

Indoor Environmental Quality



Open to all, from working professionals to the general public, this seminar benefits architects, interior designers, indoor air quality consultants, home inspectors, home dwellers, and other building professionals.

The daily schedule includes lectures and group activities, with practical experience in building science principles, research assignments, demonstrations, and interactive discussions.



Building Biology Institute
The science of healthy buildings

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Please direct all inquiries to:
outreach@buildingbiologyinstitute.org

(866) 960-0333 Click [here](#) for more information on
Building Biology

Cancellation Policy

Seminar students who paid their tuition in full, and then cancel at least thirty (30) days before the first day of classes, will receive a tuition/tuition deposit refund in full (100%). Those who cancel less than thirty days out, but more than ten days out, and had paid their tuition in full, will receive a fifty percent refund; the amount they forfeited will be considered on deposit for one year, and may be applied toward any subsequent BBI event or online course. Those who cancel ten or fewer days out will not receive a refund, but their entire forfeited payment will be considered on deposit for one year.

If a student cancels out of a seminar after having received a digital and/or hard-copy of that seminar's manual, and elects to apply their tuition credit to a seminar *other* than the one for which they cancelled out, their tuition credit will be reduced by the value (\$425.00 USD) of the course manual for the seminar out of which they cancelled.

Regarding seminar room & board, our refund policy is dependent on the chosen venue's cancellation policy; if the venue should issue a refund, BBI will pass 100% of the venue's refund to the student. In like manner, should the venue refuse BBI a refund, in whole or in part, then said venue's policy becomes fully representative of BBI's policy.

Extended Policy Stipulation

BBI does not endorse products, methods, practices, services and/or business opportunities (hereafter referred to as “offerings”) that are extraneous to BBI’s policies, practices, and/or curriculum, regardless of whether they are vended/sponsored by our alumni, students, or by outside third parties or organizations.

This policy extends to our seminars, our biennial conference, and all other live or interactive events. And while participants in our events are not restricted by BBI from apprising their fellow participants of any offerings, regardless of whether they are or may be or may not be in conflict and/or in competition with BBI, they may in no way solicit or otherwise “pitch” their fellow attendees during said event(s). Subsequent to said events, neither offerings nor follow-up appraisals of offerings may be made or attempted by any means - telephone, e-mail, or snail-mail - without the expressed *prior* consent of their intended recipient(s).

BBI reserves the right to deny/rescind enrollment, whether first-time or continuing, to students it deems to present the risk of being or becoming disruptive of our program presentations, and/or a distraction for our students from what they have come to us to learn and experience.

Discrimination: Zero Tolerance

The Building Biology Institute (BBI) does not and shall not discriminate on the basis of race, color, religion (creed), gender, age, gender expression, national origin (ancestry), disability, marital status, sexual orientation, or military status, in any of its activities or operations. These activities refer to any and all interactions involving our potential or current students and our alumni; these operations include, but are not limited to, hiring and firing of staff, recruiting/selecting of vendors, volunteers, and providers of services. We have been and remain committed to providing an inclusive and welcoming environment for all.

Seminar Synopsis

Bau-Biologie, or Building Biology®, is a specialized branch of **Building Science** with human health as the central focus. This 5-day seminar explores the interrelationships between human health, the built environment and planetary ecology. Attendees will learn about the interaction between air, moisture, toxins and humans within a built environment, and the uniquely holistic Building Biology approach to the built world. Students will learn to apply Building Biology criteria to evaluate these exposures within the built environment and how to reduce exposure and improve indoor environmental health through a better understanding of the science of Building Biology. Additionally, students will learn about how to inspect and consult for these indoor contaminants and their health impact upon occupants following Building Biology approaches. Finally, the students will explore healthier solutions that can be implemented in residential buildings to improve indoor environmental quality. The instructors are experienced Building Biology Environmental Consultants whose combined experience spans almost 3 decades.

