Clemson University
School of Architecture
Clemson Architecture Center in Charleston
Fall 2015

SYLLABUS

0.1 ARCH 4770-6770 Introduction To Craft (ITC)
0.2 Curriculum Requirement:
Fulfills Architecture Technology Requirement for undergraduate students
Elective open to both graduate and undergraduate students
0.3 Course Meetings:
1 Simons Street, Charleston SC. 29403
Tuesday 4:00-6:00 and Thursday 4:00-6:00 PM
0.4 Senior Lecturer: David Pastre / Email: pastre@clemson.edu
Pastre’s Telephone Information:
Cell: 843.696.3343
0.5 Director: Ray Huff / Email: rhuff@huffgooden.com
Professor Huff’s Telephone Information:
Office 843.723.1747
Fax: 843.723.1847
Cell: 843.324.8869
0.6 Office Hours: By appointment only
0.7 Office Locations:
Pastre = CAC.C
20 Franklin Street
Charleston. South Carolina 29401

1. Course Description
Architectural craft lab offered under different material specializations, all of which introduce students to design as informed by craft through a hands-on lab. Basic craft operations and material properties are introduced for the subject material (wood, steel, etc.) May be repeated for a maximum of six credits.

This spring, the course will introduce students to the discipline of craft using woodworking as a medium. It seeks to instill a craftsman’s approach to construction and a corresponding reconsideration of design.

2. Goals and Objectives for the Course
The purpose of ITC is to teach basic shop and tool safety at the level of mastery.

• To teach a rigorous approach to making that yields material excellence at the level of capability. Skills necessary to this endeavor include: patience, planning, the understanding of tolerance in materials and tools, a process that includes testing and mock-ups, and knowing the limits and capabilities of tools and materials.

• To teach design as informed by craft at the level of exposure. Skills necessary to this endeavor include stylistic prowess, the ability to translate theory to form, the application of an iterative design process, and the modification of concept according to material experiment.
3. **NAAB Learning Outcomes**

The material covered in this course offers students proficiency at the graduate level in the following subject areas as defined by the National Architectural Accrediting Board (NAAB):

A.2 Design Thinking Skills: Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test alternative outcomes against relevant criteria and standard.

A.3 Investigative Skills: Ability to gather, assess, record, and comparatively evaluate relevant information and performance in order to support conclusions related to a specific project or assignment.

B.4 Technical Documentation: Ability to make technically clear drawings, prepare outline specifications, and construct models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design.

**Semester Topical Outline:**
The graded components of the studio will be weighted as follows:

- Drawing and other representational techniques: 20%
- Research and study: 20%
- Design: 25%
- Fabrication: 25%
- Documentation: 10%

4. **Prerequisites**

CAC.C Shop Safety Qualification is a co-requisite to ITC.

5. **Required Textbooks And Other Readings**

Lectures and discussions will draw heavily on material from these primary references. The below-mentioned books are available in the CAC library. It is not required to purchase text for this class, but it is encouraged.


Students are required to supply their own hand tools and project materials. All tools are to be of professional quality. Where models and manufacturers have been specified below, substitutions are subject to approval by the Professor. To request a substitution, present the actual tool to the Professor for inspection prior to the second class.

The cost of quality tools is substantial, but will be a lifelong investment. Good craftsmanship requires good tools. Any student experiencing a serious financial hardship is encouraged to speak with the Professor privately about his or her needs.
6. Semester Schedule of Reviews, Tests and Final Reviews

Regular classes are held Tuesdays from 4:00-6:00 and Thursdays from 4:00-6:00. Shop safety meetings and maintenance sessions may be convened outside regular class times:

1. Safety certifications will be held during the first week of classes (see schedule below).
2. There will be a Saturday field trip.
3. ITC students will take the mid-term exam.
4. All students enrolled in ITC are required to attend the ITC final reviews.

