

CIQS Syllabus		Original:	June 29, 1993
Course No:	A201	Rev. No:	4
Course Title:	Construction Technology II	Rev. Date:	March 31, 2012

Course Description:

This course adds to the knowledge gained in Construction Technology I, covering subjects dealing with wood and plastics, thermal and moisture protection, doors, windows and glazing, interior and exterior finishes as covered in Divisions 6, 7, 8 & 9 of MasterFormat 2010.

Suggested Prerequisites:

Course No: A102 - Construction Technology I

Learning Outcomes:

The candidate will be able to:

- 1. Demonstrate the basic knowledge of the composition and use of the materials studied.
- 2. Demonstrate knowledge of the manufacturing process for the various types of materials.
- 3. Demonstrate knowledge of the appropriate processes given a defined circumstance.
- 4. Demonstrate knowledge of the conditions under which the various processes could be applied.

Course Content:

The candidate will study from the text, Construction Materials, Methods & Techniques, Building for a Sustainable Future, 3rd Edition, the following:

- 1. Wood and plastics including characteristics of wood, preparation of lumber, lumber grades, treated lumber, glued-laminated lumber, plywood, wood fasteners, plastics, forming methods, foam plastics, fibreglass reinforced plastics and plastic laminates.
- 2. Thermal and moisture protection including damp proofing, water proofing, thermal insulation, roofing materials including built-up asphalt roofing, rural roofing, single ply roofing, shingles, tile and slate, wood shingles and shakes, metal roofing, waterproofing, drainage, sealants.
- 3. Doors, windows and glass including doors, metal and metal covered doors, wood doors, special purpose doors, sliding folding doors, windows, hardware, glass, plastic glazing materials, curtain walls, window walls.
- 4. Finishes including plaster and lath systems, drywall systems, ceramic tile, terrazzo, acoustics, acoustic materials, wood flooring, resilient flooring, carpeting, painting and wall coverings.

Required Textbooks and Materials:

1. Construction Materials, Methods & Techniques, Building for a Sustainable Future, 3rd Edition, by William P. Spence & Eva Kultermann.

Additional Reference Materials:

- 1. Canadian Wood-Frame House Construction, 3rd Edition published by Canada Mortgage and Housing Corporation.
- 2. Design & Control of Concrete Mixtures, 7th Canadian Edition By Steven H. Kosmatka, Beatrix Kerkhoff, William C. Panarese, Norman F. MacLeod and Richard J. McGrath.

Testing:

Emphasis in testing will be placed upon the candidate's knowledge of:

- 1. The manufacture of the types of materials,
- 2. The proper application of the process,
- 3. The appropriate use of the various materials.