Topics include:

- Introduction
- Building Biology® principals and philosophy
- The Human Body – pathways of concern
- Brief overview of Building Science
- Indoor Climate
- Biological, Chemical and Particulate exposures by air
- Biological, Chemical and Particulate exposures from the ground
- Biological, Chemical and Particulate exposure from water

Resources: On-line module *Indoor Climate*

Time requirement: 5 days (successful completion of a written exam is required for BBEC status) Prerequisite online courses: BBI 204.2 *Indoor Climate*, BBI 206.6 *Ventilation*

Seminar Objectives

Upon completion of this seminar, the students will be able to improve indoor environmental health by:

1. Understanding the factors of the environment that effect health
 - a. Indoor climate parameters (temperature, humidity, ventilation...)
 - b. Driving forces of air movement (pressure differentials, etc.)
 - c. Combustion gases and combustion by-products (propane, natural gas, carbon monoxide, PAH)
 - d. Outdoor factors (air, water, industry, neighborhood, traffic)
 - e. Conventional heating, air conditioning, ventilation, filtration
 - f. Dust and particulates (lead, asbestos, metals)
 - g. Soil gases (radon, methane...)
 - h. Fundamental interactions of moisture and the built environment (water intrusion and humidity issues)
 - i. Biological contaminants (mold, bacteria, viruses, dust mites, allergens...)
 - j. Volatile and semi-volatile organic compounds, formaldehyde, cleaners and pesticides
 - k. Evaluate materials, products, cleaners, pesticides to determine the least toxic alternatives
2. Understand how to quantify the health of indoor environments
 - a. BBI Principles, and Guidelines for sleeping areas
 - b. Be familiar with pertinent Acts, regulations, standards, and industry best practices
 - c. Understand the limitations of testing and quantifying conditions

Seminar Syllabus: BBI 211

3. Gain practical experience at:
 - a. Improving observational skills
 - b. Interpretation of various laboratory and other agency reports
 - c. Thinking about alternatives and common-sense solutions to creating healthier spaces
 - d. **Compositing** an indoor environmental assessment report
4. Understand general issues pertinent to Building Biology Environmental Consultant (BBEC)
 - a. Safety and Personal Protective Equipment
 - b. Information resources for further education and further certification

Seminar Schedule: BBI 211

This seminar is comprised of prerecorded lectures and demonstrations, online quizzes, scheduled live interactive sessions with the course instructor, and an online, timed final exam.

The online lessons are broken down into chapters and students will watch a chapter video at their own pace, following along with the supplied PowerPoint and textbook. Upon completing each chapter, the student will answer a few multiple-choice questions on their online Learning Dashboard.

There will be a timed (2 hour) multiple-choice final exam on your Learning Dashboard.

The online Question and Answer sessions will be held via Zoom from Monday June 16th to Friday June 20th from 12:30 p.m. - 2:00 p.m. Eastern Daylight Time. Please note the time zone and adjust according to your location. The sessions will be recorded and uploaded to an online student folder in case you miss one or would otherwise like to go back and review.

Each daily Zoom Q & A session will be open for students to ask questions, and the instructor will answer all questions. For students unable to attend the live sessions, questions can be emailed to the instructor, and he will answer them during the sessions so all can learn from them.

Enrolled students should check their email periodically as the start day approaches for important information from the institute and the instructor.

Seminar Syllabus: BBI 211

Meet the Instructors

BBI 211: Indoor Environmental Quality



Stephen Collette is a Certified Building Biology Environmental Consultant, and a retired straw bale builder, having worked on two dozen straw bale structures across Ontario and Quebec, from small cottages to 13,000 ft² structures and everything in between. Stephen has an engineering background and became passionate about healthy housing when his family became ill due to exposure to mold. Stephen carries out indoor environmental inspections on houses and other buildings to determine health impactors based on building science and environmental health concerns. Stephen is a LEED AP (Leadership in Energy and Environmental Design Accredited Professional) from Canada Green Building Council. Stephen has a Building Science Certificate from the University of Toronto and is a certified Building Science Specialist of Ontario. As a consultant Stephen helps people make healthier, more environmentally friendlier building choices. Stephen is a published author who writes and lectures across North America on healthy, natural and green buildings.



Cathy Cooke is Board Certified in Holistic Nutrition with the National Association of Nutrition Professionals. She is also a Certified Building Biology Environmental Consultant and Certified Electromagnetic Radiation Specialist with the Building Biology Institute as well as a Certified Residential Mold Inspector. She assesses buildings for anything that may be causing health problems, including Indoor Air Quality, mold, chemical off-gassing, ventilation, and EMF exposure. Combining Holistic Nutrition and Building Biology, she addresses both the body and environment to help her clients achieve optimal health.

Originally from Kansas City, MO., she currently lives in Boise, ID and practices worldwide.