

## **ARE 310, Introduction to AutoCAD®**

**Professor:** Jake Hamilton, P.E.  
**Office:** Seaton 2029  
**Office Hours:** Posted by office door  
**E-mail:** jakehamilton@ksu.edu  
**Office Phone No.:** 913-375-0478

### **Course Description**

An introduction to the basics of AutoCAD

### **Student Learning Outcomes**

Upon completion of this course one should be able to:

1. Demonstrate electronic based technology to manage the construction process by applying electronic based technology to manage the construction process
2. Communicate effectively by applying appropriate graphic depictions
3. Appraise required construction project resources by understanding construction documents.
4. Understand the basic principles of MEP systems.

### **Evaluation**

#### **Grade Scale:**

A	100-93%	Grades will be based upon a percentage of total points possible:
B	92-85%	% grade = $\frac{\text{Points earned}}{\text{Total Points Possible}} \times 100$
C	84-77%	
D	76-69%	
F	68% and below	

**Approximate Evaluation Values:** Assignments: 75%; Final Project: 25%

### **Homework**

Late work will not be accepted. Notify instructor asap in the case of a real emergency beyond the control of the student (severe illness, family emergencies, etc.) Late is defined as later than the date and time specified by the instructor for any particular assignment. Computer or user error is not the responsibility of the faculty to consider.

### **Attendance**

Attendance is expected at every class until the assignment has been turned in. To be excused for being absent or late or leaving early, students must receive permission from the instructor on or before the day of the class period in question. The instructor may consider emergencies or other issues on a case-by-case basis.

### **Text / Reference Materials**

No text required. Handouts will be provided in class. Submittal details will be explained in class on the first day.

### **Use of Autodesk Software**

All students are able to download student versions of Autodesk Software, including AutoCAD, Revit, and Navisworks. These programs come with a 3-year license and can be downloaded here: <https://www.autodesk.com/education/free-software/all> (Links to an external site.). When downloading, ensure you choose the 2021 version of each software. Failure to download the proper version means you will not be able to transfer your work from home to the computer lab computers.

## **Classroom Policy**

The classroom will be managed similar to a professional office setting. Questions, discussion, and team activities are encouraged. Food, drinks, newspapers, or other distracting items are not permitted. Cell phones are to be silenced and put away during the lecture but can be used while working on assignments as long as they are not distracting to those around you. Please help to keep our computer lab clean by leaving it better than you found it.

## **Kansas State University Policy**

### **Statement Regarding Academic Honesty**

Kansas State University has an Honor and Integrity System based on personal integrity, which is presumed to be sufficient assurance that, in academic matters, one's work is performed honestly and without unauthorized assistance. Undergraduate and graduate students, by registration, acknowledge the jurisdiction of the Honor and Integrity System. The policies and procedures of the [Honor and Integrity System \(Links to an external site.\)](#) apply to all full and part-time students enrolled in undergraduate and graduate courses on-campus, off-campus, and via distance learning. A component vital to the Honor and Integrity System is the inclusion of the Honor Pledge which applies to all assignments, examinations, or other course work undertaken by students. The Honor Pledge is implied, whether or not it is stated: "On my honor, as a student, I have neither given nor received unauthorized aid on this academic work." A grade of XF can result from a breach of academic honesty. The F indicates failure in the course; the X indicates the reason is an Honor Pledge violation.

### **Statement Regarding Students with Disabilities (Links to an external site.)**

Students with disabilities who need classroom accommodations, access to technology, or information about emergency building/campus evacuation processes should contact the Student Access Center and/or their instructor. Services are available to students with a wide range of disabilities including, but not limited to, physical disabilities, medical conditions, learning disabilities, attention deficit disorder, depression, and anxiety. If you are a student enrolled in campus/online courses through the Manhattan or Olathe campuses, contact the Student Access Center at [accesscenter@k-state.edu](mailto:accesscenter@k-state.edu), 785-532-6441; for K-State Polytechnic campus, contact Julie Rowe, Diversity, Inclusion and Access Coordinator, at [jarowe@ksu.edu](mailto:jarowe@ksu.edu) or call 785-826-2971.

### **Statement Defining Expectations for Classroom Conduct**

All student activities in the University, including this course, are governed by the [Student Judicial Conduct Code \(Links to an external site.\)](#) as outlined in the Student Governing Association [By Laws \(Links to an external site.\)](#), Article V, Section 3, number 2. Students who engage in behavior that disrupts the learning environment may be asked to leave the class.

### **Statement Regarding Wearing of Face Coverings**

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In classrooms, faculty have the right to deny a student entry into the room if the student is not wearing a face covering. Students not wearing a face covering will be reminded to do so and offered a clean face covering, if one is available. If the student does not comply, the faculty member will ask the student to leave the space, and if available, join the class remotely. As a last resort, campus police will be called. The faculty members will complete the [Code of Conduct form \(Links to an external site.\)](#) and the Office of Student Life will look further into the issue and take the non-compliance with the request to leave into consideration of further accountability measures.

At no point should the professor or other students put themselves into an unsafe situation while attempting to enforce the face-covering policy. Manhattan campus police: 785-532-6412

### **Statement for Copyright Notification**

Copyright 2020(Jake Hamilton) as to this syllabus, lectures, and information provided in class. During this course students are prohibited from selling notes to or being paid for taking notes by any person or commercial firm without the express written permission of the professor teaching this course. In addition, students in this class are not authorized to provide class notes or other class-related materials to any other person or entity, other than sharing them directly with another student taking the class for purposes of studying, without prior written permission from the professor teaching this course.

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### **Campus Safety Statement**

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### **Student Resources Statement**

K-State has many resources to help contribute to student success. These resources include accommodations for academics, paying for college, student life, health and safety, and others found at [www.k-state.edu/onestop](http://www.k-state.edu/onestop) (Links to an external site.)

### **Statement on Mental Health**

Your mental health and good relationships are vital to your overall well-being. Symptoms of mental health issues may include excessive sadness or worry, thoughts of death or self-harm, inability to concentrate, lack of motivation, or substance abuse. Although problems can occur anytime for anyone, you should pay extra attention to your mental health if you are feeling academic or financial stress, discrimination, or have experienced a traumatic event, such as loss of a friend or family member, sexual assault or other physical or emotional abuse.

If you are struggling with these issues, do not wait to seek assistance.

- Kansas State University Counseling Services ([k-state.edu/counseling/](http://k-state.edu/counseling/) (Links to an external site.)) offers free and confidential services to assist you to meet these challenges.
- Lafene Health Center (<https://www.k-state.edu/lafene> (Links to an external site.)) has specialized nurse practitioners to assist with mental health.
- The Office of Student Life ([k-state.edu/studentlife](http://k-state.edu/studentlife) (Links to an external site.)) can direct you to additional resources.
- K-State Family Center offers individual, couple, and family counseling services on a sliding fee scale (<https://www.hhs.k-state.edu/familycenter/> (Links to an external site.)).
- Center for Advocacy, Response, and Education (CARE) provides free and confidential assistance for those in our K-State community who have been victimized by violence (<https://www.k-state.edu/care/> (Links to an external site.)).

### **Disclaimer**

The instructor reserves the right to modify and/or add to this syllabus as necessary.

Mon	Tues	Wed	Thurs	Fri
8/17 Syllabus & Course Overview  Introduce Assignment #1	8/18	8/19 Workday for Assignment #1	8/20	8/21
8/24  Assignment 1 due @ 2:30pm  Introduce Assignment #2	9/25	9/26  Workday for Assignment #2	9/27	9/28
8/31  Assignment 2 due @ 2:30pm  Advanced assignment due @ 2:30pm  Introduce Assignment #3	9/1	9/2  Workday for Assignment #3	9/3	9/4
9/7 Labor Day	9/8	9/9  Assignment #3 due @ 2:30pm  Introduce Final Project	9/10	9/11
9/14  Work Day for Final Project	9/15	9/16  Work Day for Final Project	9/17	9/18
9/21	9/22	9/23  Work Day for Final Project  Final Project due @ 11:59pm	9/24	9/25



## ARE 312, Introduction to Building Information Modeling

**Professor:** Derek Clements, P.E., LEED AP BD+C  
**Office:** Seaton 2036  
**Office Hours:** Posted by office door  
**E-mail:** dclements@ksu.edu  
**Office Phone No.:** 972-861-0386

### Course Description

Per Catalog: Introduction to building information modeling as a technology tool related to the engineering and construction industry. Prerequisites: CNS 321 – Graphic Communications II.

**Schedule**      MW 2:30-5:20 pm                      **Room**      S2009

### Student Learning Outcomes

Upon completion of this course, the student shall demonstrate the following proficiencies:

1. Understanding basic electronic based technology to manage the construction process
2. Communicate effectively by applying appropriate graphic depictions
3. Understand the basic principles of MEP systems.

### Evaluation

#### Grading Scale:

A	100-93%
B	92-85%
C	84-78%
D	77-70%
F	69% and below

Grades will be based on percentage of points possible:

$$\% \text{ grade} = \frac{\text{Points earned}}{\text{Total Points Possible}} \times 100$$

#### Approximate Evaluation Values:

Homework/ Projects	360 points
Quizzes	60 points
Final Exam	100 points
Total	520 points

### Attendance

Prompt attendance is required in this course, as it will be in a professional office. Absences *will not* be tallied in this course, it is your responsibility to be here. As in an office environment, I know who is present and who is not. No formal attendance component will be included in your grade, but I reserve the right to take attendance into consideration when determining final grades. If you miss a class, understand it is your responsibility to obtain the notes you missed and/or any assignments from a classmate.

### Homework

Homework will be assigned during each class period and collected at the beginning of the following class period, unless otherwise noted. **Late work will not be accepted.** The instructor may consider emergencies or other issues on a case-by-case basis. Points may be deducted from assignments that are not neat and organized. Treat each assignment as a professional submission. Assignments are to be completed by individual effort, unless otherwise noted. However, working with others to increase understanding is encouraged.

### Quizzes / Final Exam

Quizzes will be given online and should be completed outside of class. Quizzes will cover the material given during lecture to test your understanding of the concepts discussed. A comprehensive final exam will be given.

### Text / Reference Materials

Course materials will be provided as handouts or via download from Canvas.

### Use of Autodesk Software

All students are able to download student versions of Autodesk Software, including AutoCAD, Revit, and Navisworks. These programs come with a 3-year license and can be downloaded here: <https://www.autodesk.com/education/free-software/all>. When downloading, ensure you

choose the 2021 version of each software. Failure to download the proper version means you will not be able to transfer your work from home to the computer lab computers.

### **Classroom Policy**

The classroom will be managed similar to a professional office setting. Questions, discussion, and team activities will be encouraged. Food, drinks, caps/hats, newspapers, or other distracting items will not be permitted. Daily housekeeping will be required.

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### **Academic Accommodations**

Students who demonstrate the need for classroom accommodations, access to additional technologies, or information about emergency building/campus evacuation processes should contact the Student Access Center and/or their instructor. Services are available to students with a wide range of demonstrated conditions including, but not limited to, physical disabilities, medical conditions, learning disabilities, attention deficit disorder, depression, and anxiety. If you are a student enrolled in campus/online courses through the Manhattan or Olathe campuses, contact the [Student Access Center](mailto:accesscenter@k-state.edu) at [accesscenter@k-state.edu](mailto:accesscenter@k-state.edu), 785-532-6441; and/or the instructor as soon as possible, preferably within the first week of the class.

### **Harassment Policy**

It is important that you understand your rights and responsibilities regarding the University's Sexual and Racial Harassment policies. Full text of the policies can be found on KSU's web site at [www.ksu.edu/uauuc/fhbook/fhxj.html](http://www.ksu.edu/uauuc/fhbook/fhxj.html). If you experience any situations, in or out of class, that seem inappropriate or that make you uncomfortable, a list of resources and courses of action to assist you can be found on the College of Engineering web site at [www.engg.ksu.edu/students/statement-harrasment.htm](http://www.engg.ksu.edu/students/statement-harrasment.htm).

### **Statement Regarding Academic Honesty**

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The Honor and Integrity system website can be reached via the following URL: [www.ksu.edu/honor](http://www.ksu.edu/honor). A component vital to the Honor and Integrity System is the inclusion of the Honor Pledge which applies to all assignments, examinations, or other course work undertaken by students. The Honor Pledge is implied, whether or not it is stated: "On my honor, as a student, I have neither given nor received unauthorized aid on this academic work." A grade of XF can result from a breach of academic honesty. The F indicates failure in the course; the X indicates the reason is an Honor Pledge violation.

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### **Tobacco Use Policy**

The College of Engineering is designated a tobacco-free workplace and the use of tobacco products, including cigarettes, cigars, and smokeless tobacco, is prohibited in any college building, facility, or vehicle. It is the responsibility of each college member (faculty, staff, or student) to adhere to and enforce the policy, and to inform visitors of this policy. If a student, faculty member or college employee continues to disregard the policy, he/she will be reported to the dean and may lose access privileges.

### **Copyright Issues**

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### **Statement Regarding Wearing of Face Coverings**

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In classrooms, faculty have the right to deny a student entry into the room if the student is not wearing a face covering. Students not wearing a face covering will be reminded to do so and offered a clean face covering, if one is available. If the student does not comply, the faculty member will ask the student to leave the space, and if available, join the class remotely. As a last resort, campus police will be called. The faculty members will complete the Code of Conduct form and the Office of Student Life will look further into the issue and take the non-compliance with the request to leave into consideration of further accountability measures.

At no point should the professor or other students put themselves into an unsafe situation while attempting to enforce the face-covering policy. Manhattan campus police: 785-532-6412

### **Classroom Cleaning Protocols**

Instructors will end class five minutes early to ensure classrooms and teaching labs are disinfected between every class change with cleaning supplies provided in each space. The class leaving the room will be expected to spray workspaces that were used during the class. The class entering the room will be asked to wipe down the spaces that have been sprayed. Detailed information on cleaning protocols is available in the [COVID-19 Cleaning and Disinfecting Guidance](#) document.

### **Disclaimer**

The instructor reserves the right to modify and/or add to this syllabus as necessary.



## **CNS100 CNS Orientation - Fall 2020**

**Instructor:** Paul Karr  
**Office:** Seaton 2061  
**Office Hours:** MWF 9:30a-11:30a  
**E-mail:** [paulkarr@ksu.edu](mailto:paulkarr@ksu.edu)  
**Phone No.:** (913) 961-6246

### **Course Description**

Introduction to construction science and management. Promotion of interaction and connection with the department as well as a network of academic and professional networks through the use of learning communities. Familiarize entering students with the nature of the architectural, engineering, and construction industry with an emphasis on terminology and professionalism.

**Class Schedule:** MW 2:30p-3:20p Durland 1073

**Student Learning Outcomes:** Upon completion of this course, the student should demonstrate the following proficiencies:

1. Demonstrate knowledge of departmental, college and university procedures and resources.
2. Identify potential career opportunities in the field of Construction Science.
3. Apply knowledge of building industry and present both in writing and orally as a part of a team research project.
4. ACCE Accreditation Outcomes for this class:
  - a. 04.c Understanding Project Schedules
  - b. 05.b Understanding the fundamentals of professional ethics.

### **Grading Scale:**

93-100 = A  
85-92 = B  
78-84 = C  
70-77 = D

### **Approximate Evaluation Values:**

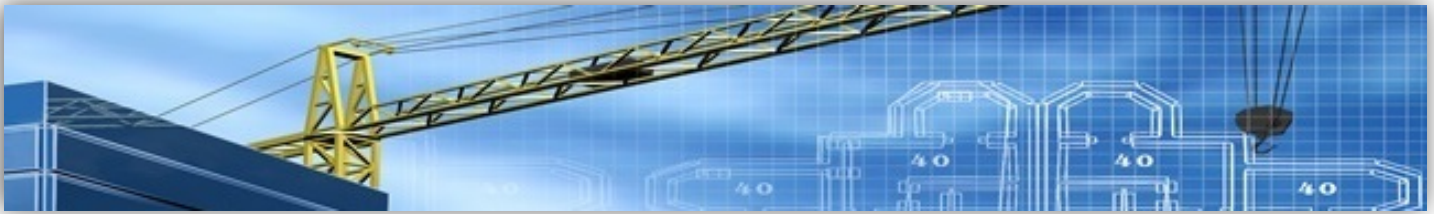
Homework	400 pts
Attendance	300 pts
<u>Research Project</u>	<u>300 pts</u>
Total Semester	1000 pts

**Homework:** Homework assignments will be given weekly. All assignments will be due on Wednesdays by no later than 5:00 pm via K-State Canvas, unless indicated otherwise by the instructor. No late work will be accepted. No assignments received via e-mail will be accepted.

**Research Project:** Each student, as part of a team, will be required to submit a research project at the end of the semester. This project is designed to expose students to the process of research and provide the opportunity to learn more about a specific topic related to Construction Science.

### **Attendance / Participation Requirements:**

Attendance and Participation is expected for all class periods. In the Fall 2020 COVID-19 environment, the term "attendance and participation" will be defined as in-person class attendance OR viewing the recorded lecture. Students will demonstrate their attendance and participation by completing an online quiz where a secret code word spoken at a random time in class will be the answer to the online quiz question. Online attendance quizzes must be completed online Friday night at 11:59pm each week to be counted.



Instructor will not monitor Excused vs Non-Excused absences. Rather, each student will be granted 2 free absences at the end of the semester to be used as needed (which equates to 2% extra credit for perfect attendance). For each absence beyond the 2 free absences, student's overall grade will be reduced by 1%.

(If a student has a medical or family emergency, you must contact the College of Engineering Dean's office and they will notify all your instructors.)

### **Late Work:**

All homework is due at the time, date and location specified. Late work will not be accepted. Homework assignments will be due via K-State Canvas on Wednesdays at 5:00pm unless noted otherwise.

### **Text / Reference Materials**

No textbooks are required for this class. Recommended optional text for personal enrichment: Building Construction Illustrated, by Francis D. K. Ching (any edition)

### **Course Topics:**

#### General Topics:

Time Management, Study Habits, Financial Aid, Scholarships, DARS Reports, Transcripts

#### Departmental Topics:

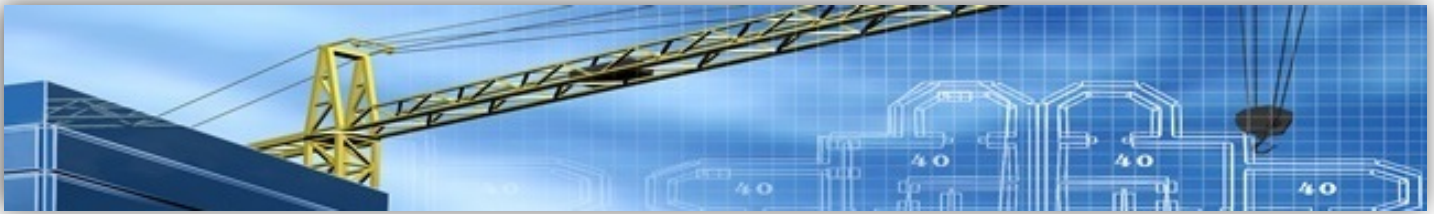
Intro to Profession, Student Organizations, Internships, Resumes, Curriculum, Flowcharts, Pre-Enrollment Process

#### Technical Topics:

Lighting, Plumbing, Mechanical, Environmental, Safety, Productivity, Plan Reading, Scheduling, Estimating

### **Course philosophy:**

- 1. Preparation & Discipline are not optional—they are minimum expectations.** It's your education and career. The true value of your career is in direct proportion to your commitment to excellence, no matter what your field of endeavor. Remember the road to success is always under construction; so be prepared to endure the process.
- 2. Your attendance and attention are required.** It is a portion of your grade in the course. Tardiness is not acceptable. You are to be ready to participate at the beginning of class and stay until class is over.
- 3. Communicate.** This is the key in our business. Your ability to communicate and work effectively as an individual as well as a team member is vital. Communication is not only being able to express thoughts verbally or in writing but includes listening and understanding as well. **All questions are welcomed!**
- 4. Professionalism.** Your work and actions should be professional in appearance and thought. Lack of attention to detail indicates carelessness or lack of professional demeanor.



### **Department Classroom Policy:**

The classroom is to be regarded as the "class office" and therefore professional behavior is expected at all times. Start preparing now for the expectations of future employers. **All cell phones and electronic devices are to be turned off during class.** If any of these devices interrupt class, then you will be asked to leave for the remainder of the class period. This will be indicated as an absence for the class period. A second disruptive occurrence results in dropping the class. (Department Policy)

No food or drink is permitted in the classroom. Also, no hats/caps, newspapers, electronic devices or other distracting items will be allowed.

### **University and College of Engineering Policies:**

#### **1. Statement Regarding Academic Honesty**

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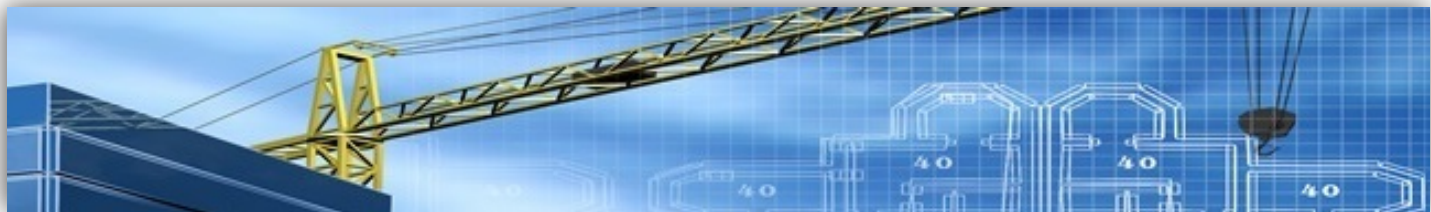
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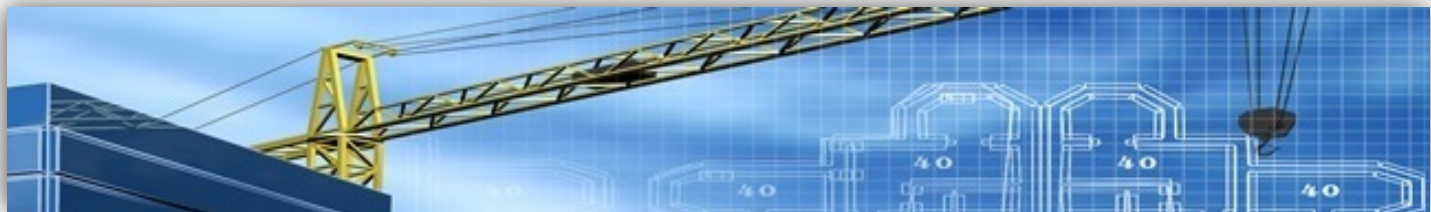
#### **Supplemental Syllabi Statements:**

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Moreover, academic freedom supports collaborative work in the pursuit of truth and the dissemination of knowledge in an environment of inquiry, respectful debate, and professionalism. Academic freedom is not limited to the classroom or to scientific and scholarly research but extends to the life of the university as well as to larger social and political questions. It is the right and responsibility of the university community to engage with such issues.

