artifacts in the portfolio as to their relevance to the outcomes
- self and peer assess portfolios using a provided response sheet.
- share their Housing and Design Portfolio with a significant adult for feedback. (Appendix C Portfolio Response Sheet)

Teachers can:

- use a checklist/interview to verify that students have included components from each module (Appendix A Housing and Design Portfolio Checklist)
- assess the content of the reflections included in the portfolio
- review the portfolio self assessment submitted by the student after sharing their portfolio

# Suggestions for Learning and Teaching

Teachers can

- demonstrate examples and uses of different types of portfolio: Life Work Portfolio, Skills Portfolio, Employment Portfolio, Presentation Portfolio, Professional Portfolio
- invite post secondary students/professional designers / educators to introduce the value and use of a Portfolio
- invite a counselor to talk to class about portfolio review process and application procedures for post secondary training

#### Students can:

- participate in a portfolio workshop on the development and presentation of their Housing and Design Skills Portfolio
- videotape their portfolio sharing session for self review
- review employment portfolios as presented by guest speakers/mentors
- reflect on information shared by guest speakers. (Appendix E Guest Speaker Reflection) It is recommended that students maintain a response journal for collecting contact information and resources provided by guest speakers, websites, and other media.
- interview their job shadow mentor on the value of an employment portfolio in their hiring practices ( Appendix D Employer Interview Potential questions)

#### Resources

Life Work Portfolio, Nova Scotia Department of Education

## Specific Curriculum Outcome 1.2

Students will be expected to plan, produce and present an innovative housing and design project that reflects personal expression, technological skills and resource management.

## **Suggestions for Assessment**

Students can

- self assess using a co-criteria rubric
- reflect on skills developed through the production of the project as well as their progress, discoveries, and insights into their project progress

#### Teachers can:

• conduct interviews in which students clearly articulate their ideas about their project development and completion

• use the co-criteria rubric to assess the student project throughout its development and completion

# Strategies for Learning and Teaching

Teachers can

- share projects from previous years, highlighting features of a successful project
- during each unit, lead a brainstorm session on project topics, creating a project idea wall.
- help students establish a work schedule and time line for project work by monitoring project development on a weekly basis
- collaborate with students on project selection and co criteria rubric development
- provide opportunities for students to share/ present their project work:
  - video, class presentations, peer reviews, community displays, PechaKucha event

Students can

- examine past projects to understand expectations
- discuss project ideas with peers and teachers
- share project work with peers and teacher throughout its development
- seek support during project challenges

Examples of an independent study topics might include:

- creation of a comfortable living space through remodelling, or renovating to accommodate the needs and wants of the inhabitant in Nova Scotia.
- research one aspect of interior design: elements, principles, materials, environmental issues
- create a magazine or ezine on a topic related to housing and design
- make a model of an outdoor living spaces supported by product research & budget
- create/develop/ produce a household item reflective of an identified need

Projects should reflect consideration for product selection, budget, purpose, environment.

Unit 2 : Career Options related to Housing and Living Environments

Note: Although it is recommended that teachers introduce the Career Module at the beginning of the course, career education needs to be incorporated throughout the entire curriculum.

## Unit Outcome 2: Career Options related to Housing and Living Environments

Students will be expected to identify life/work benefits of developing skills related to housing and living environments.

## Specific Curriculum Outcome 2.1

Students will be expected to analyze how an understanding of the art, science and technology of housing can contribute to exploration of possible career opportunities as well as being a knowledgeable housing consumer.

## **Suggestions for Assessment**

Students can:

• create a bulletin board display on the skills related to housing sorted under the headings: science/art /technology

- prepare a professional brochure that describing a professional skills in a housing career path sorted under science/art/tehnology
- share the information collected on career opportunities in housing and design

Teachers can use, for example:

- checklists, rubrics, to assess accuracy, relevancy and content of student created products (Appendix G Rubric for Assessing Student Products)
- an interview with the student to prompt reflective skills related to student experiences
- support students with rubrics for peer review of information gathered and presented

# Suggestions for Learning and Teaching

Teachers can:

- lead a brainstorm activity identifying careers in housing and how art/science/technology might be related to each
- provide a calendars from a local colleges/universities that offer education related to careers in housing. Students could identify the courses offered and sort under art/science/technology.
- invite guest speakers throughout the year to share their career pathways and related experiences
- create career related scenarios for students to analyze and discuss skill sets required on the job (Appendix F Job Scenarios/Profiles )

#### Students can:

- use reliable websites to assess job opportunities related to housing in Nova Scotia
- provide appropriate detail in logs and reflective writing
- review their Life Work Portfolio for evidence of skill development related to career opportunities in housing

#### **Resources:**

Texts

Homes and Interiors Chapter 4: Careers in Housing and Interiors

Residential Housing and Interiors Chapter 29: Careers in Housing

Chapter 30 Keeping a job and Advancing a Career

Housing Decisions Chapter 23: Careers in Housing Chapter 24 Preparing for Career Success Life Work Portfolio Resource, Nova Scotia Department of Education

## Web Links

Using search engine try key search words such as:

Interior Designers of Canada

Definition of the professional career designer and related career information. Lists all accredited programs in Canada.

