

HEALTHY BUILDING MATERIALS SYLLABUS



COURSE DESCRIPTION

Healthy Building Materials will explore the relationship between our built environment and our health. Most professional builders and do-it-yourself renovators are aware of the dangers of mold, lead, radon, carbon monoxide, and asbestos and the need for careful testing for and remediation of these health hazards. As we move to more energy efficient buildings with effective air sealing and appropriate mechanical ventilation, a growing body of evidence is helping us understand a broader range of appliances, systems, materials and finishes that can be harmful to human health. A new area of building science has emerged to help builders identify materials that should be avoided, and choose instead, items that protect indoor air quality and reduce exposures that can contribute to asthma, cardio-vascular disease, COPD, hypertension, developmental problems, preterm births and other health impacts. By adopting a proactive approach to healthy materials, builders and home renovators can guard their own health and deliver beautiful, healthy buildings that have lasting value.

The course will consist of a selected list of pre-course readings, videos, and relevant websites. Classroom time will include a discussion of the key concepts and information in the readings, and an exercise to identify materials substitutions in real-life projects.



LEARNING OBJECTIVES

1. Identify the impact of the life-cycle of materials

2. Understand the importance of healthy building materials and be able to explain to clients, suppliers, work crews and colleagues why this is an important issue.

3. Understand the serious health impacts of the chemicals and chemical compounds commonly found in some building materials, and the various pathways of exposure.

4. Know about and be able to use nationally recognized sources of reliable information about building materials that should be avoided (red-listed materials) and materials and building techniques that provide a healthy and cost-effective alternative.

5. Start to develop your own priorities and strategies to help you choose healthy materials and technologies in your building and renovation projects, and compare costs in a manner informed by a holistic, whole building approach.

REQUIRED MATERIALS

• None required!

COURSE OUTLINE

- Session 1
 - Orientation
 - Introductions
- Session 2
 - Toxic chemicals in building materials
 - Session 3
 - Material choices
- Session 4
 - Putting it all together presentations of class assignments

COURSE REQUIREMENTS

• Bring your inquiring mind!



SUGGESTED READINGS

- Enterprise Green Communities (EGC) 2020 Criteria Manual
- Green Science Policy Institute
- The New School/Parsons School of Design Healthy Materials Lab
- <u>The Living Future Institute</u>
- Healthy Building Network