### **3. Weapons Policy Statement**

Kansas State University prohibits the possession of firearms, explosives, and other weapons on any University campus, with certain limited exceptions, including the lawful concealed carrying of handguns, as provided in the University Weapons Policy, found at <http://www.k-state.edu/police/weapons/index.html>.

You are encouraged to take the online weapons policy education module (<http://www.k-state.edu/police/weapons/index.html>) to ensure you understand the requirements of the policy, including the requirements related to concealed carrying of handguns on campus. Students possessing a concealed handgun on campus must be 21 years of age or older and otherwise lawfully eligible to carry. All carrying requirements of the policy must be observed in this class, including but not limited to the requirement that a concealed handgun be completely hidden from view, securely held in a holster that meets the specifications of the policy, carried without a chambered round of ammunition, and that any external safety be in the "on" position.

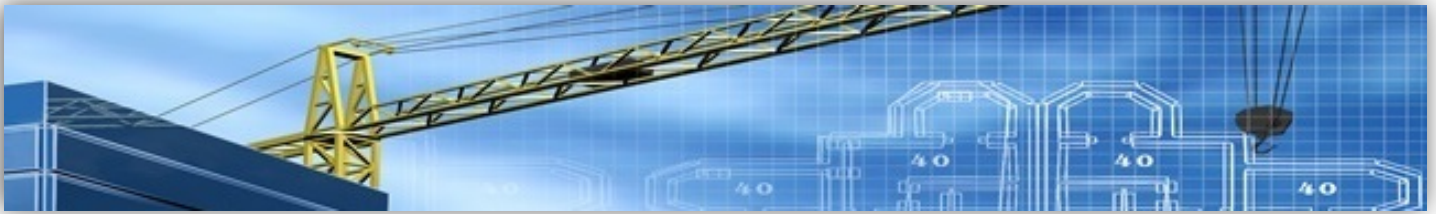
If an individual carries a concealed handgun in a personal carrier such as a backpack, purse, or handbag, the carrier must remain within the individual's exclusive and uninterrupted control. This includes wearing the carrier with a strap, carrying or holding the carrier, or setting the carrier next to or within the immediate reach of the individual.

Each individual who lawfully possesses a handgun on campus shall be wholly and solely responsible for carrying, storing and using that handgun in a safe manner and in accordance with the law, Board policy and University policy. All reports of suspected violation of the weapons policy are made to the University Police Department by picking up any Emergency Campus Phone or by calling 785-532-6412.

### **4. Campus Safety Statement**

Kansas State University is committed to providing a safe teaching and learning environment for student and faculty members. In order to enhance your safety in the unlikely case of a campus emergency make sure that you know where and how to quickly exit your classroom and how to follow any emergency directives. To view additional campus emergency information go to the University's main page, [www.k-state.edu](http://www.k-state.edu), and click on the Emergency Information button, located at the bottom of the page.





## 5. Student Resources Statement

K-State has many resources to help contribute to student success. These resources include accommodations for academics, paying for college, student life, health and safety, and others found at [www.k-state.edu/onestop](http://www.k-state.edu/onestop)

## 6. Statement on Mental Health

Your mental health and good relationships are vital to your overall well-being. Symptoms of mental health issues may include excessive sadness or worry, thoughts of death or self-harm, inability to concentrate, lack of motivation, or substance abuse. Although problems can occur anytime for anyone, you should pay extra attention to your mental health if you are feeling academic or financial stress, discrimination, or have experienced a traumatic event, such as loss of a friend or family member, sexual assault or other physical or emotional abuse.

If you are struggling with these issues, do not wait to seek assistance.

- Kansas State University Counseling Services ([k-state.edu/counseling/](http://k-state.edu/counseling/)) offers free and confidential services to assist you to meet these challenges.
- Lafene Health Center (<https://www.k-state.edu/lafene>) has specialized nurse practitioners to assist with mental health.
- The Office of Student Life ([k-state.edu/studentlife](http://k-state.edu/studentlife)) can direct you to additional resources.
- K-State Family Center offers individual, couple, and family counseling services on a sliding fee scale (<https://www.hhs.k-state.edu/familycenter/>).
- Center for Advocacy, Response, and Education (CARE) provides free and confidential assistance for those in our K-State community who have been victimized by violence (<https://www.k-state.edu/care/>).

**CNS 200 Computer Applications in Engineering and Construction (2 cr)**  
**FALL 2020**

**Instructor:** Jongchul Song  
**Office:** Seaton Hall, Room 2054  
**Office Hours:** MTUF 8:30-9:30, W 8:30-10:30  
**E-mail:** [jonsong@ksu.edu](mailto:jonsong@ksu.edu)  
**Office Phone:** 785.532.3572

**Course Description:**

2 credit hour course that is an introduction to fundamental applications of computer programming and software using engineering and construction problems; primarily advanced use of spreadsheets with data tables, embedded graphics, and presentation software.

**Class Schedule:** TuTh @ 12:30 pm - 2:20 pm                      **Room:** Seaton 2027

**Student Learning Outcomes:**

Upon completion of this course, the student should be able to:

- Use computer software applications as a communication, management & problem solving tool.
- Demonstrate computer skills that can be applied in various areas of the engineering & construction industry.

**Evaluation:**

Final course grades for this course consist of the following elements:

In-Person Attendance .....	Deduction only
4 points deduction for each class absent/left early beyond two occurrences	
<b>without completing and submitting a given week's assignment(s)</b>	
Assignments (10 EA * 20 points).....	200 points
Mid-Term Exams (3 EA * 100 points).....	300 points
<u>Final Exam .....</u>	<u>100 points</u>
Total	600 points

The total score after attendance related adjustments will be the basis for determining final course grades, and the following total scores are guaranteed to receive the indicated letter grade – **the approximate percentages are given for reference purposes only; never count on the % or course grade given by your Canvas to determine your final course grade:**

- |  |   |
|--|---|
| • If the adjusted total score is greater than or equal to 540 points (90%) | A |
| • If the adjusted total score is greater than or equal to 480 points (80%) | B |
| • If the adjusted total score is greater than or equal to 420 points (70%) | C |
| • If the adjusted total score is greater than or equal to 360 points (60%) | D |
| • If the adjusted total score is less than 360 points (60%)                | F |

The instructor reserves the right to relax these grade levels at a future date, but in no circumstance will the grade levels be raised. For example, students earning overall 535 points will never be assigned a grade less than B but may be raised to an A at the instructor's discretion.

**Textbook and Other Required Materials:**

- No text is required for this course.
- Work saved on a lab PC is deleted once logged out. A USB flash drive of 1GB or greater is recommended for this course in order to save student's own work. Alternatively, students can save their work files at their Canvas account folder.

## Course Schedule

See page 6.

## Description of Grade Elements:

- **Attendance** (deduction only)
  - In-Person attendance is required at every scheduled class meeting. If absent/leaving early no more than two lab sessions, no deduction will apply. For occurrences of absence or early departure exceeding the above mentioned limits, 4 points will be deducted each time the student is absent/leaving early without completing a given week's assignment(s).
  - If the student completed and submitted a given week's assignment(s) **prior to the start of the second lab of the week**, they will be waived on attending the second lab and will receive no deduction.
- **Assignments** (a total of 200 points = 10 EA \* 20 points)
  - There will be a total of 10 assignments – some assignments will consist of two parts. Assignments are intended to practice and obtain feedback on tasks that will require applications of the concepts and functions introduced in a given week. Although students are encouraged to discuss their approaches, they must **do their own work. Copying someone's work in part or whole and submitting it as one's own work will be reported** immediately upon discovery to the university honor system.
- **Exams** (three mid-terms and one final, a total of 400 points)
  - There will be a total of four (4) exams for the course (see date and time in the Course Schedule on page 6). All exams will consist of the similar tasks to those of assignments.
  - Exam #1 through #3 will be given during the regular class time and **require in-person attendance**. The exams will be closed-book - only the material the student puts on an one-sided letter size paper will be allowed.
  - The final exam will be given on the date and time that accords to the university final exam schedule. The final exam will be administered **online** through the Canvas.

## Course Policies:

- **Attendance** is mandatory and expected at every class.
  - **Excused absences are to be requested and approved prior to the beginning of the class period.** Approved absences are at the discretion of the instructor and will be considered on a case by case basis.
  - If an absence is due to illness, a doctor's note or equivalent is required for the absence to be excused.
  - **Missing/leaving class for internship/job interviews at K-State is not acceptable** and will not automatically be counted as an excused absence unless the student demonstrates they made reasonable efforts to schedule interviews outside of class time.
  - Missing class for internship/job interviews at a remote location other than K-State campus will be considered an excused absence provided that the student notifies the instructor in advance.
- **Late work** will not be reviewed and will be **given a grade of ZERO (0)**. This rule applies to all graded work including any extra credit work.
  - "Late work" is defined as any work other than turned in by the designated deadline AND in the prescribed manner.
  - If the student encounters a situation that justifies an extension of time to complete a given assignment, the student should email, prior to the deadline for the assignment, the instructor with a justification and specifically request for an extension of time.
  - Real emergencies, as determined at the sole discretion of the instructor, that delayed submission of an assignment may be considered on an individual basis. The student should email the instructor as soon as possible.
- **Grading and Appeal for Grades**
  - As a general rule, properly submitted work in time will be graded within a week from the deadline, and grades will be posted to Canvas – there will be no announcements that inform grade posting. Students are responsible to check their grades for each assignment.
  - Any appeal for initial grades should be made to the instructor within a week from the date that the grades were posted to Canvas. Initial grades on Canvas, if not appealed within the due time, are final, and the instructor will give no consideration to re-grade.

### Departmental Policies:

- The classroom is to be regarded as a professional business environment “class office.” Therefore, professional behavior is expected at all times. Start preparing now for the expectations of future employers.
- All cell phones and other electronic devices are to be silenced or turned off during class. If any of these devices interrupt class, then you may be asked to leave for the remainder of the class period. This will be counted as an absence for the class period. A second disruptive occurrence may result in being dropped from the class.
- No food, beverage and tobacco products are permitted in the classroom. Keep the classroom clean by properly disposing of all trash, newspapers, etc. at the end of class.

### University and College of Engineering Policies:

- **Statement Regarding Academic Honesty**  
Kansas State University has an Honor System based on personal integrity, which is presumed to be sufficient assurance in academic matters one's work is performed honestly and without unauthorized assistance. Undergraduate and graduate students, by registration, acknowledge the jurisdiction of the Honor System. The policies and procedures of the Honor System apply to all full and part-time students enrolled in undergraduate and graduate courses on-campus, off-campus, and via distance learning. The honor system website can be reach via the following URL: [www.ksu.edu/honor](http://www.ksu.edu/honor) .  
A component vital to the Honor System is the inclusion of the Honor Pledge which applies to all assignments, examinations, or other course work undertaken by students. The Honor Pledge is implied, whether or not it is stated: "**On my honor, as a student, I have neither given nor received unauthorized aid on this academic work.**" A grade of XF can result from a breach of academic honesty. The F indicates failure in the course; the X indicates the reason is an Honor Pledge violation.
- **Statements Regarding Students with Disabilities**  
Students with disabilities who need classroom accommodations, access to technology, or information about emergency building/campus evacuation processes should contact the Student Access Center and/or their instructor. Services are available to students with a wide range of disabilities including, but not limited to, physical disabilities, medical conditions, learning disabilities, attention deficit disorder, depression, and anxiety. If you are a student enrolled in campus/online courses through the Manhattan or Olathe campuses, contact the [Student Access Center](mailto:accesscenter@k-state.edu) at [accesscenter@k-state.edu](mailto:accesscenter@k-state.edu), 785-532-6441.
- **Statement Defining Expectations for Classroom Conduct**  
All student activities in the University, including this course, are governed by the [Student Judicial Conduct Code](#) as outlined in the Student Governing Association [By Laws](#), Article V, Section 3, number 2. Students who engage in behavior that disrupts the learning environment may be asked to leave the class.
- **Statement Regarding Wearing of Face Coverings**  
To protect the health and safety of the K-State community, students, faculty, staff and visitors must wear face coverings over their mouths and noses while on K-State campuses in all hallways, public spaces, classrooms and other common areas of campus buildings, and when in offices or other work spaces or outdoor settings when 6-feet social distancing cannot be maintained. In addition, all students, faculty, and staff are required to take [the COVID-19 and Face Mask Safety training](#). Employees who need reasonable accommodations and assistance related to required face coverings may contact the ADA coordinator at [charlott@k-state.edu](mailto:charlott@k-state.edu), and students needing accommodations may contact the Student Access Center at [accesscenter@k-state.edu](mailto:accesscenter@k-state.edu).

In classrooms, faculty have the right to deny a student entry into the room if the student is not wearing a face covering. Students not wearing a face covering will be reminded to do so and offered a clean face covering, if one is available. If the student does not comply, the faculty member will ask the student to leave the space, and if available, join the class remotely. As a last resort, campus police will be called. The faculty members will complete the [Code of Conduct form](#) and the Office of Student Life will look

further into the issue and take the non-compliance with the request to leave into consideration of further accountability measures.

At no point should the professor or other students put themselves into an unsafe situation while attempting to enforce the face-covering policy. Manhattan campus police: 785-532-6412.

- **Classroom Cleaning Protocols**

Instructors will end class five minutes early to ensure classrooms and teaching labs are disinfected between every class change with cleaning supplies provided in each space. The class leaving the room will be expected to spray workspaces that were used during the class. The class entering the room will be asked to wipe down the spaces that have been sprayed. Detailed information on cleaning protocols is available in the [COVID-19 Cleaning and Disinfecting Guidance](#) document.

- **[Statement for Copyright Notification](#)**

Copyright 2020 (Jongchul Song) as to this syllabus and all lectures. During this course, students are prohibited from selling notes to or being paid for taking notes by any person or commercial firm without the express written permission of the professor teaching this course. In addition, students in this class are not authorized to take notes for subsequent posting on commercial websites. The K-State Student Conduct Code prohibits any illegal or unauthorized taking, selling, or distribution of class notes. Students violating this provision will be subject to discipline under the conduct code, including but not limited to possible expulsion from K-State. Copyright shall be extended to electronic files of lecture and course materials.

- **Weapons Policy Statement**

Kansas State University prohibits the possession and use of firearms, explosives, and other weapons on any University campus, with certain limited exceptions, which include use of weapons as part of approved University Programs, use of weapons by law enforcement personnel, and the lawful concealed carrying of handguns, as provided in the weapons policy, which may be found at: <http://www.k-state.edu/police/weapons/index.html>

You are encouraged to take the online weapons policy education module (<http://www.k-state.edu/police/weapons/index.html>) to ensure you understand the requirements of the policy, including the requirements related to concealed carrying of handguns on campus. Students possessing a concealed handgun on campus must be 21 years of age or older and otherwise lawfully eligible to carry. All carrying requirements of the policy must be observed in this class, including but not limited to the requirement that a concealed handgun be completely hidden from view, securely held in a holster that meets the specifications of the policy, carried without a chambered round of ammunition, and that any external safety be in the “on” position.

If an individual carries a concealed handgun in a personal carrier such as a backpack, purse, or handbag, the carrier must remain within the individual’s exclusive and uninterrupted control. This includes wearing the carrier with a strap, carrying or holding the carrier, or setting the carrier next to or within the immediate reach of the individual.

Each individual who lawfully possesses a handgun on campus shall be wholly and solely responsible for carrying, storing and using that handgun in a safe manner and in accordance with the law, Board policy and University policy. All reports of suspected violation of the weapons policy are made to the University Police Department by picking up any Emergency Campus Phone or by calling 785-532-6412.

- **Campus Safety Statement**

Kansas State University is committed to providing a safe teaching and learning environment for student and faculty members. In order to enhance your safety in the unlikely case of a campus emergency make sure that you know where and how to quickly exit your classroom and how to follow any emergency

directives. To view additional campus emergency information go to the University's main page, [www.k-state.edu](http://www.k-state.edu), and click on the Emergency Information button.

- **Harassment Policy**

“I believe that engineers must not only be the people who know how to do things right, but also those who know the right things to do” (quote by Dr. Joseph Bordogna, National Science Foundation). One purpose of your education is to help you develop skills, approaches, and abilities that are necessary for effective teamwork, and for your success in your profession and as a citizen. It is important that you understand your rights and responsibilities regarding the University’s Sexual and Racial Harassment policies. (Full text of the policies can be found on KSU’s web site at [www.ksu.edu/uau/fhbook/fhxj.html](http://www.ksu.edu/uau/fhbook/fhxj.html). If you experience any situations, in or out of class, that seem inappropriate or that make you uncomfortable, a list of resources and courses of action to assist you can be found on the College of Engineering web site at [www.engg.ksu.edu/students/statement-harrassment.htm](http://www.engg.ksu.edu/students/statement-harrassment.htm).

- **Tobacco Use Policy**

The College of Engineering is designated a tobacco-free workplace and the use of tobacco products, including cigarettes, cigars, and smokeless tobacco, is prohibited in any college building, facility, or vehicle. It is the responsibility of each college member (faculty, staff, or student) to adhere to and enforce the policy, and to inform visitors of this policy. If a student, faculty member or college employee continues to disregard the policy, he/she may lose access privileges.

**Date of Last Update:** Thursday, August 13, 2020



**CNS 200 Computer Applications  
FALL 2020**

**Course Schedule**

- Students should expect changes to this tentative schedule and are responsible for adapting to the changes. The instructor will make every reasonable effort to inform students of schedule changes as soon as practically possible.
- \* All assignments except #4 and #6 are assigned at the start of the first lab of each week and are due at the end of the second lab of the week. If these assignments are turned in complete **prior to the start** of the second lab, in-person attendance in the second lab will be waived. Exam #1 through #3 will be given during the regular class time on Thursday and require **in-person attendance**. The final exam will be given on the date and time as per the university final exam schedule and will be administered online through the Canvas.
- † All software used in this course are available on Windows PC's in the computer lab and may be accessed remotely from any Internet-connected computer using your K-State EID and password. To remotely check out lab computers, follow step-by-step instructions at <https://cecs.engg.ksu.edu/labs/vdi>.
  - If accessing from off-campus, you must **first** install VPN software and connect to the campus through VPN. For step-by-step instructions for downloading and using the VPN, visit <https://www.k-state.edu/its/security/secure-data/vpn/index.html>.

<b>WK# (1<sup>st</sup> Class)</b>	<b>TOPICS†</b>	<b>DUE*</b>
1 (8/18)	Course Introduction	
2 (8/25)	MS WORD 1 – Page Setup & Layout	Assign #1 (20 pts)
3 (9/1)	MS WORD 2 – Table of Contents, Table of Figures	Assign #2 (20 pts)
4 (9/8)	MS WORD 3 – Editing, Working w/ Tables & Figures	Assign #3 (20 pts)
5 (9/15)	Review for Exam #1	<b>Exam #1 (100 pts)</b>
6 (9/22)	BLUEBEAM REVU – Markup, Measure	Assign #4a (10 pts) 9/24, 12:30 pm Assign #4b (10 pts) 9/29, 12:30 pm
7 (9/29)	MS EXCEL 1 – Formatting, Page Setup	Assign #5 (20 pts)
8 (10/6)	MS EXCEL 2 – Formula, Working w/ Data	Assign #6a (10 pts) 10/8, 12:30 pm Assign #6b (10 pts) 10/13, 12:30 pm
9 (10/13)	Review for Exam #2	<b>Exam #2 (100 pts)</b>
10 (10/20)	MS EXCEL 4 – Charts	Assign #7 (20 pts)
11 (10/27)	MS EXCEL 5 – Charts (cont'd)	Assign #8 (20 pts)
12 (11/3)	MS EXCEL 6 – Inserting Table and Chart into WORD	Assign #9 (20 pts)
13 (11/10)	Review for Exam #3	<b>Exam #3 (100 pts)</b>
14 (11/17)	MS PROJECT 1 – Construction Schedule	Assign #10 (20 pts)
15 (11/24)	Thanksgiving Break	
16 (12/1)	Review for Final Exam	
17	<b>Final Exam (100 pts), Thursday, Dec 10, 9:40 AM - 11:30 AM</b>	

**CNS 210-C Graphic Communications I (1 cr)**  
**FALL 2020**

**Instructor:** Jongchul Song  
**Office:** Seaton Hall, Room 2054  
**Office Hours:** MTUF 8:30-9:30, W 8:30-10:30  
**E-mail:** [jonsong@ksu.edu](mailto:jonsong@ksu.edu)  
**Office Phone:** 785.532.3572

**Course Description:**

Introduction to graphic communication principles and methods using orthographic projections, isometrics, and perspective drawings and sketches and their application to the engineering, design, and construction industry.  
 Prerequisites: CNS 220 (or concurrent).

