

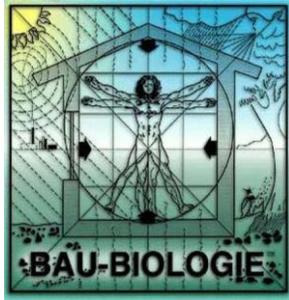
International Institute for
Bau-biologie® & Ecology

IBE 201.2

IBE 201.2 Bau-biologie Basics



**BRINGING TOGETHER TECHNOLOGY AND DESIGN
METHODS TO PROVIDE THE INFORMATION
NEEDED TO CREATE HEALTHY HOMES AND
WORKPLACES**



Bau-Biologie – IBE 201.2

Welcome

Thank you for choosing IBE for your educational needs. Current environmental realities demand a new approach to ensuring that our homes, schools and office buildings support the health and wellness of all who dwell there. We strive to provide the latest information and cutting edge methodology on the vital, complex relationship between the natural and the built environments. May you find your educational experiences enlightening, and take this knowledge out into your community for the benefit of all.

Michael Conn, Executive Director, Institute for Bau-Biologie & Ecology.

Course Navigation

You will find that it is very easy to navigate through this course.

- Progress through the lessons using intuitive navigation tools. When you study, make sure to be aware of and use all supporting materials, such as pdf files, video and audio clips, links to other websites or relevant articles or papers, as well as the online forum.
- The last lesson will give you the option of downloading an electronic version (PDF) of the course. Please be aware that this information is copyright protected.
- When finished, you will be ready for the test. These tests are "open book" and are designed to help you evaluate your understanding of the subject.
- When you have finished the entire Course Pack, a Certificate of Completion is available on-line.

By using the Forum feature, students can share information and solve problems. We would like to see truly interactive discussions take place.

Please be advised that links to third party information may not reflect or support the Building Biology viewpoint. However, it might be of some interest to see how other people, groups, institutions, etc. argue the same subject.

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Lesson 1 – Bau-Biologie

Bau-Biologie (Building Biology) Overview

In short, Bau or Building Biology looks at the impact that our buildings have on our health.

All buildings have an impact on those of us who occupy them. We are affected mentally, emotionally, physically and spiritually.

Buildings can make us feel calm or agitated; tired or energized; strong or weak; connected or isolated; motivated or lethargic; healthy or unwell.

Because the buildings we live and work in affect how we feel—they have an impact on all aspects of our lives. If we're feeling tired, depleted and unwell we don't have the available energy to do what we need or want to do. We may not be able to nourish ourselves, foster relationships, or achieve our potential. Life becomes a struggle, instead of a flowing source of happiness.

A sick building can diminish our life—a health-supporting building can enhance it.

Building Biology shows you how to arrange your home or workplace so that it safeguards and promotes your health, instead of depleting it.

Learning Building Biology also equips you with the knowledge to show others how they can adapt their homes to change their own lives.

Definition of Bau-Biologie or Building Biology

There are two official definitions:

Building Biology is the science of the holistic interactions between human life and our living environment.

Building Biology is the study of the impact that the built environment has upon the health of people—and the application of this knowledge for building healthy homes and workplaces.

Building Biology comes from the German term *Bau-Biologie* which takes into account:

The ways of building and the living environment (bau)—and all forms of life (bios)—are coordinated into a sense of order (logos).

BAU BUILDING	BIO BIOS	LOGIE LOGOS
House, skin Home, Homeland Dwelling, Nest Habit, Habitation Safe, Comfortable Hut, Hat	Mode of Life Life Living Beings Regard for Nature Worth Living Of or Relating to Life	Word (Word of God) Judgment, Reason Creation (power of creation) Incarnation, Materialization Regulating World Reason Health, Universe, Holism Culture Unity (Soul, Mind, Body)

Sometimes you may hear the term *Building Ecology* used. However, from a scientific perspective, biology is considered more encompassing than ecology. Ecology relates to the *inter-relationship of life forms*, whereas Biology encompasses this aspect in addition to the *totality of life*. It was for this reason that the term Building Biology was chosen.

The words *biology*, *architecture* and *culture* all have a Greek foundation, and a common theme. They are connected with the source and unity of life, and with its creative principle. From this perspective the architect and Building Biologist are seen as creators, or aides in the act of creation. Truly great buildings evolve from a basis of humility and holism, and not from ego and separation.

As the German author and architect Otto Bartning wrote:

"We architects only receive the power to build, and courage to gain freedom from our bonds, with the silent adherence to this basic instruction—to create out of love for the created world."

All too frequently in contemporary society we miss the biological principles when designing and building homes and workplaces, and because of this we have lost touch with the time-honored art and culture of building. Buildings have become banal, stark, inhuman, spiritless, soulless and unhealthy. They no longer feed us. There is a parallel to this in our society—where some would say that we are also decaying spiritually and physically amidst an impersonal civilization.

In Building Biology, the emphasis is always on holism—meaning entire, integral, whole—or the bigger picture. When we view life holistically, we recognize that spiritual, emotional, intellectual and physiological values are intimately linked to economic, technological, architectural and other material concepts.

This is the central theme of Building Biology—the interrelation between the built environment, the natural environment and mankind.

