LAN2001
ECOLOGICAL ANALYSIS AND CONCEPTUAL FRAMEWORKS

COURSE INFORMATION – Master of Landscape Architecture
Prerequisites: Successful completion of Segment I courses and Portfolio review
Instructors: Aidan Ackerman, Beth Lundell Garver
Email: aidan.ackerman@the-bac.edu, beth.lundell-garver@the-bac.edu
Day/Time: Monday 4:00-7:00
Duration: 3 Credits, 16 weeks

COURSE OVERVIEW
This core design studio will introduce students to the fundamental knowledge and technical skills used by landscape architects to conduct inventory and analysis for projects within constructed environments. Through performing research and representation at several scales, students will become aware of the relevant topics and best practices of landscape analysis as they relate to regional, citywide, neighborhood, and human contexts. Students will translate their analysis into a design strategy, incorporating landscape performance goals which establish social, environmental, and economic benefits.

The studio operates in conjunction with DME 2015 and DME 2016 Landscape Representation: GIS and Environmental Design, Intro and Applications, though the studio is not limited to this course sequence.

COURSE DESCRIPTION
The studio will use the Greater Boston Area as the focus of inquiry to examine the complexity of natural, economic, and social systems that interact within this urban region. Students will learn to collect, analyze, and synthesize complex data within their individual design processes to inform design proposals and decisions about land use and development, and the related infrastructure systems. Investigations at a range of scales will form the basis for multiple analysis projects, ranging from regional and metro scales to site specific ones. Representation techniques will be explored throughout the studio.

Students will perform analyses at a regional scale, assembling a comprehensive, layered analysis addressing topics around natural systems, infrastructure, human activity and behavior, and regional context. By zooming in to the city scale, students will perform a second analysis, examining the economic, social, and environmental benefits of landscape architecture within the city as a whole, and within the framework of an urban neighborhood. Through these explorations, students will be able to assess the individual and aggregate value of high-performance landscapes within an urban context. Further zooming in and out of a specific neighborhood within the city of Boston, each student will perform a thorough analysis of the design site and of its context, performing rigorous contextual and specific analyses within several small neighborhoods surrounding the Neponset River area in Mattapan. Through these analyses, students will discover tools and techniques for establishing measurements and for defining the site's baselines, including the potential economic, ecological, and social performance that may exist therein.

MATERIALS
Readings as provided by the instructors, sketchbook, trace, and adequate markers and scales. (bring to each class!)

EXPENSES
Mandatory site visits within the City of Boston will occur during the semester, and will require T fare at the student's expense.

LAAB CRITERIA
• Natural and cultural systems including principles of sustainability
• Public Policy and regulation
• Design, planning and management at various scales and applications including but not limited to pedestrian and vehicular circulation, grading drainage and storm water management
• Site design and Implementation: materials, methods, technologies, application
• Written, verbal and visual communication
• Plants and ecosystems
• Computer applications and other advanced technology
COURSE LEARNING GOALS

- **Students will gain knowledge in site analysis techniques, and conceptual thinking.**
  Within this studio, students will learn to evaluate data, assessing its value and discovering patterns and connections within the constructed environment. Students will additionally learn to clearly communicate observations, site analysis and design alternatives. Throughout the course, they will be guided through the process of synthesizing large sets of research data, learning to articulate clearly and concisely major themes and key elements of their research and discoveries.

- **Students will learn to clearly communicate observations, site analysis and design alternatives.**
  Students will be guided through the process of synthesizing large sets of research data, learning to speak clearly and concisely about major themes and key elements from their research. Frequent pin-ups will allow students to present their analysis techniques and results, with critical feedback allowing them to evaluate the effectiveness of their techniques. Students will be shown how to evaluate the existing site conditions, including local and regional context, developing an approach to the site design which will address issues and explore opportunities for successful design intervention.

- **Students will gain experience in methods of representation.**
  Students will learn to translate large quantities of data into graphic form, using GIS, Adobe Photoshop, Adobe Illustrator, and Adobe InDesign. Students will receive critical feedback on the clarity and legibility of their graphic techniques, with clear direction on how to improve the effectiveness of their visual communication. Landscape analysis precedents will be shown to students throughout the semester, accompanied by group discussions evaluating the graphic representation techniques used and their relationship to the analysis data.

