

Certificate in Sustainable Building and Design Practicum Information Packet

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Students enrolled in the Certificate Program will be expected, with the support of an advisor, to participate in a Practicum project and presentation after completing the core program and all required electives.

What is a Practicum Project?

A practicum project is the “application of existing knowledge in a new way.” This culminating activity will provide the student with the opportunity to document his/her theoretical and practical knowledge and skills in the area of Sustainable Building and Design in a real life application before a jury of professional architects and builders.

The scope, topic and form of the practicum and presentation are to be determined by the student and advisor, aided by review of the Practicum Committee, depending upon the skills, interests, and focus of the student.

Practicum presentations are generally scheduled 3 x a year in February, June & September. Please contact the office to find out the current presentation schedule.

What might a Practicum Project look like?

In simplest terms, the practicum project should allow the student to express his/her knowledge and/or skills relating to sustainable building and design practices. Additionally, it is hoped that the practicum will provide the student with an opportunity to hone in on an area of sustainable building and design that is of specific interest, and might provide a stepping stone toward the practical application of these skills.

Students might:

- Design a green home, sustainable community, or alternative renewable energy system
- Build a natural structure or a mobile photovoltaic power generator
- Create a business plan for a green design/build firm, a natural building collaborative, or a whole systems consulting firm
- Apply Permaculture principles to an existing property or plan a green renovation for a structure
- Research renewable energy options applicable to a specific population in a developing nation to improve self-sufficiency
- Do a comparative analysis of the energy performance of various building types

These are only examples of what might be considered. Let your imagination and your goals become your guides. At the end of this document is included a one page document, “**Choosing a Practicum Focus**” (page 7), to help you articulate what your practicum project might become.

Practicum Proposal

As you enter the final phase of the Certificate in Sustainable Building and Design, you will need to develop a practicum proposal and choose a Practicum Advisor. Your proposal will be presented to the Practicum Committee for review, and if you have not yet chosen an advisor, the committee will offer suggestions for someone that will provide you with the guidance necessary to fulfill the goals of your project. (See below for further information regarding the **Practicum Advisor** and the **Practicum Advisor List**.) The committee will also review your proposal for cohesiveness and decide if your project is ready to move forward.

Your practicum proposal is a 1-2 page document summarizing your plans for completing the project. While we understand that along your journey that you may discover new technologies, design ideas and inspirations that may take you in a different direction from where you began, the proposal will provide a framework to guide you through the process. Any substantive changes to the proposal should be discussed with your Practicum Advisor. You are encouraged to explore the design/build process while working on your practicum to discover what "good design" means to you.

Your practicum proposal should include the following:

- Timeline – This could be "the end of the semester", "next spring", "in two months", etc. You should set benchmark goals at different intervals throughout the schedule, ie: site visit #1, complete elevations, develop budget, site visit #2, meeting with client, etc.
- Learning Objectives – Provide a statement of purpose identifying what you hope to learn through the process of completing the practicum as well as the end goal.
- Resources & Personal Experience – List any education experience, current or future work experience, or other related experience that you will be participating in related to your practicum.
- Methodology – Summarize how you intend to carry out research and development of your project.
- Deliverables – Provide a summary of what you hope to be the final end product of your practicum, this might include a digital presentation; a written report; digital or manual drawings; structure models; or other documentation of the learning process. (All students will be required to have their work presented to the practicum review committee in a digital storage format.)
- College Credit – If you will be seeking college credit for your practicum, please describe what institution you are working with and any additional requirements for college credit.

The Practicum Advisor

An advisor is provided to help guide you through the practicum process. You are encouraged to use your advisor as one of your most valuable resources. Even if there is quite a geographic distance between you, your advisor is accessible through phone, email and other modes of communication. You can; share websites, send photographs of elevations, site plans and actual sites, as well as plan face-to-face meetings and site visits to name just a few ways of working with your advisor.

Advisors should be selected, regardless of geographic location, based on the best fit between their professional experience and the student's area of interest and are required to provide you with a minimum of 10 hours of consultation.

A partial list of Yestermorrow Design/Build School instructors is provided below. *You may also propose to work with other Yestermorrow instructors not currently on the list*, and the Practicum Committee will review your choice for compatibility based on your proposal.