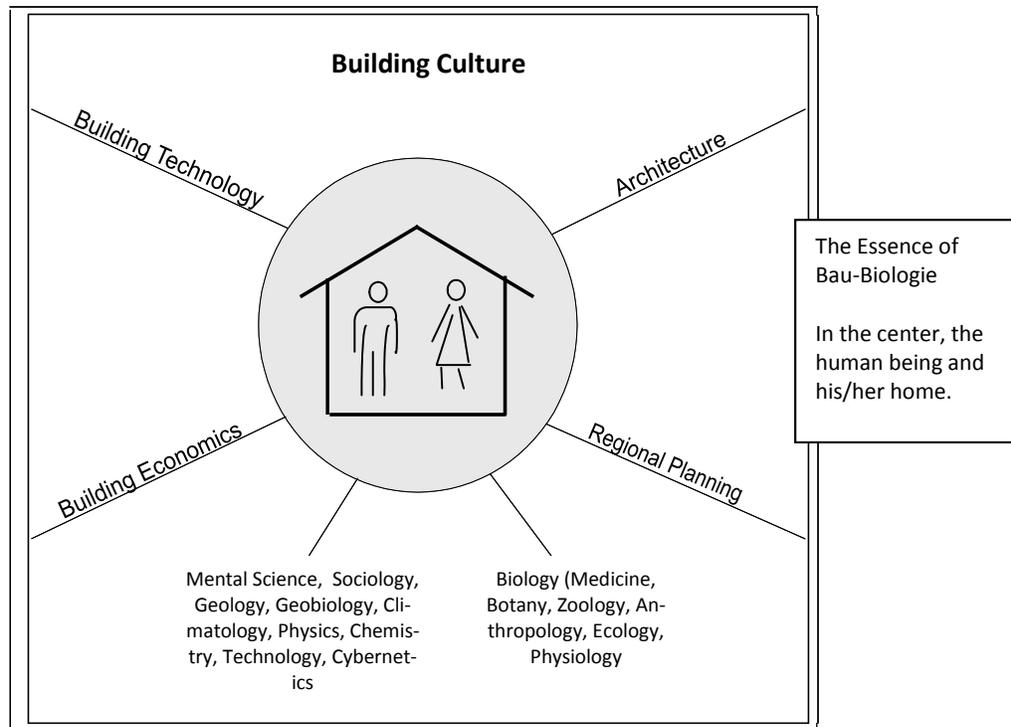
Reasons for Bau-Biologie

It seems obvious that the health, dignity, spiritual and physical well-being of humanity should be the main concern in the development and construction of homes, workplaces, and other structures where people spend significant amounts of time. To this end, Bau-Biologie should be incorporated in all construction. Unfortunately, what is obvious is sadly overlooked in conventional practice. Technology, economics, and structure are what count today.

Implementing Bau-Biologie remains a distant goal; even the *need* for it has not been widely recognized. This is reflected in the fact that few of the officially recognized construction research institutes runs a department for biology, human science, or human ecology.

It seems, then, that we are helpless to stop the cultural demise of architecture. The market is continually flooded with new synthetic building materials and furniture. They have been tested and certified for their technical and physical properties, but with little regard for health. When these unproven materials are used in building, human beings become unwitting guinea pigs.

When building a house, few people consider the various health aspects involved. Traditional, natural building materials and building systems are increasingly being replaced by artificial ones, and the importance of placing a building according to electro-biological and geo-biological principles is almost never considered. When planning new settlements or in the context of obtaining a building permit for a house, administrative agencies show little flexibility, orienting themselves entirely to accommodating existing infrastructure and sewer systems. The imposed restrictions concerning building line, form and size of the house, color of roof and external walls are often degrading and dictatorial to the owner. Important aspects such as health-oriented building, enhancing individuality, problems facing elderly people, ecological integration, and self-sufficiency with regard to power supply and waste disposal are largely ignored.



The Role of Bau-Biologie in Science and Education

Why Education in Bau-Biologie is Necessary

In the education of architects and builders, but also ecologists, civil engineers and others, the biological issues have been largely ignored. Technical, economic, and architectural elements dominate. In the past, this was less of a problem—natural building materials were used, and so the dangers to health were less acute.

However, since the 1950's, the situation has changed completely. Modern building materials, which are synthetic and unnatural, are creating a very new environment that is changing too fast for our species to adjust. This is a serious distortion of our habitat that is causing an epidemic of *sick building syndrome* and environmental illness.

Ostensibly in the civilized world, health and well-being are valued most. Why, then, does more than 90% of the population suffer from physical, mental, and psychosomatic illness? (*World Health Organization*)

It is vital that we make biological science—the science of life—the guiding element in building construction. After all, most people spend 90% of their lives in buildings—in houses, schools, or workplaces. (*Environmental Protection Agency*)

A large amount of research has established the relationship between illness or health and living environments. Unfortunately, this knowledge is little known to the general public, or those in the construction and housing industries. Not only builders, but also ecologists, civil servants, and all health professionals would greatly benefit from an understanding of Bau-Biologie. Only through education can the theoretical knowledge be put into their hands and brought into practice quickly.

Every school that teaches the technologies and economics of building should integrate Bau-Biologie and building ecology as well as socio-ecological land distribution principles into its curriculum.

Bau-Biologie is a Comprehensive Science

By its very nature, Bau-Biologie is not a narrowly specialized subject. It is holistic and integrates many more specialized subjects. It is a living concept that coordinates and unifies fields of study that are otherwise only taught in isolation.