

**Building Construction Science (BCS)
Mississippi State University**

1. Course Title and Prerequisite

Course Number & Title:

BCS 3116- Building Construction Studio 3, Fall 2015

Credit Hours: 6 credit hours; 12 hours lab

Prerequisites: BCS2226 Building Construction Studio 2

2. Faculty Contact Information

Mike Duff

mduff@caad.msstate.edu

132 C Howell Hall

Office (direct): 662-325-2508

Office Hours: 9-10:50am M; 9-10:50am W; and by appointment

Cell Phone: 469-865-7629

3. Course Information

Classroom: Howell Hall Studio A

Class Day/Time: MWF 1PM-5PM

Software Requirements: Microsoft Office Package, Microsoft Project, Autodesk Revit 2015, & Navisworks Manage 2015

Required Textbooks: Construction Scheduling: Principles & Practices, Jay S. Newitt. Second Edition, Prentice Hall 2009, ISBN 0135137829

4. Course Description:

To develop an overall knowledgebase essential to cultivate the critical thinking skills necessary to the evaluation of a structure for assemblies, sequencing, and scheduling. More specifically to (1) Develop ability and critical thinking required to dissect a structure and identify its various assemblies, (2) Categorize the assemblies of a given structure (3) Understand labor and sequencing required to achieve timely assembly under an OSHA compliant standard of safe construction practice, (4) Develop understanding of organizational structures commonly associated with entities involved in the built environment, (5) Establish basic fundamentals associated with cost estimating and scheduling and provide exposure to software commonly used in performing these tasks, (6) Learn about cutting edge technologies and innovative approaches related to each phase of this course.

5. Course Objectives:

Upon Completion of this class, students will be able to:

1. Identify and break down the various assemblies associated with a given structure, construction sequencing and general work methodology as

- presented in civil (land development) and residential construction plans. (BCS Program Goals- B, C & ACCE Learning Outcomes -1,2,7,8)
2. Explain general construction trades and techniques associated with proper sequencing of a building's construction: identity quality control and safety considerations when incorporating subject methods into a structure. (BCS Program Goals- B, C & ACCE Learning Outcomes -1,2,3,5,7,8,15)
 3. Discuss general Building Code and OSHA requirements relative to light commercial construction. (BCS Program Goals- B, C & ACCE Learning Outcomes – 1,2,3,7,8)
 4. Create a site-specific safety plan and explain the process used to do so. (BCS Program Goals- B, C & ACCE Learning Outcomes -1,2,3,7,8)
 5. Create a cost loaded schedule. (BCS Program Goals- B, C & ACCE Learning Outcomes -1,2,5,7,8,10,14,16)

6. Grading: Grades are viewed as a means to communicate evaluation of your work and progress. Specific evaluation criteria will be provided with each exam, project, and in class activity. Work will be evaluated through in-class feedback and/or written commentary. Exams/projects/class activities will be assigned a Weighting Value corresponding to the complexity and proportion of time that the schedule allots (e.g. a class project that took you one session of work will count as 100 points). Final grades will be based on an aggregate value total for exams, class work, quizzes, classroom participation, and projects and assignments. Projects, exams, and individual assignments during the semester will be numerical grades. Each of them will be evaluated and those evaluations will be provided to students based on their request. Two cumulative grades will be provided to students during the semester. At mid-term, you will receive a provisional cumulative grade indicating your progress in the course. Following the final project and the completion of end-of-semester assignments, you will receive a final cumulative grade but you will have various opportunities throughout the semester to achieve extra points for exhibiting more engagement and learning.

Grading policies will follow MSU guidelines below; satisfying the expected requirements of a project demonstrates competent, professional work, and is graded as a C. Exhibiting more engagement and understanding will result in a higher grade, less will result in lower grade.

Letter Grade	MSU Term	Numeric Equivalent	BCS definition
A	Excellent	4.0	Advances BCS standards Challenges conventional construction knowledge, techniques, management, and/or practice Provokes questions, brings new insights to problem
B	Good	3.0	Above BCS standard Advances conventional construction knowledge, techniques, management, and/or practice Beyond competent; solves the problem with a high degree of skill
C	Satisfactory	2.0	Acceptable BCS standard Within conventional construction knowledge, techniques, management, and/or practice Competent solution to the problem

D	Poor	1.0	Below BCS standards Misapplies or ignores conventional construction knowledge, techniques, management, and/or practice Minimally competent-solves only some parts of the problem
F	Failure	0	Unacceptable by BCS standards Demonstrates little or no awareness or regard for conventional construction knowledge, techniques, management, and/or practice Not competent
Fa	Failure	0	No work

7. Writing Assignments

There will be several types of writing assignments in this class.

Final Project

As part of your final project you will write a report about the current state of the building project. You will be given the current situation of the project and be asked to explain to this situation to the key players of the project the owner and your boss. You will be explaining budget and schedule issues. During the course of the semester we will be doing smaller versions of this assignment including several break out sessions with groups during studio time.