Practicum Requirements

Students are required to have a minimum of 3 meetings with their advisor, it is highly suggested that there be regularly scheduled meetings throughout the development of your practicum process. Meetings can be a face-to-face, over the phone, at a site visit, over email or through other modes of communication.

Within your proposed timeframe, you will be required to participate in the following events:

1. Submit practicum proposal and list of Yestermorrow classes to Practicum Committee
2. Initial meeting with your Practicum Advisor to review practicum proposal and scope of project
3. Interval meetings with your Advisor including a Mid-term evaluation
4. Practicum presentation review by your Advisor
5. Practicum Committee review of proposed presentation
6. Final presentation

Your final practicum presentation will be in an open public forum based on the Practicum Committee review and approval. In terms of format for your presentation you have many options to present the cumulative efforts of your work. Keep in mind that your deliverables are highly dependent on the nature of the practicum subject. For example, a design/build project will have very different deliverables from a scientific study of heat loss through building envelopes. An economic analysis of life-cycle costing of various building systems would have different deliverables from a Permaculture design for a homestead project. Below are some possible deliverables:

- Photographs
- Elevations
- Budget
- Phased Plan
- Satisfaction of Code Requirements
- Model
- Building designs
- Exploration into varying energy technology
- Schematics
- Permaculture Design
- Video Documentation
- Site Analysis
- Digital Presentation

Contact Information

If you have further questions related to the Certificate in Sustainable Building and Design, feel free to contact:

Monica DiGiovanni
Admissions Director
189 VT. Rte. 100
Warren, VT 05674
802-496-5545
monica@yestermorrow.org

Partial List of Practicum Advisors

- **Rick Ames**, *M. Arch., MIT*

Rick is a principal of Next Phase Studios, a collaborative design firm in Boston, MA. His work focuses on environmental performance and building technology for projects including housing, residential, non-profit and institutional clients. The firm provides services from full architectural planning to design/build and prototyping. He has taught at Yestermorrow since 1983.

- **Mark Chalom**

Mark is an architect, specializing in blending handcrafted Traditional and Contemporary styles with sustainable technologies. Mark's experience spans both design and construction of environmentally appropriate buildings. Since 1975, Mark has taken his architecture beyond Passive Solar and looks at the total structure, site, materials, systems, water, landscaping and their interaction with each other and the environment. His sensitivity to the historic cultures has blended these new technologies with the traditional forms and materials that have evolved in Northern New Mexico out of common sense and appropriateness. Mark is known for his expertise in the development of the "Solar Adobe" based on the past but adaptive and relevant to the future.

- **Lisa DePiano**, *MS Regional Planning, UMass*

Lisa is a certified Permaculture designer and co-founder of the Montview Neighborhood Farm, a human-powered farm and edible forest garden in the Connecticut River Valley. She has a Master's degree in Regional Planning from the U of Mass. and loves working with people to create the world they want to live in.

- **Skip Dewhirst**

Skip is a co-founder of Meerkat Design and Handwork. He is a furnituremaker and timberframer who also explores his passion for wood by designing and building guitars, carving and boatbuilding. Skip has been teaching folks of all ages about working with wood for over twenty years.

- **Andrew Faust**, *B.A., Guilford College*

Andrew is a certified Permaculture designer and a certified alternative school teacher. With 14 years of experience in bioregional education, he is presently doing Permaculture design work for nonprofits, businesses and homeowners. He has been homesteading off the grid in WV for five years where he is developing the Center for Bioregional Living.

- **Buzz Ferver**

Buzz was originally trained in Ornamental Horticulture and Landscape Design, then switched careers to work as a building designer and contractor. He has also had careers as product design engineer for an automotive tool and equipment manufacturer, and the marketing and sales agent for a huge processor of mushroom compost. Now he's back as a Design/Builder, focusing primarily on major renovations to existing houses as a partner in Overbrook Design, while still marketing compost to the horticult. He is currently living in and building his solar home in Worcester, VT.

- **Joel Glanzberg**

Joel has broad experience in environmental design and ecological restoration projects, particularly in the arid regions of the southwest US and Latin America. He has also worked extensively in the field of regenerative agriculture, including recent agricultural restoration projects in Maryland, Hubbell Trading Post and at the Rodale Institute in Pennsylvania. He has worked as a consultant to the City of Santa Fe on watershed restoration, where he has helped to design and implement programs for restoration as well as public education and engagement. Current work includes collaboration with internationally known environmental artists Helen and Newton Harrison on restoring the Santa Fe River watershed and with pueblo basket weavers on the Pojoaque River.