National Counsel for Interior Design Qualification

Describes interior design experience program including competencies required in preparation for the NCIDQ licencing exam.

## Canadian Decorators Association

Advocates for industry recognition and development; facilitates upgrading of skills and knowledge for decorators.

#### Canadian Real Estate Association

An overview of the existing housing market, market analysis.

# **Specific Curriculum Outcome 2.2**

Students will be expected to analyze the career paths related to housing in Nova Scotia, reporting on the education/training, skills required and the nature of the work involved.

# Suggestions for Assessment

Students can:

- create an Employment Opportunities advertisement describing an occupation related the housing industry in Nova Scotia
- compile a Housing and Design Career Directory to be filed in the Counseling Department

#### Teachers can:

# Suggestions for Learning and Teaching

Teachers can

- help students organize a mini career fair on job / education opportunities in Atlantic Canada related to housing and design
- provide students with access to Career Options, Career Cruising, websites to research careers in the housing and design domain

# Students can

- use Canadian Websites such as Career Cruising or Career Options, to identify education and training requirements for 3 housing related occupations. What are the entry requirements for various Canadian institutions?
- create a chart outlining education/training, skills required, nature of the work, employment opportunities in Nova Scotia for 3 different occupations within the housing and design career pathways
- make contact with potential job-shadowing prospects and college/university registration offices
- evaluate the usefulness of career and education information they acquire
- interview people currently working in the housing field
- create a "Day in the Life of" a particular occupation . Share with the class.
- respond to a given "real life" career scenario and develop a solution that reflects an understanding of the training, skill requirement and the nature of the work. See Appendix A for examples.
- visit a "Home Show" and identify the various careers represented

#### Resources

## Web Links

Using search engine try key search words such as:

Career Options
Job Search
Job Futures
Career Cruising

# Specific Curriculum Outcome 2.3

Students will be expected to identify the entrepreneurial opportunities in the housing and design industry in Nova Scotia, reporting on how the skills required might be developed.

# **Suggestions for Assessment**

Students can:

- display information on local entrepreneurs in the housing and design industry
- report on an interview with a local entrepreneur including how they developed the skills required to be successful

#### Teachers can:

• use checklists rubrics to assess student presentations/displays/reports

# Suggestions for Learning and Teaching

Teachers can

- define what is meant to be an entrepreneur. How does this apply to housing?
- invite guest speakers to share with the class their career pathway n housing

## Students can

- identify local entrepreneurs in a brainstorming sessions
- create a series of questions to use as an interview of an entrepreneur . Include pros and cons of being an entrepreneur.
- network with entrepreneurs to identify other entrepreneurial businesses in their community
- use local directories, magazines, home shows to identify housing related entrepreneurs

## Resources

Text

Homes and Interiors Chapter 4: Careers in Housing and Interiors

Residential Housing and Interiors Chapter 30: Careers

Housing Decisions Chapter: Careers in Housing

# Web Links

Using search engine try key search words such as:

Interior Designers of Canada

Definition of the professional career designer and related career information. Lists all accredited programs in Canada.

National Counsel for Interior Design Qualification

Describes interior design experience program including competencies required in preparation for the NCIDQ licencing exam.

## Canadian Decorators Association

Advocates for industry recognition and development; facilitates upgrading of skills and knowledge for decorators.

## Nova Scotia Association of Realtors

Association of realtors provides services and representation o enable realtors to best serve the public in Real estate transactions. Offers educational programs, publications, licensing, realtors code of ethics.

# Specific Curriculum outcome 2.4

Students will be expected to complete a community based learning experience related to a career path in housing.

# **Suggestions for Assessment**

Students can:

- report on a job shadow in a career related to the housing and design industry
- reflect on community based learning experience; challenges, rewards, skills required

Teachers can:

- interview the student on the job shadow/volunteer experience
- review student Job Shadow Reflection/ job shadow mentor reports

(Appendix I – Job Shadow Reflection and Appendix J- Job Shadow Mentor report)

• review the student job shadow report for specific content related to career research as defined in the outcome (Appendix J- Job Shadow Mentor report)

# Suggestions for Learning and Teaching

Teachers can

- help students identify opportunities to explore careers through community involvement: interviews, service learning, job shadowing, volunteer work\*
- \*All projects must adhere to the Department of Education Procedural Guidelines for Community Based Learning

Students can

- choose one of the suggested careers in the student text and organize a job shadow opportunity at some time during the semester
- participate in a service learning project related to housing & community. Such projects may be cleaning up a park, help plant a community garden, helping a neighbour with property maintenance

Community Based Learning Resource, Nova Scotia Department of Education

#### Web Links

Using search engine try key search words such as:

Habitat or Humanity

# Unit Outcome 3: Living Spaces- Choices and Decisions

Students will be expected to analyze the functions of housing and the factors affecting decisions about living spaces.