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<tr>
<th>Week 1</th>
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<tbody>
<tr>
<td>Tuesday, 25 August</td>
<td>Introduction to wood I</td>
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<td>Thursday, 27 August</td>
<td>Introduction to wood II</td>
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<th>Week 2</th>
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<tr>
<td>Tuesday, 1 September</td>
<td>Tool Certification</td>
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<tr>
<td>Thursday, 3 September</td>
<td>Class Cancelled (Pastre in Clemson)</td>
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<th>Week 3</th>
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<tr>
<td>Tuesday, 8 September</td>
<td>Tool Certification</td>
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<td>Thursday, 10 September</td>
<td>Tool Certification</td>
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<th>Week 4</th>
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<tr>
<td>Tuesday, 15 September</td>
<td>Joinery (Miter/Spline)</td>
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<tr>
<td>Thursday, 17 September</td>
<td>Joinery (Finger Joint)</td>
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<th>Week 5</th>
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<tr>
<td>Tuesday, 22 September</td>
<td>Joinery (Through Dovetail) &gt;Class 6-8 pm</td>
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<tr>
<td>Thursday, 24 September</td>
<td>Joinery (Through Dovetail) &gt;Class 6-8 pm</td>
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<th>Week 6</th>
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<tr>
<td>Tuesday, 29 September</td>
<td>Film <em>(Objectified)</em> Reading Assignment 1 &gt;Class 6-8 pm</td>
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<tr>
<td>Thursday, 1 October</td>
<td>Midterm Exam/Box Project Intro &gt;Class 6-8 pm</td>
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<th>Week 7</th>
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<td>Tuesday, 6 October</td>
<td>Box Project Studio &gt;Class 6-8 pm</td>
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<tr>
<td>Thursday, 8 October</td>
<td>Box Project Studio/Discuss Reading Assignment 1 &gt;Class 6-8 pm</td>
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<th>Week 8</th>
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<tr>
<td>Tuesday, 13 October</td>
<td>Box Project Studio</td>
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<tr>
<td>Thursday, 15 October</td>
<td>Box Project Studio Review/Turn in Writing Assignment 1</td>
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<th>Week 9</th>
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<tbody>
<tr>
<td>Tuesday, 20 October</td>
<td>Fall Break (no class)</td>
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<tr>
<td>Thursday, 22 October</td>
<td>Box Project Shop</td>
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<th>Week 10</th>
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<tr>
<td>Tuesday, 27 October</td>
<td>Box Project Shop</td>
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<td>Thursday, 29 October</td>
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<td>Tuesday, 3 November</td>
<td>Box Project Shop/Reading Assignment 1</td>
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<td>Thursday, 5 November</td>
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7. Assessment of Student Performance: Policy and Scale

7.1 EXPECTATIONS

The course relies on five primary instruments for assessing a student’s abilities: written and practical examinations, projects, documentation, and engagement.

Projects will be evaluated according to three criteria in proportion to their relative importance for each exercise:

1. **Invention**: degree to which a work exhibits a novel or unpredicted solution. It is an ongoing process whereby a designer overcomes new shortcomings and seizes opportunities as they become apparent—in a word, intuition.

2. **Analysis**: degree to which a student demonstrates an ability to break a problem down into manageable components; degree to which a student is able to advance a project through well-designed experiments and testing; degree to which a student establishes a relationship between his or her work and a larger technological and cultural context.

3. **Skill**: degree to which a work exhibits mastery of technique and production; and the degree to which it fulfills its qualitative and quantitative objectives.

Engagement, a measure of a student’s active level of involvement, will be based on overall performance in the course. Engagement will be assessed independently for each module at the mid-term and at the end of the course, according to three criteria:

1. **Initiative**: self-motivation; resourcefulness; passion; cheerfulness.

2. **Cooperation**: degree to which a student contributes to group endeavors and discussions.

3. **Integration**: degree to which a student’s work manifests cross-pollination between this course and his or her other courses, especially studio.