His research has focused on the integration of traditional agricultural/agro-forestry techniques and species from dryland areas world-wide.

- **Keith Giamportone**, MArch, MIT, AIA

Keith is founder of Giamportone Design in Cary, NC. He is LEED Certified and focused on a sustainable approach to design as well as the use of evidence-based design. He has been involved in a wide range of projects, including Residential, Healthcare, University, K-12, Museum and Office Buildings. Keith has been teaching at Yestermorrow since 1984 and has been a critic at several Universities as well as spoken at Universities, a Healthcare Symposium and at Project Kaleidoscope Workshop on sustainability in University buildings. Keith is on the Board of the NC Triangle Chapter of the United State Green Building Council.

- **Ben Graham**, B.Arch., RISD

After studying communities at the Findhorn Foundation and years of building with raw earth, stones, and plants, Ben now focuses his efforts on designing and building healthy community living systems and strengthening the connections between culture and nature. Ben also works on communication and decision-making in community-building efforts.

- **Josh Jackson**, BSME, Yale

Josh received his BSME from Yale University in 1989 and promptly bicycled across the country to San Francisco where he pursued an interest in alternative energy and worked for Pacific Gas & Electric on energy conservation programs. A desire to bring head, hands and heart together led Josh to the Heartwood Owner/Builder School in Massachusetts where he fell in love with timberframing and ecological building during two summers as an apprentice, and has pursued these paths through a wide variety of natural materials, handmade paper, stained glass, and of course timbers of all shapes, sizes, and species. He delights in the creation of homes that nourish community during the building process and that provide healthy, soulful, beautiful shelter. Josh continues to teach timber framing workshops at Heartwood School, Yestermorrow, and Rocky Mountain Workshops. Before co-founding TimberHomes LLC, Josh was partnered with Ben Yeomans in Humble Abode - see that site for additional projects. A new found passion for skate skiing is offering ample opportunities for exercise and public amusement this winter as Josh and his wife Geraldine Vatan have been menacing the trails at Morse Farm in Montpelier, near their home in Middlesex, Vermont.

- **Mark Krawczyk**

Mark is a permaculture designer, traditional woodworker, natural builder and landscaper who resides in Burlington, VT. He spent four years traveling the US and UK, apprenticing with the likes of the Cob Cottage Company, Kiko Denzer, Drew Langsner, coppice forester Ben Law and the Central Rocky Mountain Permaculture Institute. He maintains a small woodworking business called RivenWoodCrafts, is a member of Seven Generations Natural Builders, and is currently developing 'Keyline Vermont', a sustainable farm design/consulting business. His website: www.rivenwoodcrafts.com

- **Barton Kirk**, BS Agricultural and Biological Engineering, Penn State U; MS Integrated Ecology, Economics, and Design, U of Vermont

Barton is project manager with SEEDS, a non-profit research, design and educational institute. He works on a variety of engineering projects with SEEDS' Ecological Design Collaborative (EDC), which designs and builds systems that reconnect communities with their infrastructure. Most recently he has been researching life cycle analysis in the context of comparing stormwater and wastewater treatment options.

- **Ed Lowans**

Ed has led sustainability teams on precedent setting projects for over 30 years advancing the art and science of green business, policy, planning, buildings, technology transfer, and building science. Ed has provided sustainable design consulting for over 100 advanced planning and

design projects internationally, including many LEED® projects. He is an author, researcher, adjunct professor and frequent presenter.

- **Lizabeth Moniz**, *MA Landscape Design, Conway School of Landscape Design*

Lizabeth began exploring structure, the limitations of structure, and building with natural materials at a young age. At university getting her BFA, she worked in cabinet and custom woodworking shops. Teaching in the Peace Corps, public schools, Women Build, Youthbuild, and currently at Yestermorrow Design/Build School, has given her ability to work with different populations and age groups. She has also been a wilderness trip leader and is a self-employed builder and landscape designer. Eventually receiving her MA in Landscape Design helped her to envision and design structures and landscapes as being integrated holistically and working together.