Due Dates:

November 21- In class peer evaluation of final rough draft

November 28- Final reports are due

Google Doc Journal

At the beginning of the semester you will be given access to a Google Doc that only you and I will have access to. You will respond to different thought questions you will be given. During the semester we will spend periods of time during studio expressing thoughts and any answers to the questions I will ask you to discuss,

In-Class writing

As part of preparing for your final project paper we will be practicing writing to the different audiences involved in the construction delivery process.

8. Course Policy Statements

Class Participation and Attendance Policy: Attendance to ALL studios is expected. Tardiness and leaving class early will result in half an unexcused absence each. Overall course letter grades will be reduced by one full letter grade for every three 3 unexcused

Policy. The instructor must be notified prior to class if you are unable to attend and written documentation must be presented, in an acceptable format, to the instructor the first class period following the absence; otherwise, the absence is not excused. Attendance during project presentations and reviews is mandatory regardless of whether the assigned work is complete or not. An unexcused absence for a project review/presentation will result in a failing grade for that assignment.

Work Expectation: Six-credit studio courses are the core of the BCS curriculum. In addition to the 12 hours of class time, an average of eighteen hours of work time per week is expected for this course. This average includes weeks when formal class is not held due to University observed holidays. Work in studio outside of formal meeting hours and collaboration with peers is expected.

Assigned Readings: This class will require reading from both directed reading materials from the instructor as well as indirect reading materials as appropriate with given assignments (e.g. webinars).

Academic Honesty: Students are required by the University, the Department, and this class to honestly perform the assignments and tests required in this class, and present that work as their own. Failure to perform in an honest manner will result in a minimum consequence of a failing grade for the assignment. All student work and conduct shall adhere to the MSU Honor Code:

Mississippi State University has an approved Honor Code that applies to all students. The code is as follows: "As a Mississippi State University student I will conduct myself with honor and integrity at all times. I will not lie, cheat, or steal, nor will I accept the actions of those who do." Upon accepting admission to Mississippi State University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning, and to follow the philosophy and rules of the Student Honor Code. Ignorance of the rules does not exclude any member of the MSU community from the requirements or the processes of the Student Honor Code. For additional information please visit the website.

Professional Behavior: This class is conducted as an extension of professional practice. As such professional behavior is required of all students at all times in the class both during formal class meeting times and outside those hours. Conduct including but not limited to the following will not be tolerated and will result in suspension from the class: possession or consumption of alcohol or any illegal substances, smoking, using toxic materials in non-designated areas, pouring solvents in the sinks, doing project work in hallways or exit pathways, leaving food and garbage in the studios, harassing colleagues, or violation of shop safety regulations.

The class environment is meant for collaborative work and learning. Because it is impossible to participate collaboratively when plugged into digital media, no music, video, or non-academic computer use is allowed during class time. After class, personal music devices with earphones may be used. No "community music" i.e., stereos, radios, etc. are allowed in any CAAD buildings. Cell phones must be turned off during formal class hours.

Email/Text Messaging: Email will be used as a primary form of communication for updates to class meetings, field trips, assignment/test adjustments, etc. It is the responsibility of the student to routinely check email for information related to this class. Email communication will not be used for discussion of grades. All communication concerning grades will be conducted on an in-person basis only. If the cell phone number of the instructor has been provided, this is not for the use of text messaging.

Community Service- You will be required as a to complete 12 hours of community service. You will complete these 12 hours for Miss Laura. There will be plenty of opportunities to sign up with her. Failure to complete this will lead to a reduction of your overall course letter grade by one full letter grade. Failure to show up to your assigned time will require an additional 8 hours of service (e.g. you must now complete 20 hours). A second failure to show will be an automatic grade deduct.

Assignments: Any assigned homework must be completed to a "professional level" standard and be submitted by its due date/time through email (unless noted otherwise). Assigned work will be due at the beginning of class on the due date (unless noted otherwise). **Late work will not be accepted.**

Special Needs: Any student needing special accommodations should schedule a meeting with the instructor in the first week of classes. Further information can be obtained at Student Support Services

Tools, Materials, and Software Packages: You are required to obtain appropriate tools, materials, and software packages for the course. If you have questions regarding this issue, ask. A lack of tools, materials, or software packages is not an acceptable excuse for incomplete work.

Incompletes: A grade of I (incomplete) may be submitted in lieu of a final grade when the student, because of illness, death in his or her immediate family, or similar circumstances beyond his or her control, is unable to complete the course requirements or to take final examinations. All grades of I must be removed within thirty (30) calendar days from the date of the student's next enrollment, but only that part of student work may be made up which was missed during the emergency for which the incomplete was granted. If a grade of I is not resolved into a passing grade within the allotted time, the grade becomes an F.

Final Exam: In lieu of a final exam this class will have a final project. As such the final project and related deliverables due date may fall during Finals Week. This date will be confirmed later in the semester but every effort will be made to set the final project deadline prior to reading day and finals week.

Instructor's Qualification: The instructor reserves the right to make any changes in the course content, requirements or schedule as he may deem appropriate during the semester.