Satisfactory completion of this course will require active mental and verbal participation in class, independent thinking, scientific reasoning, attention to detail, graphic excellence, and the skillful manipulation of materials. The course is structured hierarchically. Students must complete each exercise in sequence before advancing to the next one.
7.2 DOCUMENTATION
Documentation of one’s work is a critical aspect of being a professional and building a career. In many ways, the documentation is the culmination of the design process and the final manifestation of the work itself. It is, ultimately, the only thing that survives. All work produced at the CAC.C by the students is rightfully the property of Clemson University and will be kept or returned to students at the professor’s discretion. Requirements for documentation are outlined in the CACC-Student Handbook.

7.3 GRADING
The purpose the grading is to measure student accomplishment against the purpose and requirements of the course. Evaluations will be distributed at intervals during the semester and will indicate performance according to the stated criteria of evaluation. Students are expected to use this system to monitor and adjust their performance and to seek additional support from the professor, as appropriate.

7.3.1. Effort vs. Product
Evaluations will be based primarily on student’s work, rather than effort expended. Students are expected to acquire knowledge and skill, not merely endeavor to do so. Furthermore, each student will be measured against a common standard, meaning that students entering the course with lesser skill or knowledge may have to work harder to achieve the same grades as their more accomplished colleagues. Since grades will not be internally regulated by a performance standard (e.g., a bell-curve grade distribution), there is no pre-determined grade pattern for the course: there may, for example, be no A’s—or all A’s.

7.3.2. Grading Scale
Grades will be defined as follows:

A (90 - 100)  Excellence in most areas of evaluation, high competence in others
B (80 - 89)   High Competence in most areas of evaluation, competence in others
C (70 - 79)   Fulfilled all course requirements with competence. (Competence: the answering of all requirements; adequate fitness, ability, capacity; sufficient for the purpose.)
D (60 - 69)   Less than competent work in one or more areas of evaluation. One or more requirements lacking and/or sub-standard quality.
F (Below 60)  Substantially incomplete work and/or work of an unsatisfactory quality.
INCOMPLETE  Work left incomplete at the end of the semester due to circumstances beyond the student’s control.

7.3.4 Assignment Weighing
Grades for this course will be proportionally weighted across the term in accordance with the grade component chart in 10.1. Consequently, it is beneficial to get off to a good start and to work consistently throughout the course. (The system rewards hard and consistent work and discourages procrastination. It is not possible to ruin, or save, one’s course grade on any single project. The grade will reflect a whole semester’s work.)

7.3.5 Breakthrough Factor
By stating the grading criteria, by delineating the weight accorded to each criterion, and by making regular evaluations available to the student, the professor endeavors to make the evaluation process as open and objective as possible. However an additional “breakthrough factor” may be applied to the final grade, the purpose of which is to reward students who demonstrate remarkable improvement in their work over the course of the term, which would
not otherwise be recognized by this system. The breakthrough factor is awarded at the discretion of the professor, allowing a half-letter grade modification, and is thus weighted at 15% of the final grade. It is typically awarded to only a small percentage of the participants and is effective in changing a grade only in borderline situations.

7.3.6 Grading Systems Adjustments

The purpose of articulating a detailed evaluation process is to make grading as objective as possible; thus to empower students to understand and earn the grades to which they aspire. It is not the intention of such a system to be used against learning or fairness. Consequently, the professor reserves the right to make adjustments to the stated course structure to account for circumstances that were unforeseen when the course was designed. It may, for example, be advantageous to add or alter assignments or their criteria, or to modify criteria or project-weights, if it becomes evident that it is in the best interest of learning and fairness to do so. Such changes will appear on the gradesheet. Students will notify the professor within one week if such changes engender a hardship, after which time it will be agreed that students are in accord with the change.

7.3.7 Gradesheets

Grades will be calculated in a gradesheet that shows the assignments, their respective weight, the criteria of evaluation, their respective weight, and each student’s performance. These will be periodically available to students. Students who may not understand the gradesheet, or who take issue with the grades as posted, should consult with the professor within one week of the respective posting, after which time it is agreed that students are in accord with the professor’s evaluation.