# Specific Curriculum Outcome 3.1

Students will be expected to identify and reflect on the functions of housing.

# **Suggestions for Assessment**

Students can:

- create a graph showing the results of their research on the functions. Post the graphs. Compare the class results to the national results available through Statistics Canada
- display their results
- self assess content accuracy during the debates
- submit a written reflection on their interpretation of the research and its impact on their understanding of the functions

Teachers can:

- evaluate the graph and the displays using a rubric
- assess the reflections for understanding of the outcome

#### Suggestions for Learning and Teaching

Teachers can:

- share the information from Statistics Canada on housing
- review Maslow's Hierarchy of Human Needs. How does housing address the needs at the various levels?
- define what is meant by accessibility in housing (including life cycle needs, affordability, availability, universal design) creating a word wall

#### Students can:

- create a visual depiction of the functions
- compare and contrast the functions influencing decisions. A checklist may be used or students may decide to rank order the functions.
- select a function and build an argument as to why it is the most influential in housing decisions
- participate in a debate where they defend their choice
- survey classmates, family, neighbours to identify their priority list

- complete a chart listing their needs, and wants as related to housing. How do our values affect our perception of needs? Can any of the "needs" be "wants"? Discuss.
- create a collage depicting the difference between needs and wants
- in small groups create and justify a case study that reflects how housing meets the needs at each level of Maslow's Hierarchy. What are the actual needs being met?
- look for current news items reflecting how safety and security are a growing housing issue. What are the implications of this for a potential entrepreneur?

Text

Housing Decisions Chapter 1: Housing and Human Needs

#### Web Links

Using search engine try key search words such as:

Canadian Real Estate Association

An overview of the existing housing market, market analysis.

Statistics Canada

## Specific Curriculum Outcome 3.2

Students will be expected to assess how personal priorities, space, roles, cost, life cycle, and lifestyle are factors in the selection of living spaces.

## **Suggestions for Assessment**

Students can:

- using a case study, evaluate a housing option as to how it would meet their criteria for selection Teachers can:
- create a rubric with the students that could be used to determine if the students projects students have addressed all of the factors in their evaluation

# Suggestions for Learning and Teaching

Teachers can

- lead a brainstorm activity listing possible priorities to consider when choosing housing
- display various housing designs (single family dwelling, duplexes, apartments, townhouses). Look at the advantages and challenges of each.
- create a word wall listing various housing related terms used throughout the Module.
- create 10 client profiles for students to use as a guide when choosing a housing option. Items to consider include:

Personal priorities

Space: Work Space, Recreation, Fitness / Health, Storage, Entertainment

Roles

Costs

Life cycle

Lifestyle

Location: proximity to work, services

Ergonomics

Universality of design

#### Students can

- create a list of items to consider when deciding where to live. Use the created list when assessing different living options. Prioritize the list according to their personal needs, wants, values.
- research on line housing options that meet their needs
- recommend housing options and defend their choices
- role play client /agent dialogue determining housing needs
- calculate housing costs of options available on a given property
- share the results of an interview with someone who has recently moved to determine the factors considered in selecting a residence
- create an interview list of questions to use when choosing a roommate

#### Resources

Text

Homes and Interiors Chapter 5 Choosing a Place to Live

Chapter 6 Renting versus Buying

Chapter 7 Renting a home Chapter 8 Buying a home.

NS Residential Tenancy Act

NS office for Housing and Corporate Affairs

Housing Decisions Chapter 3 Using Decision Making Skills

Chapter 4 Choosing a Place to Live Chapter 5 Acquiring Housing

#### Web Links

Using search engine try key search words such as:

Multiple Listings System

Real Estate Companies

Canadian Mortgage and Housing Corporation : A Reference site for consumers: housing selection, housing financial management

## Specific Curriculum Outcome 3.3

Students will be expected to evaluate the impact of external influences on personal housing decisions.

