Teaching Proposal:

Landscape Architecture Foundation Landscape Performance Education Grant,   2013-2014

Proposed by: Kenneth R. Brooks, FASLA, FCELA, PLA
Professor of Landscape Architecture
The Design School at Arizona State University

Project Organization:

The proposal is organized around the work of two integrated and interactive courses – an advanced MLA design studio and an advanced graduate studio – each of them taught within the interdisciplinary Design School that is the home of the accredited BSLA and MLA programs at ASU. The LDE 690 Studio is the final studio in the MLA core curriculum with a focus on applied project design that serves as the "thesis" project for the MLA degree. The applied project is typically a complex, systems-based design exploration focusing on a topic mutually agreeable to the student and the faculty and related to the strengths and mission of the program. The projects will require the student to integrate comprehensive design skill and experience with research methods appropriate to the project to resolve and advocate for their particular design challenge. The work is mentored by the instructor (in this case, Brooks) and juried and critiqued by the whole landscape architecture faculty. This year there will be a special emphasis on the application of principles of evidence-based design and the concepts of design performance, design value and design assessment. Past projects have addressed such topics as urban forestry (an ASLA student winner), neighborhood water recycling (another ASLA student winner), complete streets, stormwater management, solar power farms (resulting in an invited paper at a national solar conference), the psychological sense of engagement with the neighborhood correlated to residential architectural styles (resulting in an invited paper to a CELA conference), riparian habitat restoration, pedestrian streetscapes and other topics related to urban design and resource planning and management.

The Seminar course (LPH 590) will be taught as an advanced graduate elective course with the fundamental purpose of exploring the concepts of design performance evaluation and advocacy. To that end, the students, instructor and guests will research, refine and retell the story about our advances in the systematic process of articulating, evaluating and advocating quality design strategies and outcomes. We will apply the practices of case study, post-occupancy evaluation, and other research methods to demonstrate the practices of evidence-based design applied in the interests of improving and enhancing environmental, economic, social, cultural, and aesthetic contexts. The seminar will then move to explore and develop pedagogic methods, strategies and materials for educating professional design students, practitioners, design educators, public policy decision-makers, and general public about best practices for applying performance-based design and evaluating design contributions on the basis of the breadth and depth of the services or values provided by such design.

Learning Outcomes:

For the studio course (LDE 690), the Learning Outcomes are:
▪ identification and exploration of significant design topics worthy of MLA theses
▪ precedent and case studies relevant to the issue(s)
▪ research into alternative approaches for resolving the design issues
▪ development of evidence-based design solutions
        with assessments that illustrate performance values
For the seminar course (LPH 590), the Learning Outcomes are:
▪ exploration of the history and concepts of evidence-based and performance-based design
▪ exploration and demonstration of the application of design performance evaluation
▪ exploration and demonstration of the best practices in pedagogy related to development,
        delivery and assessment of professional course, curricula, and program content
▪ development of instructional materials advancing the teaching of design performance

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Learning Outcomes (continued):

Topics of discussion related to design performance will include:

▪ Traditional, historic and/or conventional concepts of design performance evaluation:

Vitruvius – "firmness, commodity & delight"

Sullivan/Wright – "form follows function"; "form and function are one"

Precedence-based design

AIA: "Standard of Practice"

Pro Forma studies

Case Study Investigations

Health, Safety, & Welfare

Bottom Line

▪ Contemporary advances to design performance evaluation:

Life-cycle cost analysis

Value engineering

Return on Investment (ROI)

Post-occupancy evaluation (POE)

Value-added design

▪ Quality assessment applied to project, firm and/or design management:

Total Quality Management (TQM)

ISO 9000

Six Sigma Management (6σ)

▪ Innovation and Experimental approaches

Best Practices

Triple Bottom Line

Quadruple Bottom Line

House of Quality

▪ SITES Program, Initiative and Aspirations

▪ Pedagogy

Course & Curriculum development

Educational evaluation, assessment and accountability

Instructional materials

Structure:

The two courses are organized as complementary and interactive. All of the MLA students participating in the studio (doing applied advanced design work) will also participate in the seminar). Additional students not in the MLA thesis studio will be recruited to participate in the seminar and to potentially apply their own problem-solving experience in a parallel fashion. Graduate students from other design disciplines, from sustainability science and from education will be recruited to participate in the seminar and enrich its transdisciplinary character. Landscape architecture will serve as the primary disciplinary perspective, but the related disciplines will all focus on the nature of evidence-based and performance-based approaches to design, design evaluation and design education and advocacy.