Student evaluation in the creative arts is by definition subjective. The critic has established a general indication of the expectations of the studio. The responsibility of the critic is to inform the student of his/her progress during the course of study.

MID-TERM ASSESSMENT: The critic will meet with students privately to review their work and assess the performance of the student for the first half of the semester. It is an opportunity not only for the critic to report his evaluation of the student but for the student to discuss their performance, the effectiveness and the studio and the effectiveness of the critic. This is an opportunity for open and confidential dialogue about the student and student/critic relationship.

7.4 LEARNING CULTURE

The School of Architecture has established a document that outlines the expectations of a learning environment and culture for courses of study at the School and off-campus locations. You are encouraged to review the policy at the link:

http://www.clemson.edu/caah/architecture/about/policies-and-practices.html

8. Materials and Supplies Required for Class

Personal Safety Equipment

1—NIOSH-approved wood dust respirator with interchangeable filters or several similarly rated disposable filter masks

Eye and ear protection will be provided and be made available by the CAC.

Personal Hand Tools

1—retractable measuring tape 16’-25’(Stanley or approved equal)
1—pocket caliper (4” minimum)
1—pocket square (Starrett, Stanley, or approved equal)
1—utility knife with snap-off blades (Stanley, Olfa, or approved equal)
1—1/2-in. wood chisel with protective cover (Stanley or approved equal)
1—dozen No. 2 wood pencils (Dixon, Ticonderoga, or approved equal)

*Mechanical pencils and pens may not be used for shop layout in this course.*

1—pencil sharpener
1—nail apron

*All tools should be labeled with the owner’s name. Acceptable forms of labeling include permanent marker, adhesive labeling tape, and engraving.*

**Materials**

Materials required for in-class projects will be announced one week before they are needed. Space in the shop is very limited. Students may not store any materials, tools, or other personal property in the shop without the written consent of the Professor.

**Vendors**

Charleston has many tool and material vendors. Instead of relying solely on the mega home centers as they so often do, students are encouraged to seek out specialty vendors and the building supply yards that deal primarily with the trade. The several listed below have been chosen for their proximity, helpfulness, and material selection.

**Hughes Lumber and Building Supply**: 82 Mary Street, Charleston, SC 29403 (Downtown) 577-6671. Hughes Lumber is a complete building supply located between King and Meeting Streets near the Visitor’s Center. Besides having everything you need to build a house, it has a great tool selection, and it is probably the best hardware store in the metropolitan area. The staff is generally quite helpful, just be ready to ask to see what’s out back in the wood shed. They’ve got a bigger selection than Lowe’s, and their prices are competitive.

**Southern Lumber and Millwork**: 2031 King Street, Charleston, SC 29405 (The Neck) 744-6281. Southern lumber is a major supplier to the builders in the area. They are only a few miles up King Street from the CAC. They have a good selection of common and specialty woods used in construction, such as southern yellow pine, poplar, cypress, western red cedar, ipe, Spanish cedar, Brazilian cherry, and others. Unfortunately the staff is not as helpful as those at Hughes and Woodcraft – they may be a bit gruff if you show up there late on a Friday afternoon. However, don’t get discouraged, their proximity and selection will make your trip worthwhile.

**Wurth Woodgroup**: 4325 Leer Ave, North Charleston, SC 29418 (North Charleston) 529-0808. They have a wide selection of plywood and solid wood as well as specialty and cabinet hardware. Call ahead and ask for Jay Arnold. They don’t have much of a showroom, but you can search their products at wurthwoodgroup.com

**9. Attendance Policy**

9.1 GENERAL

The nature of instruction in this course requires student participation. Classes will begin promptly and students are expected to be on time and attend all sessions. If an absence is unavoidable, students are asked to notify the professor in advance and are expected to make their own provisions for obtaining the material covered in their absence.