- **Students will learn to translate analysis into design concepts.**
  Students will learn to verbalize their knowledge of the existing site condition and context, and will be encouraged to develop an approach to the site that is informed by the analysis. Students will learn how to identify areas for improvement, renewal, or change within the existing site conditions. For the final assignment, students will develop a site design which clearly addresses issues found within their analysis, and which are also supported with defined social, environmental, and ecological benefits.

- **Students will practice how to verbally present ideas and designs in a clear and concise manner.**
  Working with large quantities of analysis data, students will learn how to communicate the most essential elements of their research in a clear, direct manner. Students will participate in multiple pin-ups and reviews throughout the semester, addressing analysis and site design at multiple scales. During these presentation opportunities, students will receive critical feedback on their analysis approach and design intervention. Students will also receive critical feedback on the clarity of their presentations and their ability to communicate complex concepts quickly and legibly.

FORMAT AND ASSUMPTIONS

- This course will be run as a design studio. There will be a pin-up and discussion during each class period with occasional lectures within the studio regarding pertinent information.

- Classes will encourage interaction among students; class participation is an integral component of the learning structure of this course.

- You will be expected to complete work on time and with the utmost care and precision. You should come prepared to each class with substantial progress from the previous class.

- Any assigned readings will be discussed in class and should be read with care.
COURSE EXPECTATIONS AND POLICIES

- This course will be run as a design studio. There will be a pin-up and discussion during each class period with occasional lectures within the studio regarding pertinent information.
- Classes will encourage interaction among students; class participation is an integral component of the learning structure of this course.
- You will be expected to complete work on time and with the utmost care and precision. You should come prepared to each class with substantial progress from the previous class.
- Any assigned readings will be discussed in class and should be read with care.
- Attendance is mandatory.
- You must arrive at class on time.
- Students will be excused from class for family or medical emergencies with advance notice, (or immediately after an emergency), by notifying the instructor or BAC staff in writing. Should you need to be absent, please contact the instructor by email or telephone before the beginning of class.

GRADING EXPECTATIONS AND POLICIES

- Grading will be based on attendance, participation, progress review and final review:
  - Attendance and Participation 15%
  - Weekly Progress Reviews* 60%
  - Final Review* 25%

* Each assignment review will be graded based on verbal presentation, graphic representation, content, and development/progress

COURSE EXPECTATIONS AND LEARNING OUTCOMES

Site Analysis

- Students are expected to compile research data related to their analysis subject(s); additionally, they are expected to explore digressive or seemingly unrelated research data; uncovering unique and innovative connections between disparate information. Students are expected to communicate the collective value and relevancy of their findings within the site context and studio objectives; additionally, they are expected to communicate ways in which their findings offer potential for design intervention and inspiration within the studio course.

Site Design

- Students are expected to create a conceptual site design which responds to the site and context, and which is informed by site analysis at multiple scales. Students are further expected to position the site as a catalyst for urban development at contextual scales, identifying and exploring specific analysis findings which support their argument.

Representation

- Students are expected to clearly and accurately represent their analysis findings, including utilization of exploratory, inventive advanced visual communication techniques to effectively convey their research. Students are expected to visually integrate only the relevant information in diagrammatic form, including recombining and reinterpretating data in an innovative manner. Students are expected to produce conceptual design graphics with proper scale and line weight, communicating the design concept and related analysis information.
readings, resources, and materials


- Corner, James, and Alex S. MacLean. Taking Measures across the American Landscape. New Haven: Yale University Press, 1996.


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SCHEDULE AND COURSE OUTLINE – SUBJECT TO CHANGE AT THE DISCRETION OF THE INSTRUCTOR

ASSIGNMENT SCHEDULE

CLASSES 1-2: WARMUP: PRECEDENT STUDY
CLASSES 3-5: ASSIGNMENT 1: REGIONAL ANALYSIS
CLASSES 6-8: ASSIGNMENT 2: URBAN VICINITY ANALYSIS
CLASSES 9-10: ASSIGNMENT 3: SITE ANALYSIS
CLASSES 11-15: ASSIGNMENT 4: SITE DESIGN

ASSIGNMENT OVERVIEW

WARMUP: PRECEDENT STUDY

Students explore the concept of analysis through precedent study. Each student will investigate a specific topic in detail, studying the conditions, methods, and representation central to their precedents.