**Class Schedule:** TU @ 2:30 pm – 4:20 pm                      **Room:** Seaton 2009

**Student Learning Outcomes:**

Upon completion of this course, the student shall demonstrate the following proficiencies:

- Illustrate the fundamentals of drawing line weights, types, and their uses in construction documents
- Demonstrate the ability to communicate information using orthographic project, isometric, and perspective drawings
- Apply material symboling, graphic symboling and dimensioning to construction details
- Develop basic construction details

**Evaluation:**

Final course grades for this course consist of the following elements:

In-Person Class Attendance .....	Deduction only (see below notes)
Projects (6 * 50 points) .....	300 points
Final Project .....	100 points
Quizzes (5 * 10 points) .....	50 points
Material Symboling Exercise .....	10 points
Plan Reading Exercise .....	20 points
Notebook & Portfolio .....	20 points
<b>Total</b>	<b>500 points*</b>

\*Notes: the total will be adjusted to determine the final course grades:

- To deduct 10 points for each occurrence of unexcused absence beyond one occurrence
- To deduct 5 points for each occurrence of tardiness or **leaving class early without the assigned project completed**

The adjusted total score will be the basis for determining final grades, and the following adjusted total scores will receive the indicated grade – the percentages are given for reference purposes only; **never count on the % given by your Canvas** to determine your final course grade:

- If the adjusted total score is greater than or equal to 90% (450 points)                      A
- If the adjusted total score is greater than or equal to 80% (400 points)                      B
- If the adjusted total score is greater than or equal to 70% (350 points)                      C
- If the adjusted total score is greater than or equal to 60% (300 points)                      D
- If the adjusted total score is less than 60% (300 points)    F



### Required Materials:

- Drafting equipment and supplies (see attached Appendix A for a list)
- 11x17 vellum papers
- 11x17 three-ring binder (1-1/2" to 2" thick) for portfolio; 11x17 spiral binders are also acceptable.
- 8.5x11 three-ring binder (1" to 1-1/2" thick) for notebook

### Course Schedule:

- Students should expect changes to this tentative schedule and are responsible for adapting to the changes. The instructors should inform students of schedule changes as soon as possible.
- \* Unless noted otherwise, **all projects (#1 through #6) are due at the start of Tuesday class** in the indicated week. For example, Project #2 drawings are due at the start of Tuesday class in Week#3. All projects including final project should be turned in **on 11 x 17 copy papers, not stapled**, for grading. For Union Copy Center location, see Appendix B.
- ^ **Quizzes are turned in through Canvas by 11:59 pm, Thursday** of the indicated week. For example, Quiz#1 is due Thursday of the second week of the semester.

WK# (First class date)	TOPICS	*Due TUE 2:30 pm	^Due THUR 11:59 pm
1 (8/18)	Course Introduction Project #1. Lines		
2 (8/25)	Lettering Project #2. Title Page	Project #1 (50 pts)	Quiz #1 (10 pts)
3 (9/1)	Scale Reading Project #3. Orthographic	Project #2 (50 pts)	Quiz #2 (10 pts)
4 (9/8)	Project #4. Isometric & Oblique	Project #3 (50 pts)	Quiz #3 (10 pts)
5 (9/15)	Project #5. Dimensioning Material Symboling Plan Reading	Project #4 (50 pts)	Material Symboling (10 pts) and Plan Reading (20 pts) Exercises Due <b>4:20pm</b> , Quiz #4 (10 pts)
6 (9/22)	Project #6. Floor Plan	Project #5 (50 pts)	Quiz #5 (10 pts)
7 (9/29)	Final Project	Project #6 (50 pts)	Notebook & Portfolio (20 pts) Due <b>2:30 pm</b>
8	Final Project (100 pts): <b>Due Tuesday, October 6, 2:30 pm</b>		

### Description of Grade Elements:

- **Projects** (6 EA x 50 points = a total of 300 points)
  - There will be a total of six (6) weekly projects, worth 50 points each, before the final project. Class time will be used to work on the project while the instructor is available for questions and clarifications.
  - Projects should be **turned in on 11 x 17 copy papers for grading**, with the original vellum retained by the student for the portfolio. When a project requires multiple sheets, do not staple them together.
  - Each student will be responsible to complete each project prior to the deadline (see above the Course Schedule). Unless otherwise notified, each project will be due at the beginning of Tuesday class a week after it was assigned. For example, Project#1 is assigned out in Week 1 and will be due back by 2:30 pm, Tuesday of Week 2.
- **Final Project** (100 points)
  - Each student will be required to complete a final project during the last week of the course. Final project is also turned in on 11 x 17 copy papers.

- **Quizzes** (5 EA x 10 points = a total of 50 points)
  - There will be a total of five (5) quizzes, administered through Canvas, that are worth 10 points each. Questions will be derived from lecture and handouts.
  - Unless otherwise notified, each quiz will be due at the end of day Thursday after it was assigned (see the Course Schedule on the previous page). For example, Quiz#2 is assigned out during Week 2 and will be due at Canvas by 11:59 pm, Thursday of Week 3.
  
- **Notebook (8.5x11) & Portfolio (11x17):** 16 + 4 = 20 points total
  - Each student is to create and maintain throughout the semester a dedicated three-ring, 8.5 x 11 binder notebook. All notebooks must include (1) a cover page on the outside of the notebook (include university and department names, course number and title, semester, and student name), (2) a label on the spine (include the course number and title, semester, and student name), (3) a “Table of Contents” with matching labeled tabs on separate sheets – tab labels should be typed or neatly printed, and (4) all handouts provided and class notes taken by the student.
  - It is recommended the notebook be organized into sections corresponding to the weekly topics shown on the Course Schedule. For example, a tab divider may be labeled as “Week #2” while the Table of Contents lists, under the same heading “Week #2,” the scheduled topics (“Lettering - Project #2. Title Page”), class notes, and handouts. Pages within each section should be ordered according to the listing in the Table of Contents but do not need to be numbered.
  - In addition to notebook, each student is to maintain a portfolio that compiles the six projects and one final project (original and copy drawings). However, at the time the student turns in the portfolio (see the Course Schedule), it should include original and copy drawings of the six projects only. Similar to the notebook, the portfolio must have a cover on the outside; however, no spine label or table of contents are required for the portfolio.

### Course Policies:

- **Attendance** is mandatory and expected at every class.
  - Unexcused absence is subject to deduction of 10 points for each occurrence beyond one occurrence.
  - Each occurrence of tardiness or **leaving class early without the assigned project completed** is subject to deduction of 5 points.
  - Excused absences are to be requested and approved prior to the beginning of the class period. Approved absences are at the discretion of the instructor and will be considered on a case by case basis.
  - If an absence is due to illness, a doctor’s or physician assistant’s note is required for the absence to be excused.
  - Missing/leaving class for internship/job interviews on K-State campus is not automatically considered excused absence, and the student should be able to demonstrate they made reasonable efforts to schedule interviews outside of class time.
  - Missing class for internship/job interviews at a remote location other than K-State campus will be considered an excused absence, provided that the student notifies the instructor in advance.
  
- **Late work** will not be reviewed and will be **given a grade of ZERO (0)**. This rule applies to all required work.
  - “Late work” is defined as any work turned in not by the designated deadline or in the prescribed manner. For example, an online quiz completed on time but turned in only via hard copy or email will be considered late and will not be graded.
  - If the student encounters a situation that justifies an extension of time to complete a given assignment, the student should email, prior to the deadline for the assignment, the instructor with a justification and **specifically request for an extension of time**.
  - Real emergencies, as determined at the sole discretion of the instructor, that delayed the student’s submission of an assignment may be considered on an individual basis. The student should email the instructor as soon as possible.
  
- **Grading and Appeal for Grades**

- Properly submitted work in time will be graded within a week from the deadline, and grades will be posted to Canvas – there will be no announcements that inform grade posting. Students are responsible to check their grades for each assignment on Canvas.
- Any appeal for initial grades should be made to the instructor within a week from the date that the graded work was returned to the student. Initial grades on Canvas, if not appealed within the due time, are final, and the instructor will give no consideration to re-grade.

### **Departmental Policies:**

- The classroom is to be regarded as a professional business environment “class office.” Therefore, professional behavior is expected at all times. Start preparing now for the expectations of future employers.
- All cell phones and other electronic devices are to be silenced or turned off during class. If any of these devices interrupt class, then you may be asked to leave for the remainder of the class period, thereby counted as an absence for the class period. A second disruptive occurrence may result in being dropped from the class.
- No food, beverage and tobacco products are permitted in the classroom. **Keep the classroom clean** by properly disposing of all trash, newspapers, etc. at the end of class.

### **University and College of Engineering Policies:**

- **Statement Regarding Academic Honesty**  
Kansas State University has an Honor System based on personal integrity, which is presumed to be sufficient assurance in academic matters one's work is performed honestly and without unauthorized assistance. Undergraduate and graduate students, by registration, acknowledge the jurisdiction of the Honor System. The policies and procedures of the Honor System apply to all full and part-time students enrolled in undergraduate and graduate courses on-campus, off-campus, and via distance learning. The honor system website can be reach via the following URL: [www.ksu.edu/honor](http://www.ksu.edu/honor).

A component vital to the Honor System is the inclusion of the Honor Pledge which applies to all assignments, examinations, or other course work undertaken by students. The Honor Pledge is implied, whether or not it is stated: **"On my honor, as a student, I have neither given nor received unauthorized aid on this academic work." A grade of XF can result from a breach of academic honesty.** The F indicates failure in the course; the X indicates the reason is an Honor Pledge violation.

- **Statements Regarding Students with Disabilities**  
Students with disabilities who need classroom accommodations, access to technology, or information about emergency building/campus evacuation processes should contact the Student Access Center and/or their instructor. Services are available to students with a wide range of disabilities including, but not limited to, physical disabilities, medical conditions, learning disabilities, attention deficit disorder, depression, and anxiety. If you are a student enrolled in campus/online courses through the Manhattan or Olathe campuses, contact the [Student Access Center](mailto:accesscenter@k-state.edu) at [accesscenter@k-state.edu](mailto:accesscenter@k-state.edu), 785-532-6441.
- **Statement Defining Expectations for Classroom Conduct**  
All student activities in the University, including this course, are governed by the [Student Judicial Conduct Code](#) as outlined in the Student Governing Association [By Laws](#), Article V, Section 3, number 2. Students who engage in behavior that disrupts the learning environment may be asked to leave the class.
- **Statement Regarding Wearing of Face Coverings**  
To protect the health and safety of the K-State community, students, faculty, staff and visitors must wear face coverings over their mouths and noses while on K-State campuses in all hallways, public spaces, classrooms and other common areas of campus buildings, and when in offices or other work spaces or outdoor settings when 6-foot social distancing cannot be maintained. In addition, all students, faculty, and staff are required to take [the COVID-19 and Face Mask Safety training](#). Employees who need reasonable accommodations and

assistance related to required face coverings may contact the ADA coordinator at [charlott@k-state.edu](mailto:charlott@k-state.edu), and students needing accommodations may contact the Student Access Center at [accesscenter@k-state.edu](mailto:accesscenter@k-state.edu).

In classrooms, faculty have the right to deny a student entry into the room if the student is not wearing a face covering. Students not wearing a face covering will be reminded to do so and offered a clean face covering, if one is available. If the student does not comply, the faculty member will ask the student to leave the space, and if available, join the class remotely. As a last resort, campus police will be called. The faculty members will complete the [Code of Conduct form](#) and the Office of Student Life will look further into the issue and take the non-compliance with the request to leave into consideration of further accountability measures.

At no point should the professor or other students put themselves into an unsafe situation while attempting to enforce the face-covering policy. Manhattan campus police: 785-532-6412.

- **Classroom Cleaning Protocols**

Instructors will end class five minutes early to ensure classrooms and teaching labs are disinfected between every class change with cleaning supplies provided in each space. The class leaving the room will be expected to spray workspaces that were used during the class. The class entering the room will be asked to wipe down the spaces that have been sprayed. Detailed information on cleaning protocols is available in the [COVID-19 Cleaning and Disinfecting Guidance](#) document.

- **[Statement for Copyright Notification](#)**

Copyright 2020 (Jongchul Song) as to this syllabus and all lectures. During this course, students are prohibited from selling notes to or being paid for taking notes by any person or commercial firm without the express written permission of the professor teaching this course. In addition, students in this class are not authorized to take notes for subsequent posting on commercial websites. The K-State Student Conduct Code prohibits any illegal or unauthorized taking, selling, or distribution of class notes. Students violating this provision will be subject to discipline under the conduct code, including but not limited to possible expulsion from K-State. **Copyright shall be extended to electronic files of lecture and course materials.**

- **Weapons Policy Statement**

Kansas State University prohibits the possession and use of firearms, explosives, and other weapons on any University campus, with certain limited exceptions, which include use of weapons as part of approved University Programs, use of weapons by law enforcement personnel, and the lawful concealed carrying of handguns, as provided in the weapons policy, which may be found at: <http://www.k-state.edu/police/weapons/index.html>

You are encouraged to take the online weapons policy education module (<http://www.k-state.edu/police/weapons/index.html>) to ensure you understand the requirements of the policy, including the requirements related to concealed carrying of handguns on campus. Students possessing a concealed handgun on campus must be 21 years of age or older and otherwise lawfully eligible to carry. All carrying requirements of the policy must be observed in this class, including but not limited to the requirement that a concealed handgun be completely hidden from view, securely held in a holster that meets the specifications of the policy, carried without a chambered round of ammunition, and that any external safety be in the “on” position.

If an individual carries a concealed handgun in a personal carrier such as a backpack, purse, or handbag, the carrier must remain within the individual’s exclusive and uninterrupted control. This includes wearing the carrier with a strap, carrying or holding the carrier, or setting the carrier next to or within the immediate reach of the individual.

Each individual who lawfully possesses a handgun on campus shall be wholly and solely responsible for carrying, storing and using that handgun in a safe manner and in accordance with the law, Board policy and

University policy. All reports of suspected violation of the weapons policy are made to the University Police Department by picking up any Emergency Campus Phone or by calling 785-532-6412.

- **Campus Safety Statement**

Kansas State University is committed to providing a safe teaching and learning environment for student and faculty members. In order to enhance your safety in the unlikely case of a campus emergency make sure that you know where and how to quickly exit your classroom and how to follow any emergency directives. To view additional campus emergency information go to the University's main page, [www.k-state.edu](http://www.k-state.edu), and click on the Emergency Information button.

- **Harassment Policy**

“I believe that engineers must not only be the people who know how to do things right, but also those who know the right things to do” (quote by Dr. Joseph Bordogna, National Science Foundation). One purpose of your education is to help you develop skills, approaches, and abilities that are necessary for effective teamwork, and for your success in your profession and as a citizen. It is important that you understand your rights and responsibilities regarding the University’s Sexual and Racial Harassment policies. (Full text of the policies can be found on KSU’s web site at [www.ksu.edu/uau/fhbook/fhxj.html](http://www.ksu.edu/uau/fhbook/fhxj.html). If you experience any situations, in or out of class, that seem inappropriate or that make you uncomfortable, a list of resources and courses of action to assist you can be found on the College of Engineering web site at [www.engg.ksu.edu/students/statement-harrassment.htm](http://www.engg.ksu.edu/students/statement-harrassment.htm).

- **Tobacco Use Policy**

The College of Engineering is designated a tobacco-free workplace and the use of tobacco products, including cigarettes, cigars, and smokeless tobacco, is prohibited in any college building, facility, or vehicle. It is the responsibility of each college member (faculty, staff, or student) to adhere to and enforce the policy, and to inform visitors of this policy. If a student, faculty member or college employee continues to disregard the policy, he/she may lose access privileges.

**Date of Last Update:** Friday, August 7, 2020

**Appendix A: DRAFTING EQUIPMENT  
to Syllabus  
CNS 210 Graphic Communication I**

Note that the required drafting equipment in this course will be needed for another course  
CNS 321 Graphic Communication II in a later semester and  
thus the student should keep the equipment and supplies for later use.

**Required**

11x17 Vellum Paper (50 sheet pad)  
Tracing paper 18" x 20 yd  
30/60 Triangle 12"  
30/60 Triangle 4"  
45/90 Triangle 12"  
45/90 Triangle 4"  
Ames Lettering Guide  
Architect Scale  
Circle Template  
Dusting Brush  
Dry Cleaning Pad  
Erasers  
Erasing Shield  
Drafting Dots (Masking tapes, 3/4" wide, work better)  
Mechanical pencils 0.3, 0.5, 0.7, 0.9mm (HB Lead)

\*\*Kits are available at the Union Bookstore and Little Apple Art. Note the kit does not include vellum papers, which should be purchased separately. Individual items may be purchased through the Union Bookstore, Little Apple Art, Staples, Hobby Lobby, or Amazon.

**Optional**

Adjustable Triangle  
30x42 Metal Edge Drawing Board (for off-campus drafting)  
H, 2H, 4H lead for selected pencils  
T-Square  
Combination compass with Adapter  
Large Mesh Kit Bag  
Cork Back Ruler 24"



**Appendix B: Location of Union Copy Center  
to Syllabus  
CNS 210 Graphic Communication I**

**NORMAL HOURS**

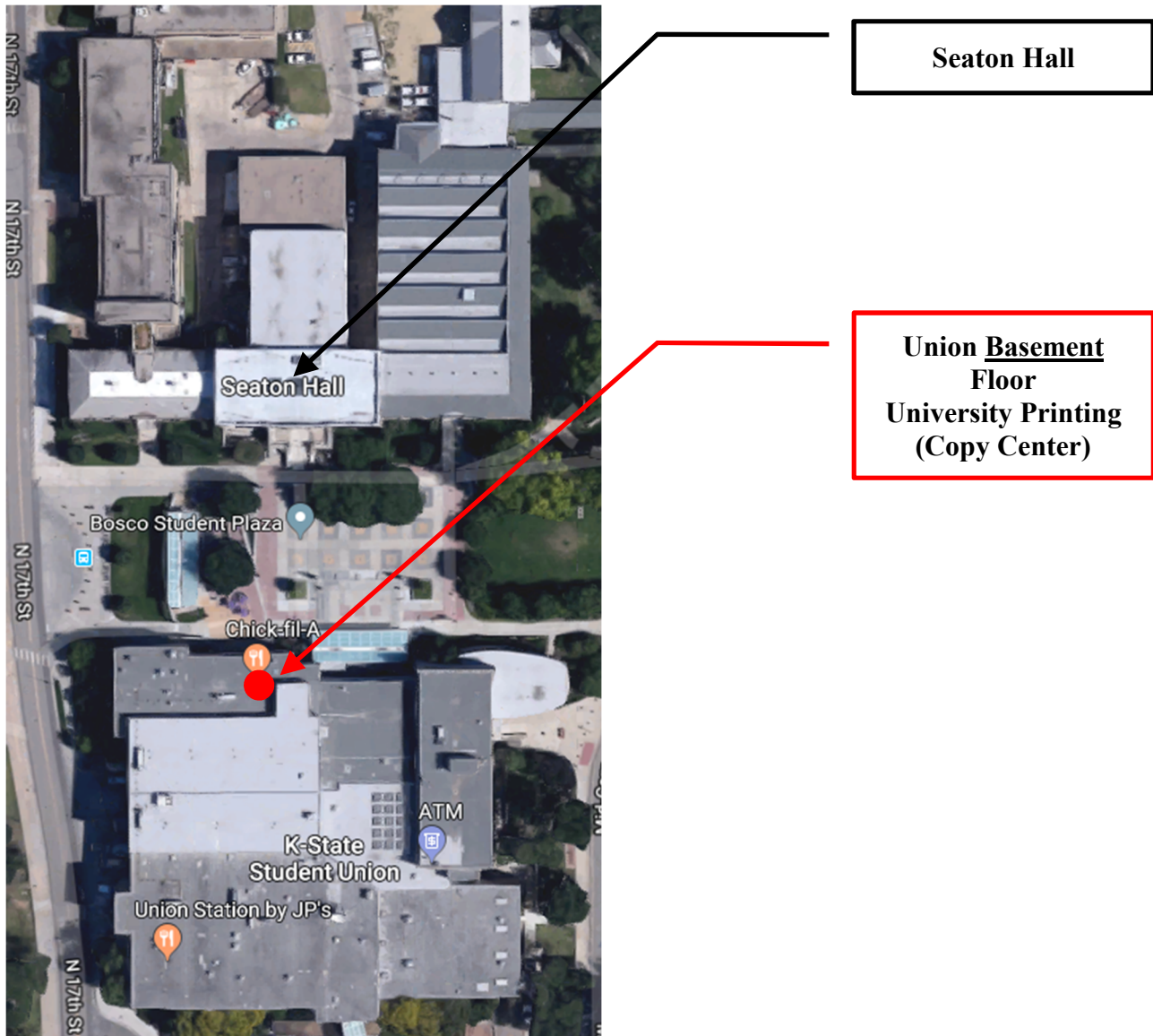
**Mon-Fri: 8:00 am-5:00 pm**

**Sat and Sun: Closed**

**PHONE: 785-532-6596**

Question: Where in the UNION to go and get 11x17 copies of my vellum drawings?

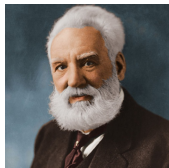
Answer: Find the “University Printing” shop (copy center) in the **basement** of UNION, whose approximate location is indicated by a dot ● in the map below.