#### Suggestions for Assessment

Students can:

• create an illustration of external influences on housing and the impact thereof on people and the community

- present a dramatic interpretation of the impact of external influences
- include reflects in their portfolio on the influences throughout history on housing styles & arrangements

Teachers can:

• use observational rubrics to assess student illustrations, presentations and reflections

# Suggestions for Learning and Teaching

Teachers can:

- introduce the terms Cocooning, Community Housing, Assisted Living, "Me Generation" as they relate to community development and housing
- create a graphic organizer of the influences generated through the brainstorm activity
- invite guest speakers to talk about various topics related to factors that influence housing decisions: realtor, banker, mortgage broker, community housing agencies. What opportunities arise as a result of the demands for housing needs?
- create a Future Wheel activity. "What would happen if..." Some topics might be:
  - mortgage rates went up
  - housing costs went up (taxes, utilities)
  - affordable housing in short supply
  - mobility
  - job security
  - family responsibilities

#### Students can

• work in a group to identify examples of the following influences on housing Nova Scotia. Each group will research and identify how the following influences are manifested in various housing styles in Nova Scotia today:

historical

cultural

societal

environmental

economic

technological

governmental

- share research along with black and white visuals of examples of the influences
- review a resource on NS historical properties
- reflect on why agencies, organizations choose particular community development plans (military housing , Olympic housing, low income housing, RCMP, clergy)

Resources

Museum of Natural History

NS Museum

# Unit 4: Innovations in Housing Ecosystems

# Unit Outcome 4: Innovations in Housing Ecosystems

Students will be expected to explore the innovations in planning and development of housing ecosystems.

# Specific Curriculum Outcome 4.1

Students will be expected to analyze the impact of technology on the housing environment today.

## **Suggestions for Assessment**

Students can:

- share research into current building materials
- create a reference list of websites relating to innovative housing technology
- create a timeline of technological changes in housing
- reflect on one item in the home and how its technology has changed the lives of the inhabitants

#### Teachers can:

• use rubrics to assess activities

# Suggestions for Learning and Teaching

Teachers can

- organize a field trip to the home show providing students with an assignment to investigate a technological advancement ( See Moodle activity)
- Invite guest speakers to "reminisce" about changes in housing

## Students can

- define technology
- role play a change in technology (cooking over a fire instead of in a microwave)
- participate in a brainstorm activity on examples of technological changes in the home
- identify local available materials and resources
- attend the Home Show and collect information on innovative practices to be shared with the class and kept in a classroom library for project work
- interview family and /or neighbours and reminisce about changes
- observe TV programs for changes in technology

#### Resources

Trade magazines Home Shows

Text

Homes and Interiors SR

Table of Contents: "The Impact of Technology"

# Chapter 3 – Housing and Technology

Housing Decisions

Chapter 22- Housing for Today and Tomorrow

#### Web Links

Using search engine try key search words such as:

Housing Technology

# Specific Curriculum Outcome 4.2

Students will be expected to compare and contrast trends that espouse sustainable housing ecosystems.

# **Suggestions for Assessment**

Students can:

• create a visual presentation of sustainable housing options

Teachers can:

• use a rubric to assess visual presentations for content and understanding

# Suggestions for Learning and Teaching

Teachers can

- provide samples of sustainability
- define ecosystems and other vocabulary related to sustainable housing

Students can

- explore internet links for ecosystem / housing/ sustainability to create a definition of "housing ecosystem"
- create a visual on the sustainable home (could be a power point, bulletin board, model)
- identify local available resources

#### Resources

Text

Homes and Interiors SR

Table of Contents : "The Impact of Technology"

Chapter 3 – Housing and Technology

Housing Decisions

Chapter 22- Housing for Today and Tomorrow

## Web Links

Using search engine try key search words such as:

United Streaming website: <a href="http://streaming.discoveryeducation.com">http://streaming.discoveryeducation.com</a>

Build it Bigger: Rebuilding Greensburg: Architects of the Environment

# Video with Teachers Guide. Includes description of LEED certification

Nova Scotia Power
Energy Nova Scotia
ComFit Program
Sustainable Housing
Grant programs for home energy efficient upgrades
Construction Association of Nova Scotia
housing ecosystems
renewable energy
sustainable housing +Nova Scotia

## Specific Curriculum Outcome 4.3

Students will be expected to investigate the scope and skills required for maintenance and upkeep of living spaces.

# **Suggestions for Assessment**

Students can:

- create a checklist of maintenance items to be completed weekly, monthly, yearly
- complete Passport to Safety on line Safety Certification(NS Workers Compensation Board)
- create illustrations on safe housing maintenance practices (steel toed boots when mowing)

#### Teachers can:

• assess student products using checklists/rubrics

## Suggestions for Learning and Teaching

Teachers can

- take students on virtual tours of real estate to illustrate the importance of maintaining house value through maintenance
- invite a handyperson to discuss basic home maintenance costs and what jobs can be done by home owners and which jobs are recommended be completed by trained professionals
- identify the difference between house maintenance and renovation