Students arriving late for class without an acceptable excuse or prior approval from the instructor will have three percentage points deducted from their final grade per occurrence. Likewise, students who depart prior to being dismissed by the Professor face the same penalty.
It is the students’ responsibility to maintain the shop in a secure, orderly, and safe fashion at all times. Accordingly, when the Professor arrives for class all work tables should be clear, all tools and supplies should be properly stored, and all waste bins, dust collection bags, and vacuums should be empty. Students who fail to assist their classmates in keeping the shop clean will have three points deducted from their final grade per occurrence.

9.2 CRITIC’S AVAILABILITY
The critic is available during the periods Tuesday/Thursday between 4:00 and 6:00. Meetings with the professor should be conducted during these hours. In special circumstances, an appointment can be arranged to meet at another time but I would urge that this be the exception rather than the rule. I will not maintain office hours but can be reached at 696-3343 (cell), or by email at pastre@clemson.edu.

There may be occasions when the critic does not meet with each student every studio meeting. If you have a particular need to discuss your work, notify the critic as soon as possible to ensure a meeting that day.

9.3 LATE PROFESSOR POLICY AND PROFESSOR ATTENDANCE
Students are expected to be in studio during all sessions, unless they have notified the professor in advance and received approval to miss all or part of the studio. Given the obligations of the studio critic, it is likely he will have to miss some of the sessions, in which case students should continue with the studio work themselves. Given the nature of a studio setting, students are not permitted to leave studio for the sole reason the critic is not in attendance.

In the event that the professor is absent from a session at which student work is due, students should proceed with the previously assigned work. All work due on the day of the professor’s absence may be turned in at the next class meeting, along with the assignments for that day, without grade penalty.

If the professor knows in advance that he will be late or absent, he will contact the studio and notify a representative student of the situation and request that notification be made to all students in attendance.

9.4 LATE WORK
Late work will be one or more grades lower than similar work completed on time at the discretion of the studio professor, depending on the degree of lateness in the absence of an approved excuse.

10. Accommodations for Students with Disabilities
Student Disability Services coordinates the provision of reasonable accommodations for students with physical, emotional, or learning disabilities. Accommodations are individualized, flexible, and confidential based on the nature of the disability and the academic environment in compliance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990.

Students are encouraged to consult with the Disability Services staff early in the semester, preferably prior to the first day of class. Current documentation of a specific disability from a licensed professional is needed. Additional information or appointments are available from Student Disability Services, G-23 Redfern Health Center, 656-6848. Details on policies and procedures are available at www.clemson.edu/asc.

11. Sexual Harassment Statement
The Clemson University Title IX (Sexual Harassment) statement: Clemson University is committed to a policy of equal opportunity for all persons and does not discriminate on the basis of race, color, religion, sex, sexual orientation, gender, pregnancy, national origin, age, disability, veteran's status, genetic information or protected activity (e.g., opposition to prohibited discrimination or participation in any complaint process, etc.) in employment, educational programs and activities, admissions and financial aid. This includes a prohibition against sexual harassment and sexual violence as mandated by Title IX of the Education Amendments of 1972. The policy is located at http://www.clemson.edu/campus-life/campus-services/access/non-discriminationpolicy.html. Jerry Knighton serves as Clemson's Title IX coordinator and he may be reached at knightl@clemson.edu or 656-3181.

12. University Academic Calendar and Policies

Students should consult the CAC.C Master Academic Calendar for additional relevant dates and deadlines.

13. Academic Integrity

“As members of the Clemson University community, we have inherited Thomas Green Clemson’s vision of this institution as a ‘high seminary of learning.’ Fundamental to this vision is a mutual commitment to truthfulness, honor, and responsibility, without which we cannot earn the trust and respect of others. Furthermore, we recognize that academic dishonesty detracts from the value of a Clemson degree. Therefore, we shall not tolerate lying, cheating, or stealing in any form. In instances where academic standards may have been compromised, Clemson University has a responsibility to respond appropriately and expeditiously to charges of violations of academic integrity.”

Please refer to the graduate academic integrity policy at:
http://gradspace.editme.com/AcademicGrievancePolicyandProcedures#integritypolicy
http://www.grad.clemson.edu/academicintegrity

Each graduate student should read this policy annually to be apprised of this critical information.