## 1. THE BASICS

- a. Instructor **Dan Hall** Seaton 2082 (old 254B) [danhall@k-state.edu](mailto:danhall@k-state.edu) (785) 341-1774
- b. Fall 2020 Office Hours **8:00 am - 8:30 am on Tuesday and Thursday**  
**11:30 am - 12:00 pm on Tuesday and Thursday**  
**1:30 pm - 3:00 pm on Monday and Wednesday**  
**And by appointment. There are no stupid questions**
- c. Course Description The study of construction materials, their properties, selection and use
- d. Class Schedule Tuesday and Thursday at 8:30 am and 9:30 am and 10:30 am in Seaton 2014


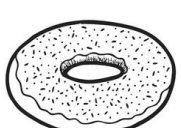
### e. Student Learner Outcomes



1. Understanding of building materials and their use
2. Working knowledge of building systems and construction methods
3. Introduction to construction terminologies
4. Calculation of building material quantities
5. Development of handwriting skills and notebook organization

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## 2. THE RULES

- a. Presence Prompt attendance is expected in this class  
If you must miss a class, you shall make arrangements in advance to cover all homework assignments, projects, and lecture notes. All arrangements to be emailed to the instructor for consideration. **Turning in work early is always accepted**  
All unforeseen absences (sickness and family issues) to be excused thru Dean's Office
- 
- b. In Class Attendance is expected at every class meeting  
Questions and discussion are welcomed, and ENCOURAGED  
Remember, this is your education  
Food, drink, and phone conversations are not permitted. Please CLEAN up your area !
- 
- c. Course Book, other Books and Reference Materials
1. Majority of course information will be PRESENTED IN CLASS on the board (photos, questions, and checking the Instructor's math skills are encouraged)
  2. **Required Course Book = Constructive Learning: Building MATERIALS by Robinett and Hall**
  3. Recommended = Building Construction Illustrated by Francis DK Ching (any edition)
  4. Also Good Information = How Buildings Learn by Stewart Brand
- d. Notebook You are required to develop a 3 ring loose leaf notebook for your use during the semester, and for future reference. Notebooks shall be tabbed, labeled, referenced with a table of contents, and contain all handouts, homework, and quizzes plus exams. Notebooks shall be complete with front cover indicating your name, "CONSTRUCTION MATERIALS", "FALL 2020", and a computer generated or hand drawn image relating to construction materials. Originality is always encouraged. Back cover shall be copy of one page of your handwritten class notes, from the blank pages provided for your use in the course book. Spine shall include your name, CONSTRUCTION MATERIALS, and FALL 2020.



e. Copyright All course materials and presentations carry a copyright © 2020 Nine Gables. During this course students are prohibited from selling notes to or being paid for taking notes by any person or commercial firm without the express written permission of the Instructor.

f. Disclaimer The instructor reserves the right to modify and/or add items to this information.

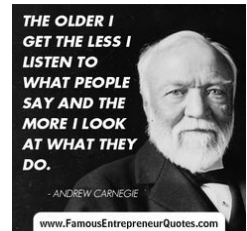
g. Academic Integrity, Accommodations for Students with Disabilities, Campus Safety, Harassment, and Expectations for Classroom Conduct are subject to guidelines of Kansas State University, Carl R Ice College of Engineering, GE Johnson Department of Architectural Engineering and Construction Science, and Dan Hall.

### 3. THE RESULTS

Letter Grades Grades will be based on a percentage of total points possible  
 A = 92 to 100% B = 83 to 91% C = 74 to 82% D = 65 to 73% F = 0 to 64%

For What It's Worth Subject to Change With Notice

Homework and Quizzes	~ 567
Four Scheduled Exams	~ 519
Notebook	~ 42
Pundit Paper	~ 105
TOTAL Points Possible	~ 1232
Attendance and Attitude	~ Letter Grade Adjuster



All of the assignments are required to be completed - no exceptions Late Work = ZERO  
 All exams will be open book, and the Constructive Learning Course Book is the book that is allowed  
 Just this single solitary bound book (no loose sheets)  
 Course Books are available for \$28.50 + tax at Able Printing in downtown Manhattan

### 4. THE PROCESS

- a. READ all the way thru, then take a deep breath
- b. LISTEN 1. to your client 2. to your boss 3. to your instructor 4. to your consultant/expert
- c. ORGANIZE by compiling a list of criteria and creating a check list. Then use it !
- d. SORT out the BS - do not add more
- e. DRAW a sketch - start with a rough one
- f. ASK questions - any missing info ? This will require research
- g. CREATE your solution after you have completed the steps above (or develop your own)
- h. BE PREPARED to "defend" your solution with facts and critical thinking

If you can't, you don't have a solution



**CNS 231 – Statics A****Fall 2020**

**Instructor:** Kyle H Larson, Ph.D., P.E.  
**Office:** Seaton 2039  
**Office Hours:** As posted on Door  
**E-mail:** [kyle@ksu.edu](mailto:kyle@ksu.edu)  
**Office Phone No.:** (785) 532-5964

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**Course Description**

The class is dedicated to the composition and resolution of forces; equilibrium of force systems; application of the principles of statics to problems, including force analyses of simple structures. Prerequisites: MATH 150 or equivalent, PHYS 113, and MATH 205 or MATH 220.

**Class Schedule**

MWF 8:30 -9:20 AM Seaton 2074

**Student Learning Outcomes**

Upon completion of this course, students should demonstrate the following proficiencies:

1. Reactions
2. Force equilibrium
3. Moment equilibrium
4. Truss Analysis

**Course Outline**

See attached schedule at end

**Evaluation**

**Grading Scale:** (Based on percentages)

A	90.0-100%
B	80.0-89.9%
C	70.0-79.9%
D	65.0-69.9%
F	64.9% and below

**Evaluation Values:**

Homework	10%
Exams (3)	50%
Final Exam (ONL)	15%
Quizzes	20%
Notebook	5%

**Homework**

Homework will be assigned on a regular basis and must be submitted into Canvas (no assignments received via email will be accepted) by 11:59 PM on the assigned due date. Scans must be in pdf format. Late work will not be accepted for credit. Homework must be neat, organized, and completed on engineering problem paper. Use of a straight edge in preparation of homework assignments is recommended. Refer to the attached handout for the homework format and a sample problem. Points will be deducted from homework assignments that are not neat, organized or do not follow the required format. Homework is to include “classroom problems” in addition to problems assigned online (points will be deducted for missing classroom problems).

**Attendance**

Prompt attendance is encouraged in this course, as it will be in the professional setting. Do not come to class late.

**Quizzes/Exams/Final Exam**

Quizzes may be given at any time. No makeup quizzes. All in class quizzes will be open note but closed book on your honor (if administered online). All exams will be closed book/notes. No makeup exams, if an exam is missed for a valid reason documented reason, it is the student’s responsibility to reschedule. Solutions must be complete, well organized, on one side of the paper only, and answers clearly marked. Assumptions must be clearly marked and justified.

**Notebook**

Students are required to keep a digital notebook. Instructor will provide more details.

**Text and Reference Materials**

Required – *Statics and Strength of Materials (7th Ed.)*, by H.W. Morrow & Robert P. Kokernak and *Course Handouts and Postings*: Canvas.

**Classroom Policy**

Students are responsible for all material presented and distributed during class meetings. First day of class find a “partner” who will obtain a copy of all handouts and course material when you are not in attendance. Food, drinks, caps/hats, electronic devices, newspapers, or other distracting items will not be permitted.

**Academic Honesty**

Kansas State University has an Honor and Integrity System based on personal integrity, which is presumed to be sufficient assurance that, in academic matters, one's work is performed honestly and without unauthorized assistance. Undergraduate and graduate students, by registration, acknowledge the jurisdiction of the Honor and Integrity System. The policies and procedures of the Honor and Integrity System apply to all full and part-time students enrolled in undergraduate and graduate courses on-campus, off-campus, and via distance learning. A component vital to the Honor and Integrity System is the inclusion of the Honor Pledge which applies to all assignments, examinations, or other course work undertaken by students. The Honor Pledge is implied, whether or not it is stated: "On my honor, as a

student, I have neither given nor received unauthorized aid on this academic work." A grade of XF can result from a breach of academic honesty. The F indicates failure in the course; the X indicates the reason is an Honor Pledge violation.

### **Students with Disabilities**

Students with disabilities who need classroom accommodations, access to technology, or information about emergency building/campus evacuation processes should contact the Student Access Center and/or their instructor. Services are available to students with a wide range of disabilities including, but not limited to, physical disabilities, medical conditions, learning disabilities, attention deficit disorder, depression, and anxiety. If you are a student enrolled in campus/online courses through the Manhattan or Olathe campuses, contact the Student Access Center at [accesscenter@k-state.edu](mailto:accesscenter@k-state.edu), 785-532-6441; for K-State Polytechnic campus, contact Julie Rowe, Diversity, Inclusion and Access Coordinator, at [jarowe@ksu.edu](mailto:jarowe@ksu.edu) or call 785-826-2971.

### **Classroom Conduct**

All student activities in the University, including this course, are governed by the Student Judicial Conduct Code as outlined in the Student Governing Association By Laws, Article V, Section 3, number 2. Students who engage in behavior that disrupts the learning environment may be asked to leave the class.

### **Face Coverings**

To protect the health and safety of the K-State community, students, faculty, staff and visitors must wear face coverings over their mouths and noses while on K-State campuses in all hallways, public spaces, classrooms and other common areas of campus buildings, and when in offices or other work spaces or outdoor settings when 6-foot social distancing cannot be maintained. In addition, all students, faculty, and staff are required to take the COVID-19 and Face Mask Safety training. Employees who need reasonable accommodations and assistance related to required face coverings may contact the ADA coordinator at [charlott@k-state.edu](mailto:charlott@k-state.edu), and students needing accommodations may contact the Student Access Center at [accesscenter@k-state.edu](mailto:accesscenter@k-state.edu).

In classrooms, faculty have the right to deny a student entry into the room if the student is not wearing a face covering. Students not wearing a face covering will be reminded to do so and offered a clean face covering, if one is available. If the student does not comply, the faculty member will ask the student to leave the space, and if available, join the class remotely. As a last resort, campus police will be called. The faculty members will complete the Code of Conduct form and the Office of Student Life will look further into the issue and take the non-compliance with the request to leave into consideration of further accountability measures.

At no point should the professor or other students put themselves into an unsafe situation while attempting to enforce the face-covering policy. Manhattan campus police: 785-532-6412

### **Classroom Cleaning Protocols**

Instructors will end class five minutes early to ensure classrooms and teaching labs are disinfected between every class change with cleaning supplies provided in each space. The class leaving the room

will be expected to spray workspaces that were used during the class. The class entering the room will be asked to wipe down the spaces that have been sprayed. Detailed information on cleaning protocols is available in the COVID-19 Cleaning and Disinfecting Guidance document.

### Campus Safety

Kansas State University is committed to providing a safe teaching and learning environment for student and faculty members. In order to enhance your safety in the unlikely case of a campus emergency make sure that you know where and how to quickly exit your classroom and how to follow any emergency directives. To view additional campus emergency information go to the University's main page, [www.k-state.edu](http://www.k-state.edu), and click on the Emergency Information button, located at the bottom of the page.

### Student Resources

K-State has many resources to help contribute to student success. These resources include accommodations for academics, paying for college, student life, health and safety, and others found at [www.k-state.edu/onestop](http://www.k-state.edu/onestop)

### Disclaimer

The instructor reserves the right to modify and/or add to this syllabus if necessary

### Course Outline

<b>Date</b>	<b>Class Period</b>	<b>Lecture Topic</b>
8/17	1	Class Introductions and Syllabus Review
8/19	2	Math Review
8/21	3	Force Systems
8/24	4	Force Components & Resultants
8/26	5	Resultants of Coplanar Force Systems
8/28	6	Resultants of Coplanar Force Systems
8/31	7	Forces in Equilibrium
9/2	8	Forces in Equilibrium
9/4	9	Moment of a Force
9/7	X	NO CLASS
9/9	10	Moment of a Force
9/11	11	Resultant of Parallel Forces
9/14	12	Review
<b>9/16</b>	<b>13</b>	<b>Exam #1 – In class</b>
9/18	14	Resultant of Parallel Forces
9/21	15	Resultant of Non-Parallel Forces
9/23	16	Resultant of Distributed Forces
9/25	17	Couples, Force-Couple Systems
9/28	18	Couples, Force-Couple Systems
9/30	19	To Be Determined
10/2	20	Reactions
10/5	21	Reactions

10/7	22	Reactions
10/9	23	Reactions
10/12	24	Reactions
10/14	25	Method of Joints
10/16	26	Method of Joints
10/19	27	Review
<b>10/21</b>	<b>28</b>	<b>Exam #2 – In class</b>
10/23	29	Method of Joints
10/26	30	Method of Joints
10/28	31	Method of Sections
10/30	32	Method of Sections
11/2	33	Method of Sections
11/4	34	Method of Sections
11/6	35	Pulleys
11/9	36	Pulleys
11/11	37	Pulleys
11/13	38	Frames
11/16	39	Review
<b>11/18</b>	<b>40</b>	<b>Exam #3 – In class</b>
11/20	41	Frames
11/23	X	NO CLASS
11/25	X	NO CLASS
11/27	X	NO CLASS
11/30	42	Online - Frames
12/2	43	Online - Review
12/4	44	Online - Review
	<b>45</b>	<b>Final Exam - Canvas</b>



**CNS 321 Graphic Communications II (3 cr)**

**FALL 2020**

**Instructor:** Don Phillippi (Lab D: TuTh 8:30 – 10:20 am)  
**Office:** Seaton Hall, Room 2064  
**Office Hours:** Posted by the office door  
**E-mail:** [dphillip@k-state.edu](mailto:dphillip@k-state.edu) **Office Phone:** 785-532-3574

**Instructor:** Jongchul Song (Lecture: Mo 2:30 – 3:45 pm; and Lab B: WeFr 2:30 – 4:20 pm)  
**Office:** Seaton Hall, Room 2054  
**Office Hours:** MTUF 8:30-9:30, W 8:30-10:30  
**E-mail:** [jonsong@k-state.edu](mailto:jonsong@k-state.edu) **Office Phone:** 785.532.3572

**Instructor:** Ray Yunk (Lab A: WeFr 8:30 – 10:20 am)  
**Office:** Seaton Hall, Room 2042  
**Office Hours:** Posted by the office door  
**E-mail:** [yunk@k-state.edu](mailto:yunk@k-state.edu) **Office Phone:** 785.532.5964

**Course Description:** Study of construction methods and procedures in the assembly of building materials. One hour recitation and six hours lab a week. Prerequisite: CNS 210 and professional program standing in ARE or CNSM.

**Class Schedule:**

Lecture (Song) <sup>1</sup>	M 2:30 pm – 3:45 pm	Leasure 013A
Lab A (Yunk) <sup>2</sup>	W, F 8:30 am - 10:20 am	Seaton 2009
Lab B (Song) <sup>2</sup>	W, F 2:30 pm - 4:20 pm	Seaton 2074
Lab D (Phillippi) <sup>2</sup>	T, Th 8:30 am - 10:20 am	Seaton 2074

<sup>1</sup> Instruction Mode: Hybrid/Blended.

- The class will be split into three groups, A, B, and D, which coincide with students' lab section. Each group will meet in person for lecture **every three weeks**. To find out which group is scheduled to meet in person for a given week's lecture, please see Course Schedule on page 7 and under 'Group to Attend Lecture In Person' column.
- The other two groups that do not attend lecture in person will participate in live streamed lecture during the class time - in case of technical difficulty with live streaming, recorded lecture will be posted to the lecture Canvas. Lectures, project assignments, and quizzes will be posted to the **lecture** Canvas and will be made accessible starting 2:30 pm every Monday. Hard copies of project assignments will be handed out at the start of lecture to in-person attendees and can be picked up from the lecture instructor's office after lecture.
- Completed drawing projects except final project part 3 shall be submitted to the student's **lab** instructor **on paper** by the start of the student's first lab a week after the project was assigned. Final project part 3 will be submitted electronically by December 2, Wednesday a week after Thanksgiving.
- Quizzes are administered online and should be completed **online** at the **lecture** Canvas by Wednesday 11:59 pm of the same week the quiz was assigned.

	<b>Assignments posted at</b>	<b>Submitted to/at</b>	<b>Grades posted at</b>
Projects	Lecture Canvas*	Lab Instructor, on paper†	Lecture Canvas
Quizzes	Lecture Canvas	Lecture Canvas, online	Lecture Canvas
Others	Varies^	Lab Instructor	Lab Canvas

\* Hard copies are also available for pickup from the lecture instructor.

† Except final project part 3 which should be submitted online at the lecture Canvas by 11:59 pm, Wednesday after Thanksgiving

^ Plan reading exercises will be handed out during lab class time while model assignments are to be posted at lecture Canvas.

<sup>2</sup> Instruction Mode: In Person. The minimum of 80% attendance is required to pass the course with a C or better grade.

**Student Learning Outcomes:**

Upon completion of this course, the student shall demonstrate the following proficiencies:

- Identify materials used in building assemblies
- Identify basic construction techniques
- Demonstrate an understanding of construction sequences
- Demonstrate familiarity with the current methods and standards used in architectural detailing
- **Demonstrate improved graphic communication abilities**
- **Illustrate construction materials in relationship to one another as an assembly or as part of a larger system**

**Evaluation:**

Final course grades for this course consist of the following elements – for details see below:

Attendance .....	Deduction only
4 points deduction for each lab session absent/left early without completing a given week’s assignment beyond two occurrences;	
<b>If absent more than 20% of the scheduled lab sessions, that is, six lab sessions, the course grade will be capped to a D.</b>	
Projects (9 EA x 100 points) .....	900 points
Final Project .....	300 points
Quizzes (9 EA x 10 points) .....	90 points
Model .....	100 points
<u>Plan Reading Exercises (2 x 25 points) .....</u>	<u>50 points</u>
Total	1,440 points

The total score after attendance related adjustment will be the basis for determining final course grades, and the following scores are guaranteed to receive the indicated grade, **provided that lab attendance meets the minimum required 80%** – the approximate percentages below are given for reference purposes only; **never count on the % or course grade given by your Canvas** to determine your final course grade:

- If the adjusted total score is greater than or equal to 1,339 points (93% of 1,440 points) A
- If the adjusted total score is greater than or equal to 1,224 (85% of 1,440 points) B
- If the adjusted total score is greater than or equal to 1,123 (78% of 1,440 points) C
- If the adjusted total score is greater than or equal to 1,008 (70% of 1,440 points) D
- If the adjusted total score is less than 1,008 (70% of 1,440 points) F

**Each LAB Instructor will determine final course grades and reserves the right to relax these grade levels** at a future date, but in no circumstance will the grade levels be raised. For example, students earning overall 1,335 points will never be assigned a grade less than B but may be raised to an A at their LAB Instructor’s discretion.

**Textbook and Other Materials:**

- OPTIONAL Text: *Building Construction Illustrated*, Ching, 5<sup>th</sup> ed. ISBN: 9781118458341
- REQUIRED: Drafting equipment and supplies (see attached a list on Appendix A)

**Description of Grade Elements:**

- **Attendance**
  - Attendance is expected at every scheduled class meeting, both lecture and lab. If absent/leaving early no more than two lab sessions, no deduction will apply. For occurrences of absence or early departure exceeding the above mentioned limits, 4 points will be deducted each time the student is absent/leaving early without completing a given week’s assignment.
  - If occurrences of absence or early departure reach 20% (**six lab sessions**), the student’s **course grade will be capped to a D**. In order to pass the course with a C or better grade, the minimum of **80% attendance is required for lab**.
  - If the student notifies their instructor **prior to the start of the second lab of a given week** that they have completed the assignment, **upon the instructor’s verification** they will be waived on attending the second lab and will receive no deduction.



- **Projects** (a total of 900 points) and **Final Project** (300 points)
  - There will be a total of nine (9) weekly drawing projects and one final project in this course – the final project consists of three parts, each of which is worth 100 points. Typically, a given project will be introduced during lecture on Monday where the background material will be presented. Lab time will be used to work on the project while the lab instructor is available for questions and clarifications. Beyond the lab time, questions may be directed to the lecture instructor.
  - Students are responsible to individually complete each project prior to the deadline – see below Course Policies section for examples of unauthorized collaboration, which will be reported to the University Honor & Integrity system. **All weekly and final project drawings shall be done on the instructor-provided 11x17 template papers. For grading purposes, all project drawings except for final project part 3 should be turned in as 11 x 17 copies**, except for final project part 3, which is to be submitted as a single image file. For location of the Union Copy Center, see the last page of this syllabus.
- **Quizzes** (a total of 90 points)
  - There will be a total of 9 (nine) quizzes, each worth 10 points, which are administered through the **lecture** Canvas and shall be completed online by the end of day each Wednesday.
  - Quizzes are intended to review lecture and scaffold the drawing projects, thus containing questions that need answered in order to complete the project properly. It is strongly recommended to complete the quiz **before** completing the drawing project.

### Course Policies:

- **Projects and quizzes are to be completed by individual efforts**, and collaboration is permitted only for plan reading exercises and model project. Examples of unauthorized collaboration includes:
  - Tracing other students' drawings/sketches, including those from a previous semester
  - Taking details or dimensions directly off of other students' drawings/sketches, including those from a previous semester
  - Taking pictures of other students' drawings/sketches to use as a reference, including those from a previous semester
  - Providing your own or someone's drawings/sketches to other students to trace, take details or dimensions off of, or take pictures of to use as a reference

When it comes to projects and quizzes, it is strongly recommended to **direct questions to the lab and/or lecture instructor, rather than talking things over and trying to help each other figure things out**. When potential unauthorized collaboration or other academic integrity issue is found, the instructor shall report alleged violation to the university Honor and Integrity office.

- **Late work** will not be reviewed and will be **given a grade of ZERO (0)**. This rule applies to all graded work.
  - "Late work" is defined as any work turned in not by the designated deadline or in the prescribed manner. For example, a Canvas quiz worked on but not submitted on time will be considered late and will not be graded.
  - If the student encounters a situation that justifies an extension of time to complete a given assignment, the student should email, prior to the deadline for the assignment, the instructor with a justification and **specifically request for an extension of time**.
  - Emergencies, as determined at the sole discretion of the instructor, that delayed the student's submission of an assignment may be considered on an individual basis. The student should email the instructor as soon as possible.
- **Grading and Appeal for Grades**
  - As a general rule, properly submitted work on time will be graded within a week from the deadline, and grades will be posted to the **lecture** Canvas except for plan reading exercises and model. **Students are responsible to check their grades at lab/lecture Canvas**.
  - Any **appeal for initial grades** should be made to the instructor **within one week from the date that the graded work was returned to the class**. Initial grades, if not appealed within the due time, are final, and the instructor will give no consideration to re-grade.