#### Students can

- use Google street to look at recent home renovations in their community.
- interview a house cleaner
- discuss safety of doing your own home maintenance
- create a chart of questions to ask home maintenance service
- create a list of home maintenance services they would be qualified to do. What would they charge and what are the safety concerns related to each? What would their expenses include? What training or certification might be required for various jobs?
- discuss the concerns related to jobs that are "paid under the table" or are part of the "under ground economy" as related to home care and maintenance

Text

Homes and Interiors

Chapter 9 – Home Maintenance

Housing Decisions

Chapter 21 Housing Decisions

#### Web Links

Using search engine try key search words such as:

Work Safe

house maintenance safety

Holmes on Homes

Canadian Home Builders Association on hiring a contractor

Sustainable Housing Home Owners Tool Kit: Protect Yourself/ Get it in Writing on protecting yourself from the underground economy

House and Garden TV

# Specific Curriculum Outcome 4.4

Students will be expected to analyze design components and their impact on the operation of a healthy home for self and environment.

# **Suggestions for Assessment**

Students can:

- create a visual or display for the public illustrating the link between health and housing design
- reflect on the role of citizens maintaining healthy environments ( For Example: Policies relating to vehicle idling, no scent , smoking, waste management)

Teachers can:

- co-create a rubric to assess the display
- use observation checklists and rubrics to assess activities and reflections

# Suggestions for Learning and Teaching

Teachers can

- lead a brainstorm activity to create a list of design components that impact on healthy homes both positively and negatively (For example: lighting, ventilation, building materials, furnishings)
- provide pamphlets on healthy housing practices
- invite guest speaker on the importance of healthy practices in home maintenance and waste management

Students can

- Assign health and safety concerns related to each component
- research the causes, symptoms and prevention of sick building syndrome

- identify possible contaminants in homes such as contents of cleaning supplies for health related issues. Students could survey products available in retail outlets.
- Students will compare lists and complete a reflection on the potential for health concerns related to a wide variety of household products
- participate in a scavenger hunt Students are given a list of potentially harmful ingredients. Students are to read labels at home or on store shelves identifying products that contain these ingredients. Students are to research the harmful effects of each ingredient listed.
- set criteria (methods, timing, cost, safety, effectiveness) and test for results in comparing commercial with home made cleaning products
- tour a waste management facility. Students could research safe disposal of household products and building materials.

Text

Homes and Interiors

Chapter 28 - Home Safety and Security

Residential Housing and Interiors

Chapter 23-Designing for Health and Safety

Housing Decisions

Chapter 20- Keeping Your Home Safe and Secure

# Specific Curriculum Outcome 4.5

Students will be expected to critique the ecological impact of urban/community planning, landscaping, and architecture on housing options.

## **Suggestions for Assessment**

Students can:

- present their neighbourhood plan to community group for feedback. Create a feedback sheet focusing on environmental design issues.
- reflect on the value of green spaces
- assess a local landscaped area for its impact on the local ecology

#### Teachers can:

• use observational checklists to make sure students are using related terms appropriately

## Suggestions for Learning and Teaching

Teachers can

- create a word wall of terms related to urban planning. Might include ecological foot print, green spaces, population density, Planned obsolescence, disposable society,
- organize for a landscape designer to speak with class on best practices in landscape design
- explore the concept of "form follows function" in architectural design. Lead a discussion on ecological considerations to be included in architectural design.

Students can

- •explore the concept of why we should promote sustainable community planning
- what are the concerns related to density of housing
- Can essential services impact on our ecological footprint? Students might make suggestions for improvements and might share their ideas in the form of a letter/presentation to a local politician.
- research the effect of temporary communities (For Example -company towns in remote areas Elliot Lake?)
- select a neighbourhood. Could its design be more respectful of the environment? Consider public transit, natural spaces, services, active living opportunities, recreation facilities.
- tour a landscaped area and discuss its features
- explore the cost factors related to ecological design contributing to longevity in housing (building materials)

#### Resources

Text

Homes and Interiors

Chapter 12 Landscaping and the Environment

Residential Housing and Interiors

Chapter 25 - Landscaping

National Geographic Human Footprint DVD

## Unit 5

## Unit Outcome 5: Components of Housing Design and Layout

Students will be expected to develop an awareness of the process involved in planning and analyzing physical living spaces.

# Specific Curriculum Outcome 5.1

Students will be expected to match housing needs, wants, resources with available housing options.