ASSIGNMENT 1: REGIONAL ANALYSIS

At a regional scale, students research and represent their analysis. This study will rely on representation to discover connections and relationships through speculative graphics.

ASSIGNMENT 2: URBAN VICINITY ANALYSIS

Within a range of urban scales ranging from the entire city to a small neighborhood, students deepen their analysis. Graphics will connect discrete elements and propose them as interrelated systems, in turn informing design possibilities.

ASSIGNMENT 3: SITE ANALYSIS

Positioning the site as one of several nodes in a larger system, each student will undertake a detailed site inventory, questioning the elements therein and provoking an avenue for design agency.

ASSIGNMENT 4: SITE DESIGN

Drawing inspiration from prior analysis, each student will propose a schematic site design. Design ideas will be tested at the scale of both the site and region to determine the success of ideas at multiple scales.
<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday, January 25th</td>
<td>WARMUP</td>
<td>Begin study of precedents and topics</td>
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<tr>
<td>Monday, February 1st</td>
<td>WARMUP</td>
<td>Present precedents and topics</td>
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<td>ASSIGNMENT 1</td>
<td>Begin regional analysis</td>
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<td>Monday, February 8th</td>
<td>ASSIGNMENT 1</td>
<td>Progress presentation of work</td>
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<td>Monday, February 15th</td>
<td>ASSIGNMENT 1</td>
<td>SCHOOL CLOSED – meet online</td>
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<td></td>
<td>Progress presentation of work</td>
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<tr>
<td>Monday, February 22nd</td>
<td>ASSIGNMENT 1</td>
<td>Present regional analysis</td>
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<td>ASSIGNMENT 2</td>
<td>Begin urban analysis</td>
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<tr>
<td>Monday, February 29th</td>
<td>ASSIGNMENT 2</td>
<td>Progress presentation of work (pin-up or desk critique)</td>
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<td>Monday, March 7th</td>
<td>ASSIGNMENT 2</td>
<td>Midterm Review</td>
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<td>Monday, March 14th</td>
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<td>SPRING BREAK – NO CLASS</td>
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<td>Monday, March 21st</td>
<td>ASSIGNMENT 2</td>
<td>Incorporate midterm review feedback</td>
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<td>Monday, March 28th</td>
<td>ASSIGNMENT 3</td>
<td>Begin site analysis</td>
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<td>Monday, April 4th</td>
<td>ASSIGNMENT 3</td>
<td>Progress presentation of work</td>
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<td>Monday, April 11th</td>
<td>ASSIGNMENT 4</td>
<td>Begin site design</td>
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<tr>
<td>Monday, April 18th</td>
<td>ASSIGNMENT 4</td>
<td>SCHOOL CLOSED – meet online</td>
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<td>Test site design at regional scale</td>
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<tr>
<td>Monday, April 25th</td>
<td>ASSIGNMENT 4</td>
<td>Continue developing site design, tying in all analyses</td>
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<tr>
<td>Monday, May 2nd</td>
<td>ASSIGNMENT 4</td>
<td>Finalize all work &amp; graphics</td>
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<td>Practice final review presentations in class</td>
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<td>Monday, May 9th</td>
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<td>Final Review</td>
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<tr>
<td>Friday, May 14th</td>
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<td>PDFs of final review boards due at midnight</td>
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Grading
The BAC’s Grade Definition Chart is included in this Syllabus. Students should note that *minimum GPAs of 2.70 (B-) overall average and studio average* are required of graduate students in order to maintain Satisfactory Educational Progress. Failure to maintain SEP may result in additional work assigned, repeating a course or semester, or withdrawal from the program.