### Departmental Policies:

- The classroom is to be regarded as a professional business environment “class office.” Therefore, professional behavior is expected at all times. Start preparing now for the expectations of future employers.
- All cell phones and other electronic devices are to be silenced or turned off during class. If any of these devices interrupt class, then you may be asked to leave for the remainder of the class period. This will be counted as an absence for the class period. A second disruptive occurrence may result in being dropped from the class.
- No food, beverage and tobacco products are permitted in the classroom. **Keep the classroom clean by properly disposing of all trash, newspapers, etc. at the end of class.**

### University and College of Engineering Policies:

- **Statement Regarding Academic Honesty**  
Kansas State University has an Honor System based on personal integrity, which is presumed to be sufficient assurance in academic matters one's work is performed honestly and without unauthorized assistance. Undergraduate and graduate students, by registration, acknowledge the jurisdiction of the Honor System. The policies and procedures of the Honor System apply to all full and part-time students enrolled in undergraduate and graduate courses on-campus, off-campus, and via distance learning. The honor system website can be reach via the following URL: [www.ksu.edu/honor](http://www.ksu.edu/honor) .

A component vital to the Honor System is the inclusion of the Honor Pledge which applies to all assignments, examinations, or other course work undertaken by students. The Honor Pledge is implied, whether or not it is stated: "**On my honor, as a student, I have neither given nor received unauthorized aid on this academic work.**" A grade of XF can result from a breach of academic honesty. The F indicates failure in the course; the X indicates the reason is an Honor Pledge violation.

- **Statements Regarding Students with Disabilities**  
Students with disabilities who need classroom accommodations, access to technology, or information about emergency building/campus evacuation processes should contact the Student Access Center and/or their instructor. Services are available to students with a wide range of disabilities including, but not limited to, physical disabilities, medical conditions, learning disabilities, attention deficit disorder, depression, and anxiety. If you are a student enrolled in campus/online courses through the Manhattan or Olathe campuses, contact the [Student Access Center](#) at [accesscenter@k-state.edu](mailto:accesscenter@k-state.edu), 785-532-6441.
- **Statement Defining Expectations for Classroom Conduct**  
All student activities in the University, including this course, are governed by the [Student Judicial Conduct Code](#) as outlined in the Student Governing Association [By Laws](#), Article V, Section 3, number 2. Students who engage in behavior that disrupts the learning environment may be asked to leave the class.
- **Statement Regarding Wearing of Face Coverings**  
To protect the health and safety of the K-State community, students, faculty, staff and visitors must wear face coverings over their mouths and noses while on K-State campuses in all hallways, public spaces, classrooms and other common areas of campus buildings, and when in offices or other work spaces or outdoor settings when 6-foot social distancing cannot be maintained. In addition, all students, faculty, and staff are required to take [the COVID-19 and Face Mask Safety training](#). Employees who need reasonable accommodations and assistance related to required face coverings may contact the ADA coordinator at [charlott@k-state.edu](mailto:charlott@k-state.edu), and students needing accommodations may contact the Student Access Center at [accesscenter@k-state.edu](mailto:accesscenter@k-state.edu).

In classrooms, faculty have the right to deny a student entry into the room if the student is not wearing a face covering. Students not wearing a face covering will be reminded to do so and offered a clean face covering, if one is available. If the student does not comply, the faculty member will ask the student to leave the space, and if available, join the class remotely. As a last resort, campus police will be called. The faculty members will complete the [Code of Conduct form](#) and the Office of Student Life will look further into the issue and take the non-compliance with the request to leave into consideration of further accountability measures.

At no point should the professor or other students put themselves into an unsafe situation while attempting to enforce the face-covering policy. Manhattan campus police: 785-532-6412.

- **Classroom Cleaning Protocols**

Instructors will end class five minutes early to ensure classrooms and teaching labs are disinfected between every class change with cleaning supplies provided in each space. The class leaving the room will be expected to spray workspaces that were used during the class. The class entering the room will be asked to wipe down the spaces that have been sprayed. Detailed information on cleaning protocols is available in the [COVID-19 Cleaning and Disinfecting Guidance](#) document.

- **[Statement for Copyright Notification](#)**

Copyright 2020 (Jongchul Song) as to this syllabus and all lectures. During this course, students are prohibited from selling notes to or being paid for taking notes by any person or commercial firm without the express written permission of the professor teaching this course. In addition, students in this class are not authorized to take notes for subsequent posting on commercial websites. The K-State Student Conduct Code prohibits any illegal or unauthorized taking, selling, or distribution of class notes. Students violating this provision will be subject to discipline under the conduct code, including but not limited to possible expulsion from K-State. Copyright shall be extended to electronic files of lecture and course materials.

- **Weapons Policy Statement**

Kansas State University prohibits the possession and use of firearms, explosives, and other weapons on any University campus, with certain limited exceptions, which include use of weapons as part of approved University Programs, use of weapons by law enforcement personnel, and the lawful concealed carrying of handguns, as provided in the weapons policy, which may be found at: <http://www.k-state.edu/police/weapons/index.html>

You are encouraged to take the online weapons policy education module (<http://www.k-state.edu/police/weapons/index.html>) to ensure you understand the requirements of the policy, including the requirements related to concealed carrying of handguns on campus. Students possessing a concealed handgun on campus must be 21 years of age or older and otherwise lawfully eligible to carry. All carrying requirements of the policy must be observed in this class, including but not limited to the requirement that a concealed handgun be completely hidden from view, securely held in a holster that meets the specifications of the policy, carried without a chambered round of ammunition, and that any external safety be in the “on” position.

If an individual carries a concealed handgun in a personal carrier such as a backpack, purse, or handbag, the carrier must remain within the individual’s exclusive and uninterrupted control. This includes wearing the carrier with a strap, carrying or holding the carrier, or setting the carrier next to or within the immediate reach of the individual.

Each individual who lawfully possesses a handgun on campus shall be wholly and solely responsible for carrying, storing and using that handgun in a safe manner and in accordance with the law, Board policy and University policy. All reports of suspected violation of the weapons policy are made to the University Police Department by picking up any Emergency Campus Phone or by calling 785-532-6412.

- **Campus Safety Statement**

Kansas State University is committed to providing a safe teaching and learning environment for student and faculty members. In order to enhance your safety in the unlikely case of a campus emergency make sure that you know where and how to quickly exit your classroom and how to follow any emergency directives. To view additional campus emergency information go to the University's main page, [www.k-state.edu](http://www.k-state.edu), and click on the Emergency Information button.

- **Harassment Policy**

“I believe that engineers must not only be the people who know how to do things right, but also those who know the right things to do” (quote by Dr. Joseph Bordogna, National Science Foundation). One purpose of your education is to help you develop skills, approaches, and abilities that are necessary for effective teamwork, and for your success in your profession and as a citizen. It is important that you understand your rights and responsibilities regarding the University’s Sexual and Racial Harassment policies. (Full text of the policies can be found on KSU’s web site at [www.ksu.edu/uau/fhbook/fhxj.html](http://www.ksu.edu/uau/fhbook/fhxj.html). If you experience any situations, in or out of class, that seem inappropriate or that make you uncomfortable, a list of resources and courses of action to assist you can be found on the College of Engineering web site at [www.engg.ksu.edu/students/statement-harrasment.htm](http://www.engg.ksu.edu/students/statement-harrasment.htm).

- **Tobacco Use Policy**

The College of Engineering is designated a tobacco-free workplace and the use of tobacco products, including cigarettes, cigars, and smokeless tobacco, is prohibited in any college building, facility, or vehicle. It is the responsibility of each college member (faculty, staff, or student) to adhere to and enforce the policy, and to inform visitors of this policy. If a student, faculty member or college employee continues to disregard the policy, he/she may lose access privileges.

## CNS 321 Graphic Communication II – FALL 2020

### Course Schedule:

- All project drawings except for final project part 3 are to be submitted on paper to the student's lab instructor at the start of the first lab a week after the project was assigned. Final project part 3 should be submitted online at the lecture Canvas by 11:59 pm, Wednesday after Thanksgiving. Project drawings are to be drawn on the instructor-provided 11x17 template papers, and 11x17 copies of drawings should be submitted for grading. Location of the Union Copy Center can be found on Appendix B.
- All quizzes are to be turned in through lecture Canvas by Wednesday 11:59 pm of the same week it was assigned.
- The instructors should inform students of schedule changes as soon as possible. Students are responsible for adapting to the informed changes.

WK# (Lecture Date)	TOPICS	Group to Attend Lecture In Person	DUE Start of First Lab	DUE Wed 11:59 pm at Lecture Canvas
1 (8/17)	Course Introduction Project #1. Lines and Lettering	Lab A (Ray)		Quiz #1 (10 pts)
2 (8/24)	Project #2. Concrete Foundation	Lab B (Jongchul)	Project #1 (100 pts)	Quiz #2 (10 pts)
3 (8/31)	Project #3. Masonry	Lab D (Don)	Project #2 (100 pts)	Quiz #3 (10 pts)
4 (9/7 No Lecture)	Plan Reading	N/A	Project #3 (100 pts)	Plan Reading #1 (25 pts) and #2 (25 pts) on paper by end of first and second lab
5 (9/14)	Project #4. RFI Sketch	Lab A (Ray)		Quiz #4 (10 pts)
6 (9/21)	Project #5. Structural Steel	Lab B (Jongchul)	Project #4 (100 pts)	Quiz #5 (10 pts)
7 (9/28)	Project #6. Roofing	Lab D (Don)	Project #5 (100 pts)	Quiz #6 (10 pts)
8 (10/5 Online Lecture; No second lab)	Model	N/A	Project #6 (100 pts)	
9 (10/12)	Project #7. Commercial Wall Section	Lab A (Ray)	Model (100 pts)	Quiz #7 (10 pts)
10 (10/19)	Project #8. Doors and Windows	Lab B (Jongchul)	Project #7 (100 pts)	Quiz #8 (10 pts)
11 (10/26)	Project #9. Stairs	Lab D (Don)	Project #8 (100 pts)	Quiz #9 (10 pts)
12 (11/2)	Final Project Part 1 – Isometric Section Sketch	Lab A (Ray)	Project #9 (100 pts)	
13 (11/9)	Final Project Part 2 – Wall Section	Lab B (Jongchul)	Final Part 1 (100 pts)	
14 (11/16)	Final Project Part 3 – Isometric Section Sketch	Lab D (Don)	Final Part 2 (100 pts)	
15 (11/23 No Lecture or Lab)	Thanksgiving Break			
16 (11/30 No Lecture or Lab)	Final Part 3 (100 pts) Due Wednesday, Dec 2, 11:59 pm at Lab Canvas			
17 (12/7 No Lecture or Lab)	Finals			

**Date of Last Update:** Wednesday, August 12, 2020

**Appendix A to Syllabus  
CNS 321 Graphic Communication II**

**DRAFTING EQUIPMENT**

**Required**

30/60 Triangle 12”

30/60 Triangle 4”

45/90 Triangle 12”

45/90 Triangle 4”

Ames Lettering Guide

Architect Scale

Circle Template

Dusting Brush

Erasers

Erasing Shield

Drafting Dots (Masking tapes, ¾” wide, work better)

Mechanical pencils 0.3, 0.5, 0.7, 0.9mm (HB Lead)

\*\*Kits are available at the Union Bookstore and Little Apple Art. Individual items may be purchased through the Union Bookstore, Little Apple Art, Staples, Hobby Lobby, or Amazon.

**Optional**

Adjustable Triangle

30x42 Metal Edge Drawing Board (for off-campus drafting)

H, 2H, 4H lead for selected pencils

T-Square

Combination compass with Adapter

Large Mesh Kit Bag

Cork Back Ruler 24”



**Appendix B to Syllabus  
CNS 321 Graphic Communication II**

**Location of Union Copy Center**

**PHONE:** 785-532-6596

**NORMAL HOURS**

**Mon:** 8:00 am-5:00 pm

**Tue:** 8:00 am-5:00 pm

**Wed:** 8:00 am-5:00 pm

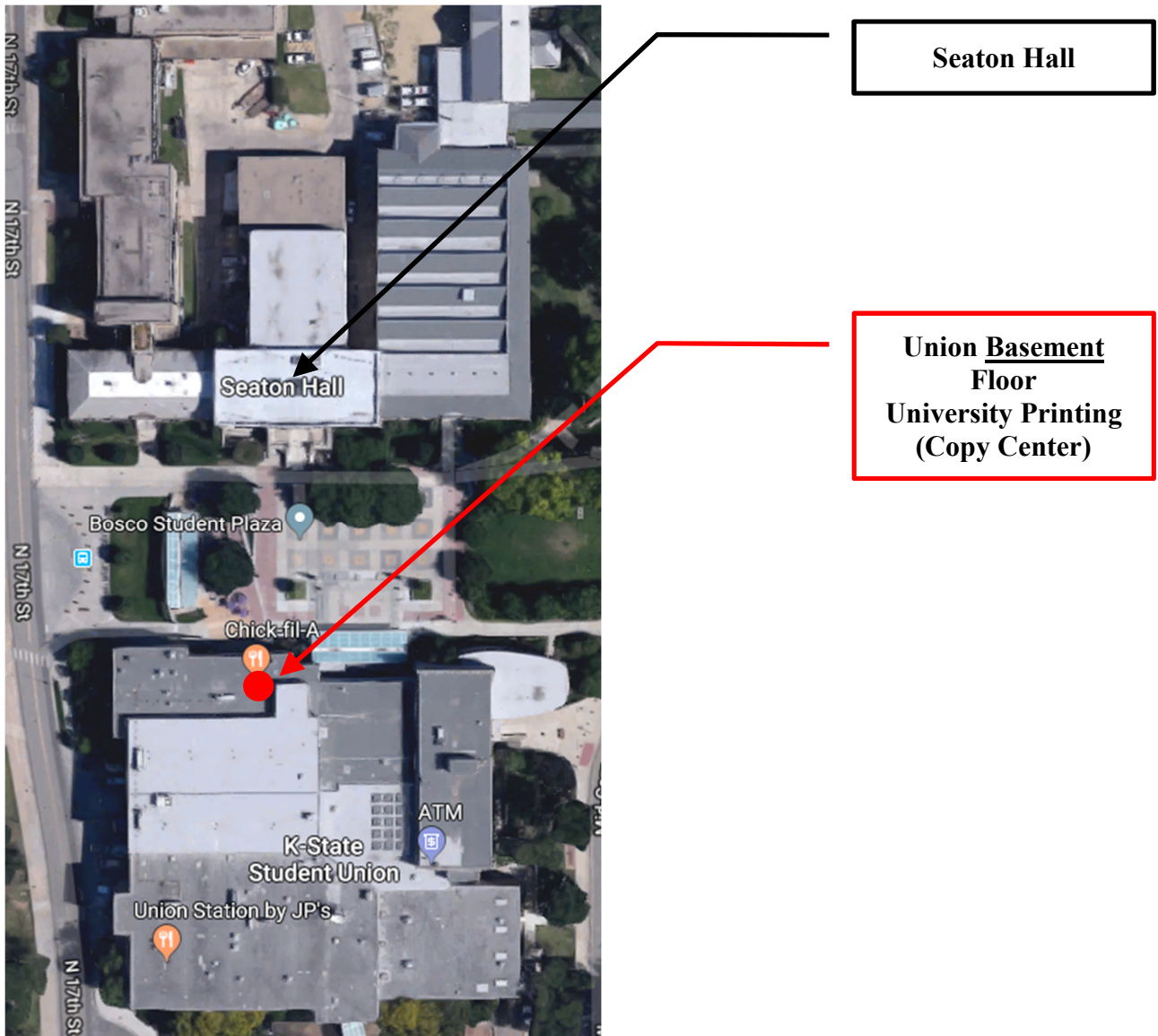
**Thu:** 8:00 am-5:00 pm

**Fri:** 8:00 am-5:00 pm

**Sat and Sun:** *Closed*

Question: Where in the UNION to go and get 11x17 copies of my drawings?

Answer: Find the “University Printing” shop (copy center) in the **basement** of UNION, whose approximate location is indicated by a dot ● in the map below.





**CNS 325 Construction Documents  
Fall 2020**

**Instructor:** Ray Yunk  
**Office:** Seaton 2042  
**Office Hours:** M 9-11a, MTWU 1:30p-2:30p  
**E-mail:** [yunk@ksu.edu](mailto:yunk@ksu.edu)  
**Phone No.:** (785) 565-1299

**Course Description**

Per Catalog: An introduction to the reading/understanding of documents used in construction: building codes, accessibility standards, specifications, drawings, shop drawings, and other submittals.

**Class Schedule:** TU 8:30p-11:20p Seaton 2072

**Student Learning Outcomes:** Upon completion of this course, the student shall be able demonstrate the ability to:

1. Understand key built environment concepts & interpretation of codes and regulations
2. Understand the components of construction documents
3. Analyze construction specifications and documents
4. Understand the purpose of bid and front-end documents
5. Apply safety methods to construction operations.
6. Understand common construction document terminology
7. Understand the relationships, participants, and responsibilities of project participants in the review, interpretation, and application of the construction documents.

**Grading Scale:**

<u>%</u>	<u>Grade:</u>	<u>Approximate Evaluation Values:</u>	
90-100	= A	Homework/Exercises	700 pts
80-89	= B	Exams	300 pts
70-79	= C	Total	1,000 pts
60-69	= D		

**Homework:** Homework will be assigned on a regular basis and be required to be turned in or uploaded to Canvas when due in the format prescribed. Late work will not be accepted for credit. The instructor may consider emergencies or other issues on a case-by-case basis. Points may be deducted from assignments that are not neat and organized. Assignments are to be completed by individual effort, unless otherwise

noted. However, working with others to compare answers or increase understanding is encouraged.

### **Attendance/Participation Requirements:**

Attendance/Participation is expected for all class periods. Students will be allowed one unexcused absence and one unexcused tardy. For each additional unexcused absence 10 points will be deducted from your overall grade. For each additional unexcused tardy 5 points will be deducted from your overall grade.

### **Text/Reference Materials**

No textbooks are required for this class. **Purchase of plan sets is required - the price and payment method will be confirmed during the first week of class.** Reference materials will also be provided by the instructor via Canvas.

### **Course philosophy:**

#### **1. Preparation & Discipline are not optional-they are minimum expectations.**

It's your education and career. The true value of your career is in direct proportion to your commitment to excellence, no matter what your field of endeavor.

#### **2. Your attendance and attention are required.** Tardiness and unexcused absences are not acceptable. You are to be ready to participate at the beginning of class and stay until class is over on assigned attendance days.

#### **3. Communicate.** This is the key in our business. Your ability to communicate and work effectively as an individual as well as a team member is vital. Communication is not only being able to express thoughts verbally or in writing but includes listening and understanding as well. **All questions are welcomed!**

#### **4. Professionalism.** Your work and actions should be professional in appearance and thought. Lack of attention to detail indicates carelessness or lack of professional demeanor.

### **Department Classroom Policy:**

The classroom is to be regarded as the "class office" and therefore professional behavior is expected at all times. Start preparing now for the expectations of future employers. **Your attention is required to participate. Cell phones and electronic devices should be put away during the lecture portion of the class.** If you or any of your devices interrupt class, then you will be asked to leave for the remainder of the class period. This will be indicated as an absence for the class period. A second disruptive occurrence results in dropping the class. (Department Policy)

No food or drink is permitted in the classroom. Also, no hats/caps, newspapers, electronic devices or other distracting items will be allowed.

### **University and College of Engineering Policies:**

Incorporated by reference through separate document **Fall 20 syllabi statements – Yunk**

## Course Topics

- Introduction to Construction Documents
  - Terminologies, project types, organization, responsible parties, types of documents
- Construction Document Reviews/Exercises
  - Plans
    - Architectural
    - Civil
    - Structural
    - Mechanical
      - Heating, Ventilation, and Air Conditioning
      - Plumbing
      - Fire Protection
    - Electrical
      - Lighting
      - Power Distribution
      - Communication
  - Other Documents
    - Specifications
    - Shop Drawings/Submittals
    - RFI's, Change Orders, Addenda, etc.
    - Cut Sheets

**CNS 510 – Technology for Management of the Construction Process  
Fall 2020**

**Instructor: Dave Dalbey**

**Office: Seaton 2031**

**Office Hours:**

*In-Person: Tuesdays 12:30-2:30 PM (appointment recommended)*

*Virtual (via Zoom): Thursdays 2:30-4:30 PM (by appointment only)*

*Other times by appointment*

**E-mail: [dalbey@ksu.edu](mailto:dalbey@ksu.edu)**

**Phone Number: 913.302.1760**

**Course Description**

Per Course Catalog: Fundamentals and application of computer aided technology in the management of the construction process.

**Prerequisites: ARE 312 – Intro to BIM, CNS 641 – Construction Estimating, and CNS 645 – Construction Scheduling and Cost Control**

**Schedule** T 2:30-4:20 PM in Seaton 2027 (Some Presentations in Seaton 2046)

**Student Learning Outcomes**

Upon completion of this course, students should demonstrate the following proficiencies:

1. Appraise construction documents for the purposes of understanding construction documents.
2. Demonstrate electronic-based technology to manage the construction process by applying electronic-based technology to manage the construction process.
3. Utilize good practices of bulk data management and understand how the industry is using technology to track.
4. Understand uses and practical management of BIM and its coordination on construction projects.

**Evaluation**

**Grade Scale:**

A	93-100%
B	85-92%
C	78-84%
D	70-77%
F	69% and below

Grades will be based on percentage of points possible:  

$$\% \text{ grade} = \frac{\text{Points earned}}{\text{Total Points Possible}} \times 100$$

**Approximate Evaluation Values:**

Problems/Assignments/Quizzes/Attendance	285 points
Projects	100 points
<u>Exams</u>	<u>150 points</u>
Total	535 points

\*Overall points may vary depending on course pace and content changes throughout the semester.

\*Unexcused absences will be considered when tallying final grades.