#### Suggestions for Assessment

Students can:

- create a visual of a project under construction identifying the various phases
- create a concept map illustrating the various components.
- reflect on the need for communication between professionals and the client throughout the process
- create a display or classroom resource binder highlighting the services offered by CMHC
- reflect on a chosen activity or artifact to be included in the portfolio

Teachers can:

• co create a rubric to assess the visual and concept map

# Suggestions for Learning and Teaching

Teachers can

- invite a contractor in to talk to class about components to be considered when designing living space . Include reference to local regulations
- obtain brochures from various housing developers
- organize a home tour for the students, led by a housing professional: inspector, realtor, contractor
- organize a tour of a building site
- identify virtual tours of construction projects on the internet
- organize a class trip to a home show (in person or on line)to explore the variety of innovations in the housing industry

#### Students can

- research resources available through CMHC and report on the information provided
- examine the resources available to assist in early planning to facilitate conversations about creating attainable (such as accessible, affordable, legal) housing options
- observe a residence under construction or renovation and report regularly on the phases leading up to completion
- interview a consumer in the process of having a house constructed or renovated re the challenges involved
- create a video of various aspects of construction (with supervision and permission)
- take on an assigned role (such as contractor, designer, plumber, electrical engineer, inspector) in the process of creating living spaces and identify the connections they would have to make with the other professionals involved in order to develop a completed structure. (teacher may assign a specific, realistic project such as a cottage on the lake or a senior's complex in a residential neighbourhood, extreme renovation project). Place each role in an appropriate sequence from start to finish hence identifying the fact that the process does not have a set sequence.

#### Resources

Housing Decisions Chapter 8 House Construction

Chapter 9 Systems Within

Homes and Interiors Chapter 10 Construction Basics

Chapter 11 Interior Construction

# Web Links

Using search engine try key search words such as:

Canadian Mortgage and Housing Publications

## Specific Curriculum Outcome 5.2

Students will be expected to read and interpret floor plans for efficiency of layout and design.

# Suggestions for Assessment

#### Students can:

- lead a virtual walk through of a floor plan describing the living space in terms of traffic patterns, work triangles, efficiency, privacy, zones
- compare and contrast floor plans for efficiency and universality

Teachers can:

• use observational checklists to assess student understanding of floor plan language (terms and concepts)

# Suggestions for Learning and Teaching

Teachers can

- provide students with floor plan symbols
- display various floor plans for a variety of living structures
- demonstrate various work patterns in kitchens (example work triangle)
- illustrate guidelines for determining floor plan efficiency

#### Students can

- interpret and recognize the symbols on existing floor plans/blueprints
- evaluate floor plan for design efficiency including traffic patterns
- explore what is meant by universal design
- identify functional areas on a floor plan and shade in those areas (quiet, work, social)
- draw work triangle on an existing kitchen floorplan
- measure the triangle in an existing kitchen and analyze for efficiency

## Resources

Text

Homes and Interiors Chapter 10 Construction Basics
Residential Housing and Interiors Chapter 2 Evaluating Floor Plans

Appendix: Standard floorplan symbols

Housing Decisions Chapter 7 Understanding Floor Plans

# Specific Curriculum Outcome 5.3

Students will be expected to develop manual and technological skills in creating floor plans in both two and three dimensions.

## **Suggestions for Assessment**

Students can:

- prepare a floor plan for a one bedroom apartment, meeting expectations of another student (client). Present their idea to the client for review and evaluation in meeting the requested needs.
- design and defend an efficient work area of a home to be included in their portfolio
- select and complete a design challenge from the text and share with class

Teachers can:

• co create a rubric for students to assess each other's floor plan

# Suggestions for Learning and Teaching

Teachers can

- provide tools to identify symbols and templates to be used on a floor plan
- demonstrate skills and materials used in drawing a floor plan.
- invite a drafts person or architect to demonstrate / share professional drawing techniques

#### Students can

- draw a rough sketch of their own floor plan (or find one to use)
  - draw traffic paths on the floor plan
- shade areas on the floor plan to identify private, social and service zones in a living space
  - -evaluate floor plan for design efficiency revise the floor plan highlighting improvements in lay out and design
- draw two dimensional floor plans to scale
- convert two dimensional floor plans to three dimensional using a computer software program

#### Resources

Appendix List of floor plan templates

Homes and Interiors: Design Challenge at end of every chapter

Google SketchUp Pro

Interior Design Course: Literacy 12 Tomris Tangaz

Architectural Drawing Course: Literacy 12 Mo Zell

Websites

#### Specific Curriculum Outcome 5.4

Students will be expected to develop a consumer awareness of the mandatory requirements in the design and construction process.

# **Suggestions for Assessment**

Students can:

- create a flow chart illustrating the human resources available throughout the process of acquiring a dwelling.
- analyze a scenario where at least 3 violations of the regulations have occurred and speculate on the consequences of that action for both consumer and contractor.

#### Teachers can:

• evaluate accuracy of the student flow chart and analysis of violations.

## Suggestions for Learning and Teaching

Teachers can:

- provide building code guidelines, zoning regulations, permit requirements for students to review as a pre consideration to site selection.
- explore the effect of environmental regulations on consumer decisions
- invite urban planners, municipal planning personnel or architects to explain to students the parameters in which the industry must work.