Schedule:

The schedule will fit the University's academic calendar in its 2014 spring term (Mid-January through early May). The studio will meet twice weekly on Wednesday and Friday afternoons (1:30-5:00) while the seminar will meet once weekly on Friday afternoons (1:30-2:30). While the use of studio time is structured with flexibility to permit informal production, critique, consultation, review and informal interaction between and among individual student designers, critics and instructors; the seminar is the formal time for

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all students, instructors and guests to engage in presentations, debates, and discussion. The general schedule will look like this:

> January – establish and identify the context(s), backgrounds, challenges and opportunities
> February – explore alternatives, standard and best practices, and cultivate alternatives
> March – test alternatives, experiment with options and potential solution; mid-term presentation
> April – design development, pedagogical materials development; design and program evaluation
> May – final presentations, advocacy sharing of lesson learned

Assignments:
The principle assignments for the studio course will be to 1) explore a significant landscape architectural design issue with appropriate analysis of background, precedence, literature review, and context studies; 2) Prepare design alternatives with a developed final proposal; 3) Evaluate the design using performance assessment strategies to determine the success of the design; and 4) communicate the findings and recommendations of the design and of the performance-based evaluation in a professional peer setting. The assignments for the seminar will be to explore the practices of design performance evaluation and to develop strategies and materials for teaching and advocating design performance assessment.

Assessment/Evaluation:
Students' design work will be reviewed and critiqued by the instructor (Brooks); landscape architecture faculty colleagues, local design professionals, design faculty from related disciplines. Participants, critics and peer reviewers for the seminar course will come from design, sustainability, and education faculty colleagues and from practicing landscape architects and other designers. CSI Fellows, LAF staff and similar external experts will be invited as contributors, critics and peer reviewers both during the courses and at the conclusion of the courses.

On-campus critics will include faculty colleagues with backgrounds in landscape architecture, architecture, industrial design, interior architecture, visual communications design, healing & healthcare environments design, urban design, sustainability science, ecology, education and psychology.

Reading Materials and Resources:
Diamond, Robert M. 1998. *Designing and Assessing Courses and Curricula: A Practical Guide, 2nd ed*.
   San Francisco: Jossey-Bass Publishers.
Jerke, Dennis, Douglas R. Porter & Terry J. Lassar. 2008. *Urban Design and the Bottom Line: Optimizing the Return on Perception*. Washington, DC: Urban Land Institute.
Sustainable Sites Initiative. 2013. *SITES v2 Rating System and Reference Guide*. SSI.
Web-based materials from LAF Sustainable Sites Initiative website and from ASLA's Advocacy Resources

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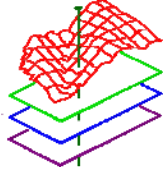
LPH 598 Topic:
Design Performance
Spring 2014 Semester
Instructor: Prof. Kenneth R. Brooks

Syllabus

The Course :

> ***LPH 598 Topic: Design Performance (schedule line #29643).*** This course is a
> seminar exploring the concepts and applications of Design Performance, especially as
> applied to landscape architecture and urban design. The course is inspired by the
> recent work by the Landscape Architecture Foundation to advance concepts of
> landscape performance – the application of tools, processes and outcomes that enhance
> the capacity of the design to serve people and environment. (see the LAF Performance
> Series information at: http://www.lafoundation.org/research/landscape-performance-
> series/). The principle goal of the course is to explore and cultivate strategies for
> developing, applying and advancing the concepts of design performance.
>
> The course will be taught for variable credit (1-3 credits) as a general elective for
> landscape architecture, urban design and other interested students with advanced
> backgrounds in design or pedagogy. Students enrolling for one credit will participate in
> the course through readings, discussion, and a demonstration of concepts of design
> performance to a case-study design project. Students enrolling for more than 1 credit
> will also develop a project for sharing and/or teaching an example of design performance
> to other design professionals.

Meeting times and location:

> The class meets regularly on Fridays from 1:30-2:20pm in the seminar room in the
> Tempe Center Studios of The Design School.

Instructor:

> Prof. Kenneth R. Brooks
> Office: CDN 72
> Email: Kenneth.Brooks@asu.edu
> Phone: 480-965-2533
> Office Hours: Wednesdays 10:00-11:00am, Thursdays 2:00-4:00pm and by
> appointment; drop-ins accepted on a time-available basis (if you come by and I'm not
> available, please leave a message so that I can get back to you). The best way to
> consult with me is to request an appointment during class or by email.