- **Keith Morris**

Keith is an organic farmer, builder, and environmental educator. For the past five years, he has been designing and establishing an edible forest garden and ecological homestead in Johnson, Vermont along the Lamoille River. Prospect Rock Permaculture combines reforestation, wildlife refuge, and ecological restoration with food production and community building, while educating about and experimenting with sustainable techniques and ways of building. He has taught certification courses or presented about permaculture at UMass Amherst, Sterling College, UVM, UNH, Johnson State, and with other community groups.

- **Meaghan Pierce-Delaney**

Meaghan graduated from University of Pennsylvania in May 2006 with Masters of Architecture as well as Landscape Architecture. For the next two months, she biked and camped her way across the North American Continent. Currently, she lives and practices landscape architecture in New York City. At the firm *terrain-nyc*, she works on projects that include the design of green roofs, water purification/ filtration gardens, rooftop terraces, low-technology water collection and dissemination techniques and public courtyards. www.terrain-nyc.net

- **Jacob Racusin**

Jacob is a natural building contractor and consultant, specializing in strawbale construction and natural plastering. He also works with High Mowing Seeds, an organic seed company in Wolcott, VT. Through the integration of sustainable design, appropriate technology, consideration of local and global impact, relation to the micro-climate and ecology of the site, appropriate selection of building materials, and the needs and wishes of the owner, Jacob works to create high-performing structures of beauty. Jacob spent the last five years designing and constructing a solar-powered strawbale building for his family in Montgomery, VT, where they are developing a farm and homestead.

- **Mac Rood**

Mac is a partner in the firm of Bast & Rood Architects. The firm's practice includes a wide range of commercial, institutional, and residential work. Mac's background includes ownership of a construction company, manufacturer of composting toilets, and development of four hydroelectric sites in Vermont. He has taught at Yestermorrow since 1980.

Choosing a Practicum Focus – Getting Started: Brain Storming and Self-Exploration

Phase 1 – Self Reflection

Questions to ponder (based on Rick Jarow's *The Ultimate Anti-Career Guide*):

- What gives you energy?
- Where is your passion?
- What is your career trajectory?
- Who is your community?
- Where is your voice?

Consider what you have learned about yourself from your education, career and your experience in your classes at Yestermorrow.

Phase 2 – Exploration (Diverge)

Considering everything from Phase I above, brainstorm all the areas of learning that you might engage in through your practicum. Don't censor. This is a time to generate ideas. To encourage your thinking, you might:

- Brainstorm by yourself.
- Talk to other students.
- Talk to faculty.
- Talk to colleagues.
- Attend conferences and workshops.

Phase 3 – Narrow Your Learning Focus Options (Begin to Converge)

Begin to narrow the options for your learning focus for practicum. To do this, you might:

- Eliminate items that you know you don't want to focus on.
- Group other items into categories.
- Consider the results from Phase 1 and establish priorities for yourself at this phase of your career and personal and professional development, and use these priorities as a guide for further narrowing.
- Talk with your practicum advisor and/or other faculty as needed.

Phase 4 – Explore Options for Projects (Diverge)

- Generate a list of possible practicum projects in your workplace and/or your community or that you could create outside of both of those settings.
- Check with relevant people to ascertain the viability of these projects.
- Talk with your practicum advisor and/or others as needed.

Phase 5 – Select Your Learning Focus and Project for practicum (Converge)

- Consider the possible matches between your potential learning goals and potential projects.
- Continue to refine your priorities.
- Continue to talk with your Practicum Advisor, other faculty, student colleagues, and other colleagues.
- Based on your learning priorities and the practical possibilities, choose your learning goals and the project through which you will those goals in your practicum.

*(*thanks to Donna Mellen of Antioch University New England for the original version of this document.)*

List of Completed Yestermorrow Classes

(to be submitted with your practicum proposal)

Name _____

Practicum Advisor Request _____

Course Information

Please List all classes you have taken at Yestermorrow

Required:	Dates
Core Class 1	
Core Class 2	
One Week Elective 1	
One Week Elective 2	
Workshop Elective 1	
Workshop Elective 2	
Workshop Elective 3	
Workshop Elective 4	
Optional:	
Additional Yestermorrow class	
Additional Yestermorrow class	
Additional Yestermorrow class	
Additional Yestermorrow class	
Additional Yestermorrow class	

Please List any other educational experience, courses, workshops or other accreditation outside of the Yestermorrow curriculum that you would like us to know about

Institution or Organization	Course or Workshop	Dates