#### Students can:

- speculate as to the necessity of having codes in the development of any living space by predicting what might possibly happen if the codes, by-laws and regulations are not adhered to strictly.
- research the consequences if a company, or an individual, does not follow the requirements.
- research the rights/recourse of the consumer when codes are violated.
- identify those human resources that would be involved in the actual process of creating the physical structure from planning, site selection, design and construction and the value offered as part of the entire process. (refer to career directories created in Unit 2)
- identify the human resources that would be involved in the process of acquiring an existing dwelling
- consider view planes, heritage homes, restrictive covenants, developer agreement

#### Resources

Municipal Government and Provincial Government policies and codes

## **Specific Curriculum Outcome 5.5**

Students will be expected to become knowledgeable about local available resources and support for new renovation technologies in our Nova Scotia economy.

## **Suggestions for Assessment**

Students can:

- create a directory of local services, agencies and supports available to consumers for inclusion in their Housing and Design Portfolio
- share research on a renovation technology with the class

Teachers can:

- assess student portfolios for inclusion of directory of services
- assess student research projects for accuracy

# Suggestions for Learning and Teaching

Teachers can

- define "renovation technologies" such as heat pumps, solar heating, insulating
- lead a brainstorm activity creating a list of services/technologies that might be needed during the construction/renovation of a home
- identify agencies that provide non biased information and support for consumers
- lead a discussion on product testing and availability

#### Students can:

- collect news stories about new renovation technologies from magazines, internet, newspapers and other media
- research a renovation technology and share with the class

#### Resources

Local contractors

Internet

# Unit 6 - Interior Design

# Unit Outcome 6: Interior Design

Students will be expected to identify and explore the elements and principles of design and their application in housing and interior design.

# Specific Curriculum Outcome 6.1

Students will be expected to apply the principles of design to creating functional, universal and aesthetically pleasing spaces for home and work.

# **Suggestions for Assessment**

Students can:

- share visuals of rooms that are arranged to exemplify the design principles
- create a visual catalogue/library of rooms and explain how the selected visuals demonstrates each principle
- explain their choices illustrating appropriateness and functionality as recommended for their client to 2 other groups
- include exemplars of design principles in the Housing and Design portfolio

#### Teachers can:

• use observational checklists during class conversations

## Suggestions for Learning and Teaching

Teachers can

- lead a discussion using examples of each of the principles. Examples of items that are not aesthetically pleasing should also be included. Students can identify which principle is not being followed.
- provide magazines, books, websites for students to review and identify examples. Note: students do no need to cut out/print off pictures- the pictures could be bookmarked
- create work groups for each activity in "Applying your Knowledge" section of the text. Students share their responses with their classmates. (Homes and Interiors, Chapter 19)

#### Students can

- find and analyze visuals for each of the principles
- draw examples of:

formal vs informal balance proportion using the "Golden" rules of design scale rhythm

- research "Golden Section" on the internet (Homes and Interiors, Chapter 19; Housing Decisions, Chapter 12)
- select fabric samples and /or pictures of furniture to create a sample board that illustrates harmony, unity and variety. Defend choices.
- in groups of 2 or 3 review a client file and recommend 3 design ideas (such as furnishings, accessories, arrangements) that would be both appropriate and functional for this client. ( *Residential Housing and Interiors, Chapter 6*)
- using provided visuals students could make recommendations as to how to create emphasis in a room

## Resources

Homes and Interiors Chapter 19 Principles f Design

Residential Housing and Interiors Chapter 6 Design

Housing Decisions Chapter 12 Using the Principles of Design

Interior Design Course Literacy 12 Tomris Tangaz

# Specific Curriculum Outcome 6.2

Students will be expected to demonstrate how design elements are used in the application of the principles of interior design.

#### **Suggestions for Assessment**

Students can:

- create a colour scheme for a room using samples (paint, fabric)
- create a game used to portray their knowledge of the elements of design
- write a newspaper advice column "Ask a Decorator" addressing design challenges
- produce a decorator show where students make recommendations for optimizing design through the use of the Design Elements
- include exemplars of design elements in the Housing and Design portfolio

Teachers can:

• use rubrics to assess student products and conversations

## Suggestions for Learning and Teaching

Teachers can

- provide a variety of samples for student use
- provide opportunities for students to manipulate the various elements
- create a resource file of visuals to model various applications of the elements of design Students can
- analyze visual examples of the use of line, form and space as design elements in a room