Textbook:

> Title: *"Urban Design and the Bottom Line*
> Authors: Dennis Jerke, Douglas R. Porter, Terry J. Lassar
> Publisher: Urban Land Institute
> Copyright   2008
> ISBN: 9780874209969

Student E-mail Contact Requirements:
> A portion of the communication among students and instructors for this course will be conducted through the ASU Blackboard On-line website in the myASU tools and the use of the college network server. In order to facilitate the secure use of the networks, it is necessary for all of the students in the course to use their officially assigned ASU e-mail accounts for access and communication. Although students are permitted to use non-ASU email accounts for simple unofficial e-mail communication, all official communication in the course will be through the ASU e-mail accounts. E-mail messages used in the course should include the name of the sender and a subject description in the e-mail header or subject line.

University Policy on Academic Integrity:
> ASU's policies and standards related to academic integrity are provided at the website of the Office of Student Life. Students are expected to be familiar with standard practices of honesty, fairness and consideration of peers and colleagues as well as the consequences for violating those standards. Committing acts of dishonesty or unfairness or tolerating such acts by classmates will be subject to appropriate sanctions. Students are encouraged to discuss concerns or questions with the instructors to determine what is and isn't acceptable. Some actions maybe acceptable in this class while being unacceptable in others. (For instance, we will encourage students to work on projects in this class related to project assignments in other classes, as long as they have been concurrently preapproved by the instructors of both classes. The ASU academic integrity website can be found at: http://www.asu.edu/studentaffairs/studentlife/judicial/academic_integrity.htm

> Plagiarism and cheating are serious offenses and may be punished by failure on an exam, paper, exercise, or project; failure in the course; and/or expulsion from the university. Academic dishonesty and cheating also includes software piracy, since it is a form of unauthorized use of the intellectual property of others.

Late Work Policy:
> Work submitted late will be reviewed and critiqued, but it will have a penalty of at least 10% per day for being late. For all work submitted through the on-line digital dropbox, the time/date stamp on that submittal shall be considered the submittal time.

Attendance, Participation and Professionalism:
> Attendance and participation in the course is important to learning and will be strongly encouraged. Collaborative learning is a valuable form of learning software. When you're not able to participate, you're not able to learn from others, and they not from you. Roll may be called at various times. Roll may be called at various times. Students must participate at a rate of 90% or a grading penalty will be assessed for each 10% missed. Tardiness will be treated as one-half an absence.

Evaluation and Grading:
> Points for assignments for the term will be organized as follows

> 50%   for projects assigned
> 50%   for participation, professionalism, attendance and contribution

Grading Scale:

Grades will be assigned according to the following scales and performance characterizations.:

Letter Points
Grade   Earned (Approximate Percentage)

"A" grades indicate superior performance, significantly exceeds expectations and requirements

A+   between 98 - 100 %
A   between 93 - < 97 %
A-   between 90 - < 93 %

"B" grades indicate very good performance, meets professional expectations of competent performance

B+   between 87 - < 90 %
B   between 83 - < 87 %
B-   between 80 - < 83 %

"C" grades indicate good performance, meets minimally acceptable professional performance standards

C+   between 77 - < 80 %
C   between 70 - < 77 %

"D" grades indicate poor, marginal, not professionally acceptable

D   between 60 - < 70 %

"E" grades indicate unacceptable or irresponsible performance

E   less than 60%

University Policy on Incomplete Grades:

The University policy for incomplete work and incomplete grades will be followed in this course. A grade of Incomplete will only be assigned for circumstances beyond the control of the student with the student's grades-to-date being passing or better at the time of the request. Typical circumstances indicating a need for an incomplete include personal illness, family emergency, or sustained equipment failure. Students are encouraged to communicate with the instructors as soon as possible if they have circumstances that limit their ability to perform well in the course. The process requires that the student make a request and provide information that justifies the request. The instructor and student will fill out and file and a form indicating that an Incomplete grade will be assigned, outline the work to be completed and the date to be submitted.

Policy on cell phones, pagers and similar devises in class:

As a courtesy to students and speakers, it will be a class policy that all cell phones, pagers, beepers and other similar devises be turned off while class is in session. During any testing (including quizzes) all phones, pages, texting equipment and related devises must be turned off and put away. Any of these devises sitting out in plain sight during such periods are subject to confiscation because they raise a question about integrity. To protect yourself, make sure that the phone or pager is off and out of sight in a pocket, backpack, briefcase or purse.