### BAC Grade Definitions

<table>
<thead>
<tr>
<th>Grade</th>
<th>Scale</th>
<th>0-100 Scale</th>
<th>Definition</th>
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<tbody>
<tr>
<td>A</td>
<td>4.0</td>
<td>94 – 100</td>
<td>Excellent</td>
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<td>The work exceeds the requirements of the course and demonstrates complete understanding of course goals. In addition, assignments exhibit a level of critical thinking that has allowed the student to demonstrate creative problem solving. Ideas and solutions are communicated clearly, showing a high level of attention and care.</td>
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<tr>
<td>A-</td>
<td>3.7</td>
<td>90 – 93</td>
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<tr>
<td>B+</td>
<td>3.3</td>
<td>87 – 89</td>
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<tr>
<td>B</td>
<td>3.0</td>
<td>84 – 86</td>
<td>Good</td>
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<td>The work meets the requirements of the course and demonstrates understanding of course goals. The assignments reflect an ability to solve problems creatively, but solutions demonstrate inconsistent depth and critical thinking ability. Ideas and solutions are communicated effectively, but may lack the clarity and depth one sees in excellent work.</td>
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<tr>
<td>B-</td>
<td>2.7</td>
<td>80 – 83</td>
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<tr>
<td>C+</td>
<td>2.3</td>
<td>77 – 79</td>
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<tr>
<td>C</td>
<td>2.0</td>
<td>74 – 76</td>
<td>Fair</td>
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<td>The work meets the minimum requirements of the course and reflects understanding of some course goals but is lackluster. The assignments exhibit a basic problem-solving ability, but the process and solutions lack sufficient depth and demonstrate a need for greater critical thinking. Ideas are communicated ineffectively, showing a lack of attention to detail and a decided lack of clarity or depth.</td>
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<tr>
<td>C-</td>
<td>1.7</td>
<td>70 – 73</td>
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<tr>
<td>D</td>
<td>1.0</td>
<td>60 – 69</td>
<td>Poor</td>
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<td>The work barely meets the minimum requirements of the class. Assignments lack depth and a display a minimal understanding of course goals. Ideas are presented with little or no detail or elaboration. Course guidelines are often not followed.</td>
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<tr>
<td>RF</td>
<td>0.0</td>
<td>0 - 59</td>
<td>Unacceptable or missing work</td>
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<td>Repeat/Fail. The work neither satisfies the requirements of the class nor demonstrates understanding of course objectives. The presentation of work is unprofessional and/or incomplete. Overall, the student shows insufficient understanding of the course requirements. Poor attendance or violation of academic integrity policy may also be factors.</td>
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<tr>
<td>I</td>
<td>0.0</td>
<td></td>
<td>Incomplete</td>
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<tr>
<td>NF</td>
<td>0.0</td>
<td></td>
<td>Failure due to non-attendance</td>
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<tr>
<td>W</td>
<td>0.0</td>
<td></td>
<td>Withdrawn</td>
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Late Policy
Assignments are due no later than the date and time assigned. Students should contact the instructor in advance if, for a valid reason work will be submitted late.

Student Responsibility
A student should

• complete assignments to the best of his or her ability, and submit them on time. In the event that circumstances require a late submission, the student should contact the instructor before the assignment is due and appropriate accommodation may be considered. In the event of an emergency (e.g., medical, personal), the instructor and student advisor should be contacted at the earliest possible time.
• engage actively with the ideas presented and with fellow students. Wide-ranging opinions and ideas are encouraged, and a civil, respectful courtesy for everyone else is required.
• think deeply. This course addresses challenging subjects and thought-provoking material, and everyone should be prepared to reflect and consider deeply-held assumptions.

Mid-Semester Warning
Students will receive a progress assessment at mid-semester. Students who do not perform up to expectations will receive a Mid-Semester Warning; a copy of the warning will be kept in the student's file.

Writing Standards
Writing in this course should meet the standard of accuracy and clarity of expression that is expected of design professionals. Appropriate grammar, correct spelling, and the ability to construct a clear and well-organized statement or argument are expected.