**Homework**

Homework will be assigned on a regular basis and will be predominantly submitted electronically. As a rule, late work will not be accepted for credit. The instructor may consider emergencies or other issues on a case-by-case basis. Points may be deducted from assignments that are not neat and organized. Assignments are to be completed by individual effort, unless otherwise noted. However, working with others to increase understanding is encouraged.

**Exams/Quizzes/Final Exam**

There are two (2) exams anticipated during the semester to test your comprehension, knowledge, and understanding of the subject matter presented. The exams are formatted around the application of the construction technology being studied thus given in the form of an exercise. Short quizzes may be administered periodically to monitor your preparation for class. At this time, no final exam is scheduled.

**Notebook**

Notebooks are not currently planned for the course.

**Attendance**

Prompt attendance is required in this course, as it will be in a professional office. Each student is responsible for all information introduced in class. If you miss a class, understand it is your responsibility to obtain the notes you missed and/or any assignments from a classmate. Additionally, unexcused absences will be considered by the instructor when determining final grades.

***\*Fall 2020 Update: With these uncertain times and health concerns of students and their families, please do your best to communicate any special needs or causes of unexpected absences to the instructor at your earliest convenience. Accommodations will be made on a case-by-case basis.***

**Textbook**

No text book will be required for the course. Additional selected readings from other sources may be provided and/or assigned.

**Document Use**

A large portion of the files, models, and construction documents have been donated by industry for the college and student's benefit. The intent is that these materials will be used within the framework of the class and are not permitted to be copied or distributed.

**Department Classroom Policy**

The classroom will be managed similar to a professional office setting. Questions, discussion, and team activities will be encouraged. Food, drinks, caps/hats, newspapers, cell phone usage, or other distracting items will not be permitted. Daily housekeeping will be required.

All student activities in the University, including this course, are governed by the Student Judicial Conduct Code as outlined in the Student Governing Association By Laws, Article VI, Section 3, number 2. Students who engage in behavior that disrupts the learning environment may be asked to leave the class

***\*Fall 2020 Update: Students are expected to clean their computer equipment (mouse, keyboard, etc.), as well as the desktops before and after class with University-provided cleaning supplies.***



### **Academic Accommodations**

Students who demonstrate the need for classroom accommodations, access to additional technologies, or information about emergency building/campus evacuation processes should contact the Student Access Center and/or their instructor. Services are available to students with a wide range of demonstrated conditions including, but not limited to, physical disabilities, medical conditions, learning disabilities, attention deficit disorder, depression, and anxiety. If you are a student enrolled in campus/online courses through the Manhattan or Olathe campuses, contact the [Student Access Center](http://www.k-state.edu/uauc) at [accesscenter@k-state.edu](mailto:accesscenter@k-state.edu), 785-532-6441; and/or the instructor as soon as possible, preferably within the first week of the class.

### **Harassment Policy**

It is important that you understand your rights and responsibilities regarding the University's Sexual and Racial Harassment policies. Full text of the policies can be found on KSU's web site at [www.ksu.edu/uauc/fhbook/fhxj.html](http://www.ksu.edu/uauc/fhbook/fhxj.html). If you experience any situations, in or out of class, that seem inappropriate or that make you uncomfortable, a list of resources and courses of action to assist you can be found on the College of Engineering web site at [www.engg.ksu.edu/students/statement-harrasment.htm](http://www.engg.ksu.edu/students/statement-harrasment.htm).

### **Statement Regarding Academic Honesty**

Kansas State University has an Honor and Integrity System based on personal integrity, which is presumed to be sufficient assurance that, in academic matters, one's work is performed honestly and without unauthorized assistance. Undergraduate and graduate students, by registration, acknowledge the jurisdiction of the Honor System. The policies and procedures of the Honor System apply to all full and part-time students enrolled in undergraduate and graduate courses on-campus, off-campus, and via distance learning.

The Honor and Integrity system website can be reached via the following URL: [www.ksu.edu/honor](http://www.ksu.edu/honor). A component vital to the Honor and Integrity System is the inclusion of the Honor Pledge which applies to all assignments, examinations, or other course work undertaken by students. The Honor Pledge is implied, whether or not it is stated: "On my honor, as a student, I have neither given nor received unauthorized aid on this academic work." A grade of XF can result from a breach of academic honesty. The F indicates failure in the course; the X indicates the reason is an Honor Pledge violation.

### **Statement on Academic Freedom**

Kansas State University is a community of students, faculty, and staff who work together to discover new knowledge, create new ideas, and share the results of their scholarly inquiry with the wider public. Although new ideas or research results may be controversial or challenge established views, the health and growth of any society requires frank intellectual exchange and is thus essential to any university's mission.

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**Tobacco Use Policy**

The College of Engineering is designated a tobacco-free workplace and the use of tobacco products, including cigarettes, cigars, and smokeless tobacco, is prohibited in any college building, facility, or vehicle. It is the responsibility of each college member (faculty, staff, or student) to adhere to and enforce the policy, and to inform visitors of this policy. If a student, faculty member or college employee continues to disregard the policy, he/she will be reported to the Dean and may lose access privileges.

**Copyright Issues**

Copyright 2020 (Dave Dalbey) as to this syllabus and all lectures. During this course students are prohibited from selling notes or being paid for taking notes by any person or commercial firm without the express written permission of the professor teaching this course. In addition, students in this class are not authorized to provide class notes or other class-related materials, files, or documents to any other person or entity, other than sharing them directly with another student taking the class for purposes of studying, without prior written permission from the professor teaching this course.

**Disclaimer**

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**Semester Outline / Schedule**  
**(subject to change at instructor's discretion)**

**PROCORE**

Project Management Software (Procore)

- Project Start Up / Document Control / Drawings
- Change Management / RFIs
- Submittals / Daily Reports / Meeting Minutes
- EXAM #1

**BLUEBEAM**

Document Control / Review (Bluebeam)

- Properties / Layers / Signatures
- Search / Take-off / Stamps / Tool Sets
- Site Logistics
- EXAM #2

**BIM SOFTWARE**

BIM Management (Navisworks, BIM 360 Glue, SketchUp)

- Navigation / Properties
- Clash Detection
- Project Visualization
- Problem Solving / Finding Issues

**TECHNOLOGY PRESENTATIONS**

- Final Project, Paper, and Presentations

**CNS 524 – Steel & Timber Construction**

**Professor:** Don Phillippi  
**Office:** 2064 Seaton Hall  
**Office Hours:** See Office Door  
**E-mail:** dphillip@k-state.edu  
**Office Phone:** 785-532-3574

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**CNS 524 Steel & Timber Construction**

Determination of loads, critical load combinations, load path, and stability of structures.  
Principles of design, fabrication and erection of steel and timber structures.

Prerequisite: CE 331 – Strength of Materials

**Class Meeting:** MWF 9:30 AM -10:20 AM

**Room:** S 2014

**Student Learning Outcomes**

Upon completion of this course the student should be able to:

1. Apply the physical properties of steel and timber members.
2. Understand the construction process, loads, critical load combinations, load paths of a structure, and shear/moment diagrams.
3. Evaluate steel and timber framing systems and terminology using written, graphic and oral skills.
4. Understand steel structural systems and components such as roofs, walls, floors, decks, beams and columns.
5. Understand NDS code provisions for timber through the execution of homework assignments.

**Evaluation****Grading Scale**

A ≥ 93

86 ≤ B < 93

78 ≤ C < 86

70 ≤ D < 78

F < 70 in combination with failure to: complete exams; or assignments; or attend class.

**Tentative Evaluation Weight**

Homework	20%
Quizzes	10%
Test 1	20%
Test 2	20%
Test 3	15%
Test 4	15%

Note: All homework assignments and quizzes will count toward the final grade.

## CNS524 Steel & Timber Construction

### Homework

Assignments will be posted online or distributed in class. All homework is to be completed as individual assignments and turned in at the beginning of the class hour on the due date, with one problem of each assignment graded. Homework must be neat and organized and is to be on engineering problem paper. Use of a straight edge in preparation of homework assignments is required. Refer to the attached handout for the homework format and a sample problem. Points will be deducted from homework assignments that are not neat, organized or do not follow the required format.

### Project

No project due to COVID-19 issues.

### Examinations (Quizzes, Tests, Final Exam)

Unannounced quizzes based on previously assigned reading or the previous lecture will be administered throughout the semester. All quizzes will be closed book and closed notes.

The examinations will generally be open code book with one page of notes (one side only) permitted. Solutions must be complete, well organized, on one side of the paper only, and answers clearly marked. Assumptions must be clearly marked and justified. Draw sketches and identify references.

### Notebooks

No notebooks due to COVID-19 issues.

### Textbooks and Reference Materials

Textbooks:

1. *National Design Specification for Wood Construction ASD/LRFD and Supplement*, 2015 Edition, American Forest and Paper Association and the American Wood Council
2. *AISC Steel Manual, 15<sup>th</sup> Edition*, American Institute of Steel Construction
3. Course Handouts and Postings on the CNS524 website on K-State On-Line

Other Recommended Reference Material:

1. *International Building Code*, 2015 Edition, International Code Council
2. *ASCE7-10*

### CNS524 Classroom Policies

Class attendance is strongly encouraged and will be monitored by the instructor. Students are responsible for all material presented and/or distributed during class meetings. Attendance and punctuality are considered normal courtesy extended to the class members and the instructor.

### Department Classroom Policies

The classroom is to be regarded as a professional business environment. Therefore professional behavior is expected at all times. All cell phones, PDA's, iPods, etc. are to be silenced or turned off during class. If any of these devices interrupt class, then you may be asked to leave for the remainder of the class period.

**Food, beverage and tobacco products are not permitted in the classroom. Keep the classroom clean by properly disposing of all trash at the end of class.**

## **KANSAS STATE UNIVERSITY AND COLLEGE OF ENGINEERING POLICIES**

### 1. Statement Regarding Academic Honesty

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2. Statement Regarding Students with Disabilities

Students with disabilities who need classroom accommodations, access to technology, or information about emergency building/campus evacuation processes should contact the Student Access Center and/or their instructor. Services are available to students with a wide range of disabilities including, but not limited to, physical disabilities, medical conditions, learning disabilities, attention deficit disorder, depression, and anxiety. If you are a student enrolled in campus/online courses through the Manhattan or Olathe campuses, contact the Student Access Center at [accesscenter@k-state.edu](mailto:accesscenter@k-state.edu), 785-532-6441; for K-State Polytechnic campus, contact Julie Rowe, Diversity, Inclusion and Access Coordinator, at [jarowe@ksu.edu](mailto:jarowe@ksu.edu) or call 785-826-2971.

#### Additional Information for Faculty:

Faculty members who need assistance with accommodating a student with a documented disability should contact the access services office on the appropriate campus. Assistance may include administration of course exams with extended time and/or distraction reduced environment or providing an alternate format of text materials.

3. Statement Defining Expectations for Classroom Conduct All student activities in the University, including this course, are governed by the Student Judicial Conduct Code as outlined in the Student Governing Association By Laws, Article V, Section 3, number 2. Students who engage in behavior that disrupts the learning environment may be asked to leave the class.

### 4. Statement Regarding Wearing of Face Coverings

To protect the health and safety of the K-State community, students, faculty, staff and visitors must wear face coverings over their mouths and noses while on K-State campuses in all hallways, public spaces, classrooms and other common areas of campus buildings, and when in offices or other work spaces or outdoor settings when 6-foot social distancing cannot be maintained. In addition, all students, faculty, and staff are required to take the COVID-19 and Face Mask Safety training. Employees who need reasonable accommodations and assistance related to required face coverings may contact the ADA coordinator at [charlott@k-state.edu](mailto:charlott@k-state.edu), and students needing accommodations may contact the Student Access Center at [accesscenter@k-state.edu](mailto:accesscenter@k-state.edu).

In classrooms, faculty have the right to deny a student entry into the room if the student is not wearing a face covering. Students not wearing a face covering will be reminded to do so and offered a clean face covering, if one is available. If the student does not comply, the faculty member will ask the student to leave the space, and if available, join the class remotely. As a last resort, campus police will be called. The faculty members will complete the Code of Conduct form and the Office of Student Life will look further into the issue and take the non-compliance with the request to leave into consideration of further accountability measures.



## CNS524 Steel & Timber Construction

At no point should the professor or other students put themselves into an unsafe situation while attempting to enforce the face-covering policy. Manhattan campus police: 785-532-6412

### 5. Classroom Cleaning Protocols

Instructors will end class five minutes early to ensure classrooms and teaching labs are disinfected between every class change with cleaning supplies provided in each space. The class leaving the room will be expected to spray workspaces that were used during the class. The class entering the room will be asked to wipe down the spaces that have been sprayed. Detailed information on cleaning protocols is available in the COVID-19 Cleaning and Disinfecting Guidance document.

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Kansas State University prohibits the possession of firearms, explosives, and other weapons on any University campus, with certain limited exceptions, including the lawful concealed carrying of handguns, as provided in the University Weapons Policy, found at <http://www.k-state.edu/police/weapons/index.html>. You are encouraged to take the online weapons policy education module (<http://www.k-state.edu/police/weapons/index.html>) to ensure you understand the requirements of the policy, including the requirements related to concealed carrying of handguns on campus. Students possessing a concealed handgun on campus must be 21 years of age or older and otherwise lawfully eligible to carry. All carrying requirements of the policy must be observed in this class, including but not limited to the requirement that a concealed handgun be completely hidden from view, securely held in a holster that meets the specifications of the policy, carried without a chambered round of ammunition, and that any external safety be in the "on" position.

If an individual carries a concealed handgun in a personal carrier such as a backpack, purse, or handbag, the carrier must remain within the individual's exclusive and uninterrupted control. This includes wearing the carrier with a strap, carrying or holding the carrier, or setting the carrier next to or within the immediate reach of the individual.

Each individual who lawfully possesses a handgun on campus shall be wholly and solely responsible for carrying, storing and using that handgun in a safe manner and in accordance with the law, Board policy and University policy. All reports of suspected violation of the weapons policy are made to the University Police Department by picking up any Emergency Campus Phone or by calling 785-532-6412.

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## CNS524 Steel & Timber Construction

### 4. Campus Safety Statement

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K-State has many resources to help contribute to student success. These resources include accommodations for academics, paying for college, student life, health and safety, and others found at [www.k-state.edu/onestop](http://www.k-state.edu/onestop)

### 6. Statement on Mental Health

Your mental health and good relationships are vital to your overall well-being. Symptoms of mental health issues may include excessive sadness or worry, thoughts of death or self-harm, inability to concentrate, lack of motivation, or substance abuse. Although problems can occur anytime for anyone, you should pay extra attention to your mental health if you are feeling academic or financial stress, discrimination, or have experienced a traumatic event, such as loss of a friend or family member, sexual assault or other physical or emotional abuse.

If you are struggling with these issues, do not wait to seek assistance. · Kansas State University Counseling Services ([k-state.edu/counseling/](http://k-state.edu/counseling/)) offers free and confidential services to assist you to meet these challenges. · Lafene Health Center (<https://www.k-state.edu/lafene>) has specialized nurse practitioners to assist with mental health. · The Office of Student Life ([k-state.edu/studentlife](http://k-state.edu/studentlife)) can direct you to additional resources.

K-State Family Center offers individual, couple, and family counseling services on a sliding fee scale (<https://www.hhs.k-state.edu/familycenter/>).

Center for Advocacy, Response, and Education (CARE) provides free and confidential assistance for those in our K-State community who have been victimized by violence (<https://www.k-state.edu/care/>).

**CNS528 – Concrete & Masonry Construction**

**Professor:** Don Phillippi  
**Office:** 2064 Seaton Hall  
**Office Hours:** See Office Door  
**E-mail:** dphillip@k-state.edu  
**Office Phone:** 785-532-3574

**CNS528 Concrete & Masonry Construction**

Determination of loads, critical load combinations, load path, and stability of structures.  
Principles of design, fabrication and erection of concrete and masonry structures.  
Prerequisite: CE 331 – Strength of Materials

**Class Meeting:** MWF 10:30 AM -11:20 AM

**Room:** S 2014

**Student Learning Outcomes**

Upon completion of this course, students should be able to:

1. Apply the physical properties of concrete, reinforcing steel and masonry.
2. Understand the construction process, loads, critical load combinations, load paths of a structure, and shear/moment diagrams.
3. Evaluate reinforced concrete and masonry systems and terminology using written, graphic and oral skills.
4. Understand structural systems and components such as roofs, walls, floors, decks, beams and columns.
5. Understand standard ACI code specifications for reinforced concrete and masonry through the execution of homework assignments.

**Evaluation****Grade Scale**

$A \geq 93$   
 $86 \leq B < 93$   
 $78 \leq C < 86$   
 $70 \leq D < 78$   
 $F < 70$  in combination with failure to: complete exams; or assignments; or attend class.

**Tentative Evaluation Weight**

Homework	20%
Quizzes	10%
Test 1	20%
Test 2	20%
Test 3	15%
Test 4	15%

Note: All homework assignments and quizzes will count toward the final grade.

There is not a Final Examination for this course.

## CNS528 Concrete Construction

### Homework

Assignments will be posted online or distributed in class. All homework is to be completed as individual assignments and turned in at the beginning of the class hour on the due date, with one problem of each assignment graded. Homework must be neat and organized and is to be on engineering problem paper. Use of a straight edge in preparation of homework assignments is required. Refer to the attached handout for the homework format and a sample problem. Points will be deducted from homework assignments that are not neat, organized or do not follow the required format.

### Project

No project due to COVID-19 issues.

### Examinations (Quizzes, Tests, Final Exam)

Unannounced quizzes based on previously assigned reading or the previous lecture will be administered throughout the semester. All quizzes will be closed book and closed notes.

The examinations will generally be open code book with one page of notes (one side only) permitted. Solutions must be complete, well organized, on one side of the paper only, and answers clearly marked. Assumptions must be clearly marked and justified. Draw sketches and identify references.

### Notebooks

No notebook due to COVID-19 issues.

### Textbooks and Reference Materials

Textbooks:

1. *American Concrete Institute ACI 318-14 Building Code Requirements for Structural Concrete and Commentary*
2. Course Handouts and Postings on the CNS528 website on K-State On-Line

Reference Codes:

1. *Concrete Structures* by Setareh & Darvas
2. *Building Code Requirements for Masonry Structures (ACI 530-16/ASCE 5-16, TMS 402-16)*

### CNS 528 Classroom Policies

Class attendance is strongly encouraged and will be monitored by the instructor. Students are responsible for all material presented and/or distributed during class meetings. Attendance and punctuality are considered normal courtesy extended to the class members and the instructor.

### Department Classroom Policies

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## CNS528 Concrete Construction

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If an individual carries a concealed handgun in a personal carrier such as a backpack, purse, or handbag, the carrier must remain within the individual's exclusive and uninterrupted control. This includes wearing the carrier with a strap, carrying or holding the carrier, or setting the carrier next to or within the immediate reach of the individual.

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#### 6. Statement on Mental Health

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If you are struggling with these issues, do not wait to seek assistance. · Kansas State University Counseling Services ([k-state.edu/counseling/](http://k-state.edu/counseling/)) offers free and confidential services to assist you to meet these challenges. · Lafene Health Center (<https://www.k-state.edu/lafene>) has specialized nurse practitioners to assist with mental health. · The Office of Student Life ([k-state.edu/studentlife](http://k-state.edu/studentlife)) can direct you to additional resources.

K-State Family Center offers individual, couple, and family counseling services on a sliding fee scale (<https://www.hhs.k-state.edu/familycenter/>).

Center for Advocacy, Response, and Education (CARE) provides free and confidential assistance for those in our K-State community who have been victimized by violence (<https://www.k-state.edu/care/>).



**CNS 534 Heating and Air Conditioning (3 cr.)**  
**Fall 2020**

**Instructor:** Andrew Sneed  
**Office:** Seaton 2041  
**Office Hours:** As posted (Virtual)  
**E-mail:** [asneed@ksu.edu](mailto:asneed@ksu.edu)  
**Office/Cell Phone:** (314) 304-7649

**Course Description**

Per Catalog: Principles of designing, applying, and installing heating and air conditioning systems for buildings.  
Prereqs: CNS 321 – Graphic Comm II.

**Schedule** MWF 9:30-10:20 am **Room** Seaton 2046 / Remote

**Student Learning Outcomes**

Upon completion of the course, the student should be able to:

- Understand basic principles of heat transfer related to human thermal comfort.
- Perform manual and spreadsheet calculations of heating and cooling loads for buildings.
- Perform layout and sizing of basic HVAC air and hydronic systems for small commercial buildings.
- Identify equipment and accessories for HVAC air and hydronic systems for small commercial buildings.
- Understand basic concepts and terminologies for building HVAC air and hydronic mechanical systems.
- Understand the relationships and responsibilities of the mechanical trade contractors with the general construction team including ethical and performance obligations.

**Teaching Philosophy**

A student’s ability to learn thrives in an environment (whether in-person or remote, synchronously or asynchronously) that allows them to become responsible for their own curiosity, questioning and practicing. The semester is setup for you to be presented with introductory concepts that affect every part of a mechanical system (design, installation, end user experience). You will begin to notice mechanical installations around you, to work problems in class, to practice the skills doing routine homework, and evaluate your own progress via exams. A final project will bring all course aspects together.

**Evaluation**

**Grading Scale:**

A	100-90%
B	89.99-80%
C	79.99-70%
D	69.99-60%
F	59.99% and below

Grades will be based on percentage of points possible:

$$\% \text{ grade} = \frac{\text{Points earned}}{\text{Total Points Possible}} \times 100$$

**Evaluation Values** (subject to change during the semester):

Homework/Quizzes	50%
Exams (4 @10% each)	40%
Final Project	10%
<b>Total</b>	<b>100%</b>

Grades, assignments, course handouts, and feedback on assignments will be posted regularly on K-State Canvas.