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Landscape Architecture & Urban Design
Advanced Design & Applied Project Studio

Herberger Institute for Design & the Arts
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Syllabus: Advanced Applied Project/Thesis Studio

Course(s):   This syllabus serves several courses. This advanced design studio courses is intended as a culminating studio for master of landscape architecture and master of urban design students. The course sections for enrollment in the course include: *LDE 690 Topics: Advanced Landscape Architecture Studio IV, LDE 593 Applied Projects,* and *MUD 690 Advanced Urban Design Studio IV.* This is the regular thesis studio that most MLA students will take. The ASU Graduate College recognizes this course as a "non-thesis, culminating experience"or project. By being a "project," the Graduate College's rules for format, process, and content are somewhat relaxed. The expectations of the landscape architecture faculty is that exploration and presentation protocols may be more flexible but a researchable issue is systematically and rigorously examined, evaluated and specific conclusions and recommendations are made. Design, as a process for exploring or comparing ideas may be an acceptable part of the project, but it is probably not the object of the project intent ("doing a design project" is not the goal of the thesis studio). The schedule line number for LDE 690 is 19177 and for LDE 593 is 27554.

The themed topic and focus of the course will be *Design Performance*. Students will develop a complex design project that addresses a significant professional issue. The project will explore and demonstrate how advanced design resolves that issue in a performative manner using evidence-based practices and performance-based metrics.

Instructor: Prof. Kenneth R. Brooks (serving as studio supervisor in consultation and collaboration with other landscape architecture and urban design faculty)
Office: CDN 72   Ph: 480-965-2533   *Kenneth.Brooks@asu.edu*
Office Hours: Wednesdays 10:00-11:00, Thursdays 2:00-4:00 and by appointment; drop-ins are invited on a time-available basis (if you come by and I'm not available, please leave a message so that I can get back to you). The best way to consult with me is to request an appointment during class or by email.

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Grading: Traditional grades will be assigned by LA faculty consensus.

Description   This course is intended to give professional design students (especially MLA and MUD students) an opportunity to engage in complex design that applies a research-based approach. The course serves as a culminating experience for the MLA or MUD degree. The focus will be on both process and outcome related to a topic of significance to the discipline, of professional interest to the student and supportable by the resources of The Design School (including available faculty expertise).

Requirements: Each student will propose a researchable topic or issue. The proposal will include a description of the issue, the methodology to be used in investigating it, the lead landscape architecture faculty, the anticipated outcomes and deliverables. Each student will propose at least two faculty members as lead reviewers (including the designated thesis studio supervisor). Students may invite other faculty and other professionals serve as critics, advisors, and/or reviewers. The proposals, periodic reviews and final project presentations/defense will be conducted and adjudicated by a committee of the landscape architecture and/or urban design faculty and invited guests. Students taking the formal thesis track (LDE 599) will follow a similar process, with the addition of review and acceptance by the officially-approved supervisory committee.

Course Meetings: The thesis studio is scheduled to meet regularly on Wednesday and Friday afternoons from 1:30 - 5:55pm. Because of the independent nature of the projects, students will have flexibility in the use and management of this time for project work. Students will schedule weekly critique review sessions with the studio supervisor (Brooks) and with other faculty consultants. A monthly progress presentation will be made to a committee of faculty reviewers during the term.

Final Products: All students will prepare both a formal oral final presentation and documents that can be digitally achieved. All students are also encouraged to present their work in a venue for professional peer-review (such as an article, a conference presentation or a competition submission) in a format appropriate to the venue.

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Review Dates:
(all mid-reviews in TmpCt198 Seminar Room, Final review location will be announced.)

REVIEW   DATE   FOCUS / DURATION
1st Mid-Review   Fri, Jan 28   Project Issues, Goals, Scope, Program, Expectations – 15 minutes
2nd Mid-Review   Fri, Feb 28   Research, Ideation, Concepts, Implementation Strategies – 30 minutes
3rd Mid-Review   Fri, Apr 4   Design Implementation and Development– 30 minutes
4th Mid-Review   Fri, Apr 25   Prelim Final Rev. - Design Completion, Design Perf. Testing– 30 min.

TDS Public Design Reviews
               Friday, May 9   Showcase Presentation– 30 minutes

Related Course: The thesis studio, focusing on Design Performance, will be complimented by seminar on Design Performance. The seminar will explore the nature of design performance and examine strategies, systems and tools for applying and communicating issues of performance.