To Document Correctly:
Be sure to attribute all outside pieces of information to their original sources. In addition, students should keep in mind that even if it is required to paraphrase, there is a need to cite that material. Use appropriate bibliographic and webliographic references for quoted and paraphrased material. An excellent resource for proper format and usage guidelines is Kate L. Turabian's A Manual for Writers of Term Papers, Theses, and Dissertations.

Samples for a Bibliography:  http://www.press.uchicago.edu/books/turabian/turabian_citationguide.html
A Guide for Writing Research Papers:  https://owl.english.purdue.edu/owl/

The Learning Resource Center can provide professional writing advice in structuring an argument and in correct documentation. Students can make an appointment with a writing tutor at writingcenter@the-bac.edu or by calling 617.585.0174. Several downloadable guides to writing, research, and citation are available at http://www.the-bac.edu/resources/academic-services/learning-resource-center.

Plagiarism
Plagiarism is representing someone else's words or ideas as their own. On occasion students violate, often innocently, rules for citing and referencing source material; this is still plagiarism. This problem has been exacerbated by the ready availability and frequent use of online resources. To report on research it is incumbent on the student to know the difference between a direct quotation and paraphrasing (both are appropriate, but require citation), and paraphrasing and plagiarism.

There are two types of plagiarism: intentional and accidental. Each is serious and will not be tolerated. Intentional Plagiarism is the deliberate attempt to submit someone else's work as their own. This includes turning in:
• A paper copied from a book or magazine
• A paper written (in total or in part) by another person

The first time a student commits this level of plagiarism, they will receive an “F” for the assignment. The second offense will receive an “F” in the course. This policy covers all assignments, including discussion board posts.

Accidental Plagiarism is the result of misunderstanding or misapplying the rules of documentation. It includes using an idea from a source without naming the source, using the exact words of a source without quotation marks, or following the words and structure of the source too closely as one is paraphrasing. Errors resulting from a misapplication or unawareness of the rules of documentation may result in the grade of “F” for the paper in question.
**Academic Integrity**
As stated in the Campus Compact, the BAC expects intellectual activities to be conducted with honesty and integrity. Work submitted or presented as part of a BAC course:
- Shall be the original creation of its author;
- Is allowed to contain the work of others so long as there is appropriate attribution; and
- Shall not be the result of unauthorized assistance or collaboration.

Failure to adhere to these guidelines is academic dishonesty, and calls into question the student and the college. Visit the BAC Academic Integrity Statement for additional information: [http://the-bac.edu/resources/academic-services/learning-resource-center/academic-integrity-statement](http://the-bac.edu/resources/academic-services/learning-resource-center/academic-integrity-statement)

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Course materials may not be saved, copied, printed, or distributed without permission other than as specified to complete course assignments. Use of the course materials is limited to enrolled class members for the duration of the course only.

**Diversity Statement**
The Boston Architectural College is committed to promoting a community that celebrates, affirms, and vigorously pursues inclusiveness in all its forms. (Full text at: [http://the-bac.edu/about-the-bac](http://the-bac.edu/about-the-bac)).

**Disability Services**
The BAC offers reasonable accommodations to students who otherwise cannot reach their academic potential due to a learning disability, physical impairment, medical/psychological condition, or unforeseen circumstances that may arise during the course of their studies. All forms of accommodation are tailored specifically to the individual student and meet guidelines for educational benefit and academic consistency. Accommodations must maintain academic integrity and a realization of required learning objectives. Students who are eligible for accommodations are strongly encouraged to notify the instructor. Students must have appropriate documentation on-file.

The Boston Architectural College complies with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act. If you are a student who is seeking accommodations based on a documented disability and/or diagnosis, please contact Disability Services to discuss reasonable accommodations. The Disability Services Coordinator can be reached by emailing DisabilityServices@the-bac.edu. The Disability Services office is located in 320 Newbury Street on the first floor. While you may activate accommodations at any time during your academic career at the BAC, it is highly encouraged to schedule a meeting as soon as possible.

More information can be found at this link: [http://www.the-bac.edu/students/offices-and-resources/academics/academic-advising/disability-services](http://www.the-bac.edu/students/offices-and-resources/academics/academic-advising/disability-services).