## Homework

Homework will be assigned on a regular basis and submitted online via Canvas (as posted). Late work will not be accepted. The instructor may consider emergencies or other issues on a case-by-case basis. Points may be deducted from assignments that are not neat and organized. Assignments are to be completed by individual effort, unless otherwise noted. Working with others to increase understanding and promote attitudes of teamwork is encouraged, however.

## Attendance

Prompt attendance is required in this course, as it will be in your professional careers. Excused absences are to be requested and approved prior to the beginning of the class period applied. Approved excused absences are at the discretion of the instructor and will be considered on a case by case basis. If a student has a situation prohibiting them from attending the class during the normal time, they are to address it with the instructor during the first week of classes. If you are absent from class you will miss out on the opportunity to ask questions during the live lectures.

## Quizzes / Tests / Final Exam

Quizzes will be administered periodically on Canvas. Questions will pertain to topics covered in recent previous classes and portions of the mechanical code. Quizzes may not be made up and a zero will be recorded in the gradebook if not submitted by the due date. If a quiz is missed due to an emergency situation, an extension period may be granted. Four exams will be administered during the semester, with a Final Project due during Finals Week.

## Notebook

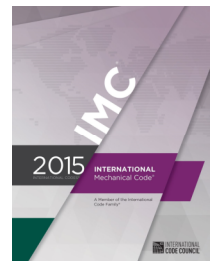
Students are encouraged to develop a notebook for this course for future reference. This can be a hard-copy or digital notebook. Notebooks shall be tabbed, labeled, and contain all class notes, handouts, and assignments. Notebooks shall be kept updated and current at all times.

## Text / Reference Materials

There is no required text for this course. Course materials will be provided as handouts or via download from Canvas. Material needed for weekly online quizzes is available for free access online and will not be provided by the instructor.

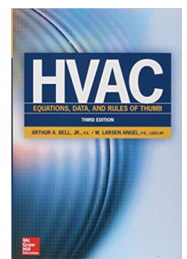
Recommended Text – **2015 International Mechanical Code** (ISBN # 978-1609834791 softcover, ISBN # 978-1609834784 loose leaf)

(This code book is available for free access online but cannot be printed or copied). This code book will be used for online quizzes only. Any handouts required from this text will be made available via Canvas online by the course Instructor.



Recommended Text – **HVAC Equations, Data, and Rules of Thumb** Third Edition (ISBN # 978-0071829595)

(This book provides a vast amount of basic knowledge and summary of many of the topics covered in the course. While the text will not be directly referenced and tested over, I have found it to be an effective reference for professionals in our field)



## Departmental Policies:

- The classroom will be managed like a professional office setting. Therefore, professional behavior is expected at all times. Questions, discussion, and team activities will be encouraged.
- No food, drinks, tobacco products, electronic devices, newspapers, or other distracting items will be permitted in the classroom. Daily housekeeping will be required.
- The use of Canvas discussion boards will be monitored and any inappropriate comments will be reported.

## **University and College of Engineering Policies:**

**Statement Regarding Academic Honesty:** Kansas State University has an Honor and Integrity System based on personal integrity, which is presumed to be sufficient assurance that, in academic matters, one's work is performed honestly and without unauthorized assistance. Undergraduate and graduate students, by registration, acknowledge the jurisdiction of the Honor and Integrity System. The policies and procedures of the [Honor and Integrity System](#) apply to all full and part-time students enrolled in undergraduate and graduate courses on-campus, off-campus, and via distance learning. A component vital to the Honor and Integrity System is the inclusion of the Honor Pledge which applies to all assignments, examinations, or other course work undertaken by students. The Honor Pledge is implied, whether or not it is stated: "On my honor, as a student, I have neither given nor received unauthorized aid on this academic work." A grade of XF can result from a breach of academic honesty. The F indicates failure in the course; the X indicates the reason is an Honor Pledge violation.

**Statement Regarding Students with Disabilities:** Students with disabilities who need classroom accommodations, access to technology, or information about emergency building/campus evacuation processes should contact the Student Access Center and/or their instructor. Services are available to students with a wide range of disabilities including, but not limited to, physical disabilities, medical conditions, learning disabilities, attention deficit disorder, depression, and anxiety. If you are a student enrolled in campus/online courses through the Manhattan campus, contact the Student Access Center at [accesscenter@k-state.edu](mailto:accesscenter@k-state.edu), 785-532-6441.

**Statement Defining Expectations for Classroom Conduct:** All student activities in the University, including this course, are governed by the [Student Judicial Conduct Code](#) as outlined in the Student Governing Association [By Laws](#), Article V, Section 3, number 2. Students who engage in behavior that disrupts the learning environment may be asked to leave the class.

**Statement Regarding Wearing of Face Coverings:** To protect the health and safety of the K-State community, students, faculty, staff and visitors must wear face coverings over their mouths and noses while on K-State campuses in all hallways, public spaces, classrooms and other common areas of campus buildings, and when in offices or other work spaces or outdoor settings when 6-foot social distancing cannot be maintained. In addition, all students, faculty, and staff are required to take the [COVID-19 and Face Mask Safety training](#). Employees who need reasonable accommodations and assistance related to required face coverings may contact the ADA coordinator at [charlott@k-state.edu](mailto:charlott@k-state.edu), and students needing accommodations may contact the Student Access Center at [accesscenter@k-state.edu](mailto:accesscenter@k-state.edu).

In classrooms, faculty have the right to deny a student entry into the room if the student is not wearing a face covering. Students not wearing a face covering will be reminded to do so and offered a clean face covering, if one is available. If the student does not comply, the faculty member will ask the student to leave the space, and if available, join the class remotely. As a last resort, campus police will be called. The faculty members will complete the [Code of Conduct form](#) and the Office of Student Life will look further into the issue and take the non-compliance with the request to leave into consideration of further accountability measures.

At no point should the professor or other students put themselves into an unsafe situation while attempting to enforce the face-covering policy. Manhattan campus police: 785-532-6412

**Statement Regarding Classroom Cleaning Protocols:** Instructor will end class five minutes early to ensure classrooms and teaching labs are disinfected between every class change with cleaning supplies provided in each space. The class leaving the room will be expected to spray workspaces that were used during the class. The class entering the room will be asked to wipe down the spaces that have been sprayed. Detailed information on cleaning protocols is available in the [COVID-19 Cleaning and Disinfecting Guidance](#) document.

**Campus Safety:** Kansas State University is committed to providing a safe teaching and learning environment for student and faculty members. In order to enhance your safety in the unlikely case of a campus emergency make sure that you know where and how to quickly exit your classroom and how to follow any emergency directives. To

view additional campus emergency information go to the University's main page, [www.k-state.edu](http://www.k-state.edu), and click on the Emergency Information button, located at the bottom of the page.

**Weapons Policy Statement:** Kansas State University prohibits the possession of firearms, explosives, and other weapons on any University campus, with certain limited exceptions, including the lawful concealed carrying of handguns, as provided in the University Weapons Policy, found at <http://www.k-state.edu/police/weapons/index.html>.

You are encouraged to take the online weapons policy education module (<http://www.k-state.edu/police/weapons/index.html>) to ensure you understand the requirements of the policy, including the requirements related to concealed carrying of handguns on campus. Students possessing a concealed handgun on campus must be 21 years of age or older and otherwise lawfully eligible to carry. All carrying requirements of the policy must be observed in this class, including but not limited to the requirement that a concealed handgun be completely hidden from view, securely held in a holster that meets the specifications of the policy, carried without a chambered round of ammunition, and that any external safety be in the “on” position.

If an individual carries a concealed handgun in a personal carrier such as a backpack, purse, or handbag, the carrier must remain within the individual’s exclusive and uninterrupted control. This includes wearing the carrier with a strap, carrying or holding the carrier, or setting the carrier next to or within the immediate reach of the individual.

Each individual who lawfully possesses a handgun on campus shall be wholly and solely responsible for carrying, storing and using that handgun in a safe manner and in accordance with the law, Board policy and University policy. All reports of suspected violation of the weapons policy are made to the University Police Department by picking up any Emergency Campus Phone or by calling 785-532-6412.

**Academic Freedom Statement:** Kansas State University is a community of students, faculty, and staff who work together to discover new knowledge, create new ideas, and share the results of their scholarly inquiry with the wider public. Although new ideas or research results may be controversial or challenge established views, the health and growth of any society requires frank intellectual exchange. Academic freedom protects this type of free exchange and is thus essential to any university's mission.

Moreover, academic freedom supports collaborative work in the pursuit of truth and the dissemination of knowledge in an environment of inquiry, respectful debate, and professionalism. Academic freedom is not limited to the classroom or to scientific and scholarly research, but extends to the life of the university as well as to larger social and political questions. It is the right and responsibility of the university community to engage with such issues.

**Student Resources Statement:** K-State has many resources to help contribute to student success. These resources include accommodations for academics, paying for college, student life, health and safety, and others found at [www.k-state.edu/onestop](http://www.k-state.edu/onestop)

**Statement on Mental Health:** Your mental health and good relationships are vital to your overall well-being. Symptoms of mental health issues may include excessive sadness or worry, thoughts of death or self-harm, inability to concentrate, lack of motivation, or substance abuse. Although problems can occur anytime for anyone, you should pay extra attention to your mental health if you are feeling academic or financial stress, discrimination, or have experienced a traumatic event, such as loss of a friend or family member, sexual assault or other physical or emotional abuse.

If you are struggling with these issues, do not wait to seek assistance.

- Kansas State University Counseling Services ([k-state.edu/counseling/](http://k-state.edu/counseling/)) offers free and confidential services to assist you to meet these challenges.

- Lafene Health Center (<https://www.k-state.edu/lafene>) has specialized nurse practitioners to assist with mental health.
- The Office of Student Life ([k-state.edu/studentlife](https://www.k-state.edu/studentlife)) can direct you to additional resources.
- K-State Family Center offers individual, couple, and family counseling services on a sliding fee scale (<https://www.hhs.k-state.edu/familycenter/>).
- Center for Advocacy, Response, and Education (CARE) provides free and confidential assistance for those in our K-State community who have been victimized by violence (<https://www.k-state.edu/care/>).

**Statement for Copyright Notification:** Copyright 2020 (Andrew Sneed) as to this syllabus and all lectures. During this course students are prohibited from selling notes to or being paid for taking notes by any person or commercial firm without the express written permission of the instructor teaching this course. In addition, students in this class are not authorized to provide class notes or other class-related materials to any other person or entity, other than sharing them directly with another student taking the class for purposes of studying, without prior written permission from the instructor teaching this course.

**Disclaimer:** The instructor reserves the right to modify and/or add to this syllabus as necessary.

**CNS 534 Heating and Air Conditioning      Fall 2020      COURSE OUTLINE (subject to change)**

			<b>WEEK 1</b>
August 17, 2020	M		Introduction, Syllabus, Overview of HVAC
August 19, 2020	W		Thermal Comfort
August 21, 2020	F		Heat Transfer
			<b>WEEK 2</b>
August 24, 2020	M		Psychrometrics
August 26, 2020	W		Psychrometrics
August 28, 2020	F		Refrigeration Cycle and HVAC Design Concerns
			<b>WEEK 3</b>
August 31, 2020	M		Indoor Air Quality Best Practices
September 2, 2020	W		HVAC Design Conditions
September 4, 2020	F		U Factors and R Values
			<b>WEEK 4</b>
September 7, 2020	M		No Class – Labor Day
September 9, 2020	W		Exam 1 Review
<b>September 11, 2020</b>	<b>F</b>		<b>EXAM 1</b>
			<b>WEEK 5</b>
September 14, 2020	M		Heat Gain Calcs, Load Calc Intro
September 16, 2020	W		Load Spreadsheet
September 18, 2020	F		Sample Loads Project
			<b>WEEK 6</b>
September 21, 2020	M		Sample Loads Project
September 23, 2020	W		Sample Loads Project
September 25, 2020	F		Sample Loads Project
			<b>WEEK 7</b>
September 28, 2020	M		Load Calculation Sample Problems
September 30, 2020	W		Exam 2 Review
<b>October 2, 2020</b>	<b>F</b>		<b>EXAM 2</b>
			<b>Week 8</b>
October 5, 2020	M		HVAC System Types / Air System Types
October 7, 2020	W		Ductwork (Download CookTools App to Phone)
October 9, 2020	F		Ductwork
			<b>WEEK 9</b>
October 12, 2020	M		Fans
October 14, 2020	W		Air Distribution and Air Accessories
October 16, 2020	F		Air Handling Units / Rooftop Units
			<b>WEEK 10</b>
October 19, 2020	M		Heat Pumps / Terminal Units
October 21, 2020	W		Exam 3 Review
<b>October 23, 2020</b>	<b>F</b>		<b>EXAM 3</b>
			<b>WEEK 11</b>
October 26, 2020	M		Hydronic Systems
October 28, 2020	W		Hydronic Piping/Sizing
October 30, 2020	F		Hydronic Sizing
			<b>WEEK 12</b>
November 2, 2020	M		Pumps
November 4, 2020	W		Valves and Accessories
November 6, 2020	F		Boilers/Chillers/Cooling Towers
			<b>WEEK 13</b>
November 9, 2020	M		Variable Refrigerant Flow/Chilled Beams
November 11, 2020	W		Exam 4 Review
<b>November 13, 2020</b>	<b>F</b>		<b>EXAM 4</b>
			<b>WEEK 14 - REMOTE</b>
November 16, 2020	M		HVAC Controls and Instrumentation
November 18, 2020	W		HVAC Test and Balance
November 20, 2020	F		Final Project Introduction
			<b>Break</b>
November 23-27, 2020	M,W,F		No Class – Thanksgiving Break
			<b>WEEK 15 - REMOTE</b>
November 30, 2020	M		Final Project, Commissioning of HVAC
December 2, 2020	W		Final Project, Coordination with Other Trades
December 4, 2020	F		Final Project
			<b>FINALS WEEK</b>
<b>December 7, 2020</b>	<b>M</b>		<b>FINAL PROJECT DUE (Monday 12/07 1:40 pm)</b>





**CNS 535 – Electrical & Lighting (3 cr.)**  
Fall 2020

**Instructor:** Jake Hamilton  
**Office:** Seaton 2029  
**Office Hours:** Posted by door  
or by appointment  
**E-mail:** [jakehamilton@k-state.edu](mailto:jakehamilton@k-state.edu)  
**Office Phone No.:** (913) 375-0471

**Course Description**

Per Catalog: Basic design and construction of building electrical, lighting and distribution systems with an emphasis on the National Electrical Code (NEC) and installation. Prerequisites: CNS 321 – Graphic Comm II.

**Schedule**

MWF 11:30 am  
(All classes available via zoom)

**Room**

Seaton 2071 (Monday and Wednesday  
Online (Fridays))

**Student Learning Outcomes**

Upon completion of the course, the student should be able to:

- Understand the fundamentals of Electrical Systems design and Electrical Terminology in the context of building design and construction.
- Apply appropriate electrical system components to an electrical construction project.
- Interpret a set of electrical construction drawings and design intent to understand the electrical portion of a construction project.
- Evaluate an electrical design to determine the adequacy of selected components and component ratings and characteristics.
- Understand relationships and responsibilities of the electrical trade contractors with the general construction team including ethical and performance obligations.

**Evaluation**

**Grading Scale:**

A 100-90%  
B 89-80%  
C 79-70%  
D 69-60%  
F 59% and below

Grades will be based on percentage of Points possible:

$$\% \text{ grade} = \frac{\text{Points earned}}{\text{Total Points Possible}} \times 100$$

**Approximate Evaluation Values (subject to change during the semester):**

Homework	350 (points)	35%
Quizzes	150 (points)	15%
Exams (5)	500 (points)	50%
Total	1000 (points)	

### **Attendance**

Attendance is expected on the day you are assigned (Monday or Wednesday). Please try to arrive as close to class start time as possible. All in person classes will be available via zoom for remote students to watch live and ask questions. The zoom presentation will be recorded and posted to Canvas. If unable to watch live, you are expected to watch the recorded presentation prior to the next scheduled class.

*To be excused for being absent or late, students must receive permission from the instructor before the class period in question. The instructor may consider emergencies or other issues on a case-by-case basis.*

### **Homework**

Homework will be assigned on a regular basis and submitted online via Canvas when due, unless otherwise noted. Late work will not be accepted for credit. The instructor may consider emergencies or other issues on a case-by-case basis. Points may be deducted from assignments that are not neat and organized. Assignments are to be completed by individual effort, unless otherwise noted. Working with others to increase understanding and promote attitudes of teamwork, however, is encouraged.

### **Quizzes / Exams / Final Exam**

Online quizzes will be given throughout the semester, typically on Fridays. There will be four exams during the semester, with a final exam during finals week. Exams will be in person, typically scheduled on Friday. See Canvas for Exam dates.

### **Notebook (Not Graded)**

Students are required to develop a 3-ring, loose-leaf notebook during the semester for use in class and for future reference. Notebooks shall be tabbed, labeled, and contain all class notes, handouts, and assignments. Notebooks will be required for completion of assignments and exams. Refer to attachment for additional requirements.

### **Text / Reference Materials**

Many course materials will be provided via download from K-State Canvas or as handouts.

Required Text – **Ugly's Electrical References – 2017 (Available at K-State Bookstore or online - ISBN #9781284119367)**

(Get the actual book, not a .pdf or a rental. You'll want to write in it and use it for open-book tests. Other editions are probably okay, only be aware that some page numbers may not match what I'm referencing in class.)

### **Classroom Policy:**

We will manage the classroom like a professional office setting. Therefore, professional behavior is expected at all times. Start preparing now for the expectations of future employers. Questions, discussion, and team activities are encouraged.

No food, drinks, tobacco products, electronic devices, newspapers, or other distracting items are permitted in the classroom. Daily housekeeping is required.

## Attachment to the Syllabus

1. If you are absent from class you will miss notes and handouts. It is your responsibility to obtain them from your fellow classmates.
2. Food, drinks, smoking or chewing tobacco are not permitted in the classroom.
3. Cell phones must be turned off when you are in the classroom.
4. You will not need a laptop during class so please keep them in your bag.
5. All students are to maintain a course notebook consisting of class notes, handouts, etc. The primary purpose of the required notebook is to promote the willingness of the student to maintain the course material for use as a reference source upon entering industry. In addition, the various materials provided may need referenced throughout the semester. You will organize your notebook and prepare your own Table of Contents. Keep your notebook up to date and bring it to each class.

Notebooks are to be organized and professionally presented, including the following components:

- Cover and spine labeled with course name and student name.  
(3 ring notebook will be fine)
  - Tabs separating information. Organize by subject, not date.
  - Table of contents referenced to tabbed sections
  - Notes in neat, legible format for future use
6. Routinely check K-State Canvas for grades, assignments, course handouts, and feedback on assignments.

### **CNS 535 – Electrical & Lighting**

Electrical Industry & Big Picture  
Voltages and Calculations  
Residential Services  
Commercial Services  
Conductors and Conduit  
Outlet Boxes  
Wiring Devices  
Fuses and Circuit Breakers  
Disconnects and Controllers  
Distribution Equipment  
Grounding  
Building Layouts and Calculations

### **COURSE OUTLINE**

Working and Dedicated Space  
Motors & Electric Heat  
Metering  
Utility Company Coordination  
Transformers  
Voltage Drop  
Lighting Basics  
Lamp Types and Uses  
Lighting Fixture Types and Applications  
Illumination Calculations  
Wattage Calculations  
Controls



## CNS536 Water Supply & Plumbing - Fall 2020

**Instructor:** Paul Karr  
**Office:** Seaton 2061  
**Office Hours:** MWF 9:30a-11:30a  
**E-mail:** [paulkarr@ksu.edu](mailto:paulkarr@ksu.edu)  
**Phone No.:** (913) 961-6246

**Class Schedule:** MWF 8:30a-9:20a Seaton 2046

### Course Description

Per Catalog: Principles and practices of the design and layout of plumbing and fire protection, and individual waste treatment systems for buildings including code requirements and estimating.  
 Prerequisites: CNS 321 – Graphic Comm II.

### Student Learning Outcomes

Upon completion of the course, the student should be able to:

- Understand the fundamentals of Plumbing systems and terminology in the context of building design and construction including Sanitary Sewer Waste & Vent, Domestic Water, Natural Gas Piping, Storm Drainage, & Fire Sprinkler systems.
- Apply appropriate plumbing system components to a plumbing construction project.
- Interpret a set of plumbing construction drawings and design intent to understand the plumbing portion of a construction project.
- Evaluate a plumbing design to determine the adequacy of selected components and component ratings and characteristics.
- Understand relationships and responsibilities of the plumbing trade contractors with the general construction team including ethical and performance obligations.
- ACCE Accreditation Outcome for this class: 19c. Identify the basic principles of MEP systems through: Understanding the basic principles of plumbing, piping, and fire protection systems.

### Teaching Philosophy

Students learn best by feeding their own curiosity, by observing, questioning, trying, and practicing - not merely by listening. The semester is therefore set up for you to be encouraged to notice plumbing installations around you, to work problems in class, to practice the skills doing routine homework, and evaluate your own progress regularly via homework grades and quizzes. Exams serve as benchmarks to celebrate and assess your progress.

### Evaluation Grading Scale:

A 100-90%  
 B 89-80%  
 C 79-70%  
 D 69-60%  
 F 59% and below

Grades will be based on percentage of points possible:  

$$\% \text{ grade} = \frac{\text{Points earned}}{\text{Total Points Possible}} \times 100$$

### Approximate Evaluation Values: (subject to change during the semester):

Snapchats	100 (points) 10%
Homework	300 (points) 30%
Quizzes	100 (points) 10%
Exams (5)	500 (points) 50%
<b>Total</b>	<b>1000 (points)</b>

Learn **by Doing**

Grades, assignments, handouts, and feedback on assignments will be posted on K-State Canvas.

**Homework:** Homework will be assigned regularly. Submit online when due, unless otherwise noted. Late work will generally not be accepted for credit. The instructor may consider emergencies or other issues on a case-by-case basis. Points may be deducted from assignments that are not neat and organized. Assignments are to be completed by individual effort, unless otherwise noted. Working with others to increase understanding and promote attitudes of teamwork is encouraged, however.