- create colour wheels. Possible medium might be paint, fabric, or pencil. Include dimensions of colour (tints, shades, intensity)
- identify colour schemes/harmonies in provided resources (*Applying your Knowledge, Homes and Interiors, Chapter 18*)
- create a 3 dimensional display depicting various textures that may be used in decorating
- collect 20 samples of textures and sort according to student generated categories Samples may include actual artifacts or photos of accessories, furnishings, flooring, wall finishes, window treatments, textiles
- experiment with paint finishes to identify the affect of light and surface texture on colour
- in groups of 2-3 rotate through work stations developed to allow students to practice application of the elements of design to interior design.
- create sample boards depicting an element of design (line, form, space, texture and colour)

Homes and Interiors Chapter 17 Elements of Design

Chapter 18 The Role of Color in Design

Residential Housing and Interiors Chapter 6 Design

Chapter 7 Color

Housing Decisions Chapter 10 Elements of Design

Chapter 11 Using Color Effectively

Interior Design Course Literacy 12 Tomris Tangaz

## Specific Curriculum Outcome 6.3

Students will be expected to develop an awareness of furnishing, textiles, material necessary in making a home liveable for its dweller.

## **Suggestions for Assessment**

Students can:

- showcase their expertise in a school based Home Show for parents and staff
- create a class magazine or ezine on materials used in interior design
- reflect on project work related to material selection and the process involved in that selection
- include exemplars of design materials in the Housing and Design portfolio
- debate the ethical decisions related to product selection and purchasing

Teachers can:

• observe, dialogue and assess student products

## Suggestions for Learning and Teaching

Teachers can

- define what is meant by materials and lead a brainstorm activity identifying various materials used in design
- arrange a tour of a furniture store

- invite guest speaker from a local business specializing in interior appointments: flooring, window treatments, kitchens, bathrooms, stager, interior designer, product developer, furniture designer
- lead a discussion on the factors to consider when selecting materials: quality, durability, cost, environmental impact, sustainability, economy, fair labour practices, availability, suitability, aesthetics, universality, safety
- maintain a classroom resource library on various materials Students can:
- become an "expert" on one aspect of interior design materials (such as flooring, lighting, traditional furniture styles)
- research storage and organizational options for home/work
- organize an area documenting the changes with photographs before, during and after (chosen in consultation with the teacher)
- compare and contrast materials to be considered for purchase based on established criteria as agreed upon in class
- explore the field of ergonomics as it applies to furniture and appliance selection
- identify materials that are designed to be ergonomic for an office area
- design an ergonomic chair and desk for their personal space
- within a set budget (suggestion \$100) select materials that could be used to enhance a student's personal living space that reflect the principles of design. Document with visuals and written report.
- consider the advantages and disadvantages of "Do It Yourself" versus hiring skilled workers (include skill, end result and cost, time factor, warranty, satisfaction)

Homes and Interiors Chapter 22 Kitchens, Laundry Areas and Baths

Chapter 23 Home Offices and Storage Spaces

Chapter 24 Choosing Backgrounds Chapter 25 Recognizing Furniture Styles

Chapter26 Selecting Furniture

Chapter 27 Choosing Lighting and Accessories

Chapter 28 Home Safety and Security

Residential Housing and Interiors Part 3 Materials Used

Part 4 Furniture

Part 5 Structural Systems Part 6 Home Systems

Housing Decisions Chapter 13 Textiles in Today's Homes

Chapter 14 Creating Interior Backgrounds Chapter 15 Furniture Styles and Construction Chapter 16 Arranging and Selecting Furniture

Chapter 17 Addressing Windows Lighting and Accessories

Chapter 18 Selecting Household Appliances

## Web Links

Using search engine try key search words such as: House and Garden TV Lazy Boy Furniture Home Hardware Benjamin Moore Paints IKEA

# Specific Curriculum Outcome 6.4

Students will be expected to collaborate in the development of a remodelling or renovation proposal for a living or work space to accommodate the needs and wants of a potential client in Nova Scotia.

# **Suggestions for Assessment**

Students can:

- develop a co-criteria rubric to assess their group project
- share their proposal with their client using visuals. Could be virtual, role play or other presentation style

#### Teachers can:

- use co criteria rubric to assess student projects
- interview students to assess student organization skills in developing their proposal
- use observational rubrics to assess ability of student groups to collaborate and problem solve

# Suggestions for Learning and Teaching

Teacher can

- create a series of client profiles and projects for students to select
- lead students in development of their co-criteria rubric
- provide models of completed projects

Students can

- create a chart connecting their client profile to project needs and wants
- develop a task list for group members
- create a floorplan, budget and proposal for their "client"

#### Resources

Homes and Interiors Chapter 22 Kitchens, Laundry Areas and Baths

Chapter 23 Home Offices and Storage Spaces

Chapter 24 Choosing Backgrounds

Chapter 25 Recognizing Furniture Styles

Chapter26 Selecting Furniture

Chapter 27 Choosing Lighting and Accessories

Chapter 28 Home Safety and Security