**Quizzes / Tests / Final Exam:** Quizzes will be given regularly. Four exams will be given during the semester, with a comprehensive Final during finals week. **Quizzes & exams will be online this semester.**

**Attendance / Participation Requirements:**

**Attendance and Participation is expected for all class periods. In the Fall 2020 COVID-19 environment, the term "attendance and participation" will be defined as in-person class attendance OR viewing the recorded lecture. Instructor will not monitor Excused vs Non-Excused absences. Students will demonstrate their attendance and participation by completing all online assignments and quizzes on time and with a high level of understanding.**

(If a student has a medical or family emergency, you must contact the College of Engineering Dean's office and they will notify all your instructors.)

**Notebook:** To minimize contact transmission this semester, handouts will be provided online rather than on paper. It is the student's option to print them or maintain them electronically. Either way, students are encouraged to develop a well-organized storage method or maintain a 3-ring, loose-leaf notebook. These materials will be needed for completion of assignments, online quizzes, and online exams. For that reason, laptops or notepads will be allowed in class as needed.

**Text / Reference Materials:**

Required Text – **2018 International Plumbing Code** (ISBN # 9781609837457)

(Paperback or loose-leaf 3-ring binder are recommended. There are online versions available for viewing but I don't recommend them because you'll be unable to write in it or tab them for quick reference, especially for completing open-book exams.

(2015 IPC version is also acceptable if you find it to be less expensive.)



**Department Classroom Policy:**

The classroom is to be regarded as the "class office" and therefore professional behavior is expected at all times. Start preparing now for the expectations of future employers. All cell phones and electronic devices are to be turned off during class except as needed for class work. If any of these devices interrupt class, then you will be asked to leave for the remainder of the class period. This will be indicated as an absence for the class period. A second disruptive occurrence results in dropping the class. (Department Policy)

No food or drink is permitted in the classroom. Also, no hats/caps, newspapers, electronic devices or other distracting items will be allowed.

## **University and College of Engineering Policies:**

### **1. Statement Regarding Academic Honesty**

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### **3. Statement Defining Expectations for Classroom Conduct**


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## **Supplemental Syllabi Statements:**

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Kansas State University prohibits the possession of firearms, explosives, and other weapons on any University campus, with certain limited exceptions, including the lawful concealed carrying of handguns, as provided in the University Weapons Policy, found at <http://www.k-state.edu/police/weapons/index.html>.

You are encouraged to take the online weapons policy education module (<http://www.k-state.edu/police/weapons/index.html>) to ensure you understand the requirements of the policy, including the requirements related to concealed carrying of handguns on campus. Students possessing a concealed handgun on campus must be 21 years of age or older and otherwise lawfully eligible to carry. All carrying requirements of the policy must be observed in this class, including but not limited to the requirement that a concealed handgun be completely hidden from view, securely held in a holster that meets the specifications of the policy, carried without a chambered round of ammunition, and that any external safety be in the "on" position.





If an individual carries a concealed handgun in a personal carrier such as a backpack, purse, or handbag, the carrier must remain within the individual's exclusive and uninterrupted control. This includes wearing the carrier with a strap, carrying or holding the carrier, or setting the carrier next to or within the immediate reach of the individual.

Each individual who lawfully possesses a handgun on campus shall be wholly and solely responsible for carrying, storing and using that handgun in a safe manner and in accordance with the law, Board policy and University policy. All reports of suspected violation of the weapons policy are made to the University Police Department by picking up any Emergency Campus Phone or by calling 785-532-6412.

#### **4. Campus Safety Statement**

Kansas State University is committed to providing a safe teaching and learning environment for student and faculty members. In order to enhance your safety in the unlikely case of a campus emergency make sure that you know where and how to quickly exit your classroom and how to follow any emergency directives. To view additional campus emergency information go to the University's main page, [www.k-state.edu](http://www.k-state.edu), and click on the Emergency Information button, located at the bottom of the page.

#### **5. Student Resources Statement**

K-State has many resources to help contribute to student success. These resources include accommodations for academics, paying for college, student life, health and safety, and others found at [www.k-state.edu/onestop](http://www.k-state.edu/onestop)

#### **6. Statement on Mental Health**

Your mental health and good relationships are vital to your overall well-being. Symptoms of mental health issues may include excessive sadness or worry, thoughts of death or self-harm, inability to concentrate, lack of motivation, or substance abuse. Although problems can occur anytime for anyone, you should pay extra attention to your mental health if you are feeling academic or financial stress, discrimination, or have experienced a traumatic event, such as loss of a friend or family member, sexual assault or other physical or emotional abuse.

If you are struggling with these issues, do not wait to seek assistance.

- Kansas State University Counseling Services ([k-state.edu/counseling/](http://k-state.edu/counseling/)) offers free and confidential services to assist you to meet these challenges.
- Lafene Health Center (<https://www.k-state.edu/lafene>) has specialized nurse practitioners to assist with mental health.
- The Office of Student Life ([k-state.edu/studentlife](http://k-state.edu/studentlife)) can direct you to additional resources.
- K-State Family Center offers individual, couple, and family counseling services on a sliding fee scale (<https://www.hhs.k-state.edu/familycenter/>).
- Center for Advocacy, Response, and Education (CARE) provides free and confidential assistance for those in our K-State community who have been victimized by violence (<https://www.k-state.edu/care/>).

<b>CNS 536 – Plumbing Course Outline (Subject to Change)</b>	
<b>WEEK 1</b>	
August 17, 2020	Wk 1 - Plbg First Day
August 19, 2020	Wk 1 - Plbg Codes
August 21, 2020	Wk 1 - Plbg Industry
<b>WEEK 2</b>	
August 24, 2020	Wk 2 - Plbg Fixture Counts
August 26, 2020	Wk 2 - Plbg Fixtures
August 28, 2020	Wk 2 - Plbg Fixtures air gaps
<b>WEEK 3</b>	
August 24, 2020	Wk 3 - Plbg Sanitary Drainage
August 26, 2020	Wk 3 - Plbg Sanitary Drainage Sizing
August 28, 2020	Wk 3 - Plbg Sanitary Drainage Sizing
<b>WEEK 4</b>	
September 7, 2020	<b>Labor Day</b>
September 9, 2020	Wk 4 - Plbg Venting & Cleanouts
September 11, 2020	Wk 4 - Plbg Venting
September 12, 2020	<b>EXAM 1 - DRAINAGE, WASTE &amp; VENT (100)</b>
<b>WEEK 5</b>	
September 14, 2020	Wk 5 - Plbg Grease
September 16, 2020	Wk 5 - Plbg Grease Sizing
September 18, 2020	Wk 5 - Manholes
<b>WEEK 6</b>	
September 21, 2020	Wk 6 - Flowlines
September 23, 2020	Wk 6 - Profiles & Introduce Storm
September 25, 2020	Wk 6 - Sizing Roof Drains
<b>WEEK 7</b>	
September 28, 2020	Wk 7 - Expansion
September 30, 2020	Wk 7 - Siphonic
October 2, 2020	Wk 7 - Review Drainage and Storm
October 3, 2020	<b>EXAM 2 - TRAPS, INTERCEPTORS, ROOF DRAINAGE (100)</b>
<b>Week 8</b>	
October 5, 2020	Wk 8 - Plbg Introduce Water Heaters
October 7, 2020	Wk 8 - Plbg Water Heater Sizing
October 9, 2020	Wk 8 - Plbg Water Heater Types
<b>WEEK 9</b>	
October 12, 2020	Wk 9 - Plbg Tankles WH & TMV
October 14, 2020	Wk 9 - Plbg Introduce Water
October 16, 2020	Wk 9 - Plbg Water Pressure Losses
<b>WEEK 10</b>	
October 19, 2020	Wk 10 - Plbg Water Pipe Sizing
October 21, 2020	Wk 10 - Plbg Booster Pumps
October 23, 2020	Wk 10 - Plbg Water Service
October 24, 2020	<b>Exam 3 - WATER SYSTEMS (100)</b>
<b>WEEK 11</b>	
October 26, 2020	Wk 11 - Natural Gas Intro
October 28, 2020	Wk 11 - Natural Gas Pressures
October 30, 2020	Wk 11 - Plbg Gas Pipe Sizing
<b>WEEK 12</b>	
November 2, 2020	Wk 12 - Plbg Gas Pipe Installation
November 4, 2020	Wk 12 - Plbg Gas Pipe Install and review
November 6, 2020	Wk 12 - Gas In Depth - High School Value Engineering project
<b>WEEK 13</b>	
November 9, 2020	Wk 13 - Plbg Fire Sprinkler Intro
November 11, 2020	Wk 13 - Plbg Fire Sprinkler
November 13, 2020	Wk 13 - Plbg Fire Sprinkler
<b>WEEK 14</b>	
November 16, 2020	Wk 14 - Fire Sprinkler In Depth - Lay out a room
November 18, 2020	Wk 14 - Gas and Fire Sprinkler Review for exam
November 20, 2020	<b>EXAM 4 - GAS &amp; FIRE SPRINKLER SYSTEMS (100)</b>
<b>WEEK 15</b>	
November 30, 2020	Wk 15 - Plbg Review & Virtual QuikTrip Tour
December 2, 2020	Wk 15 - Plbg Notebooks Ethics
December 4, 2020	Wk 15 - Plbg Recap Exam Review TEVAL
<b>FINALS WEEK</b>	
December 8, 2020	<b>EXAM 5 - COMPREHENSIVE FINAL</b>

**CNS 542 – Ethics and Professional Standards  
Fall 2020**

**Instructor: Ray Buyle**  
**Office: 2051 Seaton**  
**Office Hours: Posted outside office door**  
**E-mail: [rbyule@ksu.edu](mailto:rbyule@ksu.edu)**  
**Office Phone No.: 532-5964**

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**Course Description**

The primary focus will be the review and dissemination of case studies related to ethics and professional standards within the design and construction industries through readings, discussion and role play. Due to the subjective nature of the topic matter, students will not be graded on their positions or opinions but, rather, on their thoughtful participation in class discussions and the development of their work product.

**Class Schedule:**

T-U 1:30-2:20 pm DUE 1112

Session A – August 17<sup>th</sup> through October 6<sup>th</sup>

**Student Learning Outcomes**

Upon completion of this course, students should demonstrate the following proficiencies:

1. understand and recognize issues that impact ethical behavior and professional conduct
2. reason out solutions to ethical dilemmas
3. apply principals of sound ethical and professional behavior in their careers.
4. develop their own ethical code and professional standards

**Evaluation**

**Grade Scale:**

A	100-93%
B	92-85%
C	84-78%
D	77-70%
F	below 70%

Grades will be based on percentage of points possible:  
$$\% \text{ grade} = \frac{\text{Points earned}}{\text{Total Points Possible}} \times 100$$

**Approximate Evaluation Values:**

Reading summary responses	440 points
Class participation	100 points
Personal Code of Ethics	25 points
Notebook	<u>50 points</u>
Total	615 points

**Homework**

Homework will be assigned on a regular basis and collected each class period, unless otherwise noted. Late work will not be accepted for credit. Waiting until five minutes before the start of class to print your assignment and then discovering there is a printer issue in the computer lab is not an acceptable excuse for not having an assignment completed on time, so don't procrastinate. The instructor may consider emergencies or other issues on a case-by-case basis. Points may be deducted from assignments that are not neat and organized. Assignments are to be completed by individual effort, unless otherwise noted.

However, working with others to compare answers or increase understanding is encouraged. Failure to complete an assignment may result in a grade reduction beyond the point value of the assignment at the sole discretion of the instructor.

Assignments for each class period typically consist of a formal and an informal submission. The formal assignment is to be typed and printed, 12 pt, Times New Roman font, 1.5 spacing, 1" maximum margins, and typically about one page in length. The informal assignment can be typed or hand written at your discretion. The following information is to appear in the **upper right hand corner** of the first page of **every** assignment (both formal and informal): your name followed immediately by your student number (assigned by me on the first day of class), CNS 542, and the due date, following the example below:

Ray Buyle #2  
CNS 542  
August 27, 2020

The title of the assignment is to be centered at the top of the page immediately below the header as follows:

“Revenge of the Coddled: An Interview with Jonathan Haidt”  
or  
Case Study #10

The formal assignments are to be corrected according to my comments and proofreading marks, and both the original and the corrected copy are to be included in your notebook.

### **Quizzes &/or Tests:**

None are scheduled or anticipated, but I reserve the right to assign either or both, depending on class participation or lack thereof.

### **Notebook:**

All students are required to maintain a course notebook consisting of class notes, handouts, assignments, etc. The primary purpose of the notebook is to reinforce the planning, organization, and the professional presentation of material that will be required of you as you enter the construction/engineering industry and to facilitate the use of the course material as a future reference. In addition, the various materials provided will be referred to throughout the semester. The notebook is to be an electronic document (pdf format), neat and organized and include the following:

- A front cover page that includes your name on the top line, the course number (“CNS542”) and title (“Ethics and Professional Standards”), the semester and year (“Fall 2020”), and the instructor’s name (“Assoc. Professor Ray Buyle – Instructor”)
- A **detailed** Table of Contents that is comprehensive, well organized, and in chronological order that includes the title of each assignment.
- The various sections of your notebook are to be separated by slip sheet page separators in your electronic document that correspond to your table of contents.
- The notebook is to contain all work product for the semester, including your notes, **all** handouts (including syllabus, proofreading guides, assignment sheet, etc.), and both formal and informal assignments. Formal assignments are to be corrected as per my review comments and then re-printed and included in your notebook with the corrected version in front of the original version.
- Your completed electronic notebook is to be uploaded to Canvas by noon Tuesday, October 13<sup>th</sup>.

The notebook will be reviewed and graded by the instructor at the end of the course for organization, completeness and neatness. Appropriate credit will be given based on your professional efforts. (50 pts)

### **Attendance:**

1. Attendance is mandatory and expected:
  - a. Each student is responsible for all information introduced in class.
  - b. Excused absences are to be requested and approved prior to the beginning of the class period that will be missed. Approved absences are at the discretion of the instructor and will be considered on a case by case basis.
  - c. If an absence is due to illness, a doctor’s note is required in order for the absence to be excused.
  - d. Missing/leaving class for internship/job interviews is not acceptable and will not be counted as an excused absence. Schedule your interviews outside of class time (Dept. policy).

- e. Each unexcused absence will result in a **2.5%** point reduction from the total points earned for the semester (this includes absences caused by cell phone disruptions and tardiness). You will be allowed **one** discretionary unexcused absence for the semester before points are deducted.
  - f. Leaving class early without prior consent of the instructor is considered an unexcused absence.
2. Tardiness will not be tolerated. If you are not present in the classroom at **1:30 pm** (by the instructor's clock), it will be counted as an unexcused absence.

### **Textbook / Required Materials**

- *Professional Ethics for the Construction Industry*, by Rebecca Mirsky and John Schaufelberger
- Student manual (available for purchase at Umbarger Hall room 26 for ± \$6.80)

### **Classroom Policy:**

Refer to **Department Classroom Policy** below.

### **Department Classroom Policy:**

1. The classroom is to be regarded as the “class office” and therefore professional behavior is expected at all times. Start preparing now for the expectations of future employers. **All cell phones and electronic devices are to be turned off during class.** If any of these devices interrupt class, then you will be asked to leave for the remainder of the class period. This will be indicated as an absence for the class period. A second disruptive occurrence results in dropping the class. (Department Policy)
2. No food or drink is permitted in the classroom. Also no hats/caps, newspapers, electronic devices or other distracting items will be allowed.

### **Attachments:**

K-State Course Syllabi Statements – Fall 2020

## CNS 641 - CONSTRUCTION ESTIMATING

\*\*\* FALL 2020 \*\*\*

**Instructor(s):** Shannon Casebeer  
**Office:** Seaton 2083  
**Office Hours:** Please see hours posted by office door.  
<http://www.are-cns.ksu.edu/docs/people/faculty-schedules-01-29-2020.pdf>  
**E-mail:** [scasebeer@k-state.edu](mailto:scasebeer@k-state.edu) (please do not message us through Canvas)  
**Phone:** Dept. Office 785-532-5964 or mobile 816-806-1886

### Course Description per Course Catalog:

*Understanding estimating procedures, quantity surveying, specification reviews, pricing of an estimate, market analysis, subcontractor and supplier solicitation, and risk management, following the CSI MasterFormat.*

### Course Prerequisites:

- CNS 325 Construction Documents
- CNS 440 Construction Methods and Equipment

### Modality:

This class will be held in person, on campus until further notice. An overview schedule will be provided but may be subject to change based on class progress and unforeseen COVID19 pandemic impacts.

### Class Schedule:

- Morning Section [IN-PERSON] meets M W F, time 8:30am - 11:20am Seaton 2072
- Afternoon Section [IN-PERSON] meets M W F, time 2:30pm - 5:20pm Seaton 2072

### Student Learning Outcomes:

Upon Completion of this Course, the student shall demonstrate the following proficiencies:

- ACCE PLO 03.a.i. Analyze and formulate quantity takeoffs. [Direct Measure]
- ACCE PLO 03.a.ii. Analyze and formulate cost estimates. [Direct Measure].
- ACCE PLO 06 a. Analyzing construction documents for planning and management of construction processes [Direct Measure].

### Evaluation (Grading Scale):

A	100-93%
B	92-84%
C	83-75%
D	74-66%
F	65% and below

Grades will be based upon a percentage of total points possible:  

$$\% \text{ grade} = \frac{\text{Points earned}}{\text{Total Points Possible}} \times 100$$

**NOTE: SYLLABUS GRADING SCALE SUPERSEDES ANY SCALE SHOWN IN THE K-STATE ONLINE CANVAS SYSTEM**

### Approximate Evaluation Values\*\*:

<u>CNS 643 Grading Evaluation Components</u>		<u>Points</u>	
1	Attendance & Daily Participation	275	22.9%
2	Assignments / Quizzes	700	58.3%
3	Final Assignment	100	8.3%
4	Exams	125	10.4%
5	Student Notebook	not collected	
6	Bid Day - Team	pending decision	
7	Bid Day - Individual	pending decision	
<b>Total</b>		<b>1200</b>	<b>estimated</b>

[image]



*\*\* Note – course content and points values may be changed or adjusted at Instructor’s discretion during the semester.*

### **Homework:**

Homework Assignments will consist of quantity surveying (takeoff), review of the bid documents (plans and specifications) and determination of pricing for a specific building project...essentially creating our estimate and getting ready for our final project, a simulated competitive bid day. Unless specific permission or instruction is given by the Instructor that students may work together, all assignments are to be completed by individual effort. Partway through the semester you may be assigned to a bid team, and then you will work with your teammates from that point up to and through our mock Bid Day.

### **Quizzes:**

Quizzes will be given periodically at Instructor’s option either in-class or on Canvas. Quizzes are to be completed individually.

### **Projects (simulated Bid Day event):**

- Pending Dept. approval to proceed with this event, the date will be announced in class. Bid Day runs from 1:00 pm to 5:00 pm. You will need to clear your schedule. See your instructor in advance if you have an issue.
- Bid Day is earned by the class and is not a right! (we will do this only if Teams are ready)
- All bid day forms / bids / materials are the property of the Department – at no time will they leave the classroom.

### **Exams:**

- We will test you over Self-performed Building Concrete takeoff. Date/modality to be announced.
- All exams are to be completed individually.
- All exams are the property of the department – at no time will they leave the classroom.

### **Notebook:**

Students are required to develop a 3-ring, loose-leaf notebook during the semester for use in class and for your future reference. Notebooks shall be organized, tabbed, labeled (front cover and spine), and contain a Table of Contents for all class notes, handouts, and assignments. See notebook organization guide provided in class. Notebooks will not be turned in or graded for credit.

### **Attendance & Participation:**

Attending this class, participating in discussions and working on assignments during class time is required and is a significant component of your grade. Punctual attendance will also be required in this course, as it will be in a professional office after you graduate. Don’t be tardy for this class. Attendance/Participation points will be earned or lost as follows:

- In class on time, with good performance and participation = **full points** that day
- Excused Absence = these are handled on a case-by-case basis. For example...missing class for your aunt’s birthday, while important to you, is a choice you’re making to miss this class, so you would receive 0 points for that day because you’re not in class participating/working. Missing class because you’re legitimately sick or quarantined is beyond your control, so you may still be able to receive your daily points depending on the circumstances and your communication with me. Illness may be considered an excused absence if you notify me prior to the start of class.
- Tardy = **half points** for that day provided you show up and work the rest of the class period.
- Unexcused Absence = **negative points** for that day. Whatever participation points you would have normally earned will instead be DEDUCTED from your grade. Don’t let this happen.

If you have a legitimate reason to miss class, I fully expect you to show me the respect and courtesy you would show to your future employer by letting me know well in advance of your planned absence. If you miss a class, it is your responsibility to see me for any missed lecture notes, assignments etc. and to submit any required work by the established deadlines, regardless of your absence.



Job interviews on campus should be scheduled outside class hours. For out-of-town interviews, I will, allow you to miss one (1) class period as an excused absence provided you give me sufficient advance notice of your absence. You will not receive any participation points if you miss class for interviews.

Student competitions or student organizational events will be considered an excused absence provided you give me sufficient advance notice and a note/email from the sponsoring faculty person/organization for the event. You will receive full participation points for the days you miss class for your involvement in supporting a student competition or student organizational activity.

### **Text / Required Materials:**

- Project Specification Manuals. These will be downloaded in pdf format from CANVAS.
- Project Plan Sets/Sheets. These will be purchased by each student from the department. Cost of these sets is determined by the ARE/CNS office and will be announced in class the first week. All other course materials will be handed out in class or made available for download from CANVAS.
- Padlock. Used for your personal locker (locker signup will occur in class) and furnished by student.
- Estimator tools. Calculator, architectural scale, engineering scale, highlighters/colored pencils and engineering paper are to be provided by student.
- Notebook binders for Class Notebook (2-3" spine) provided by student.
- Laptop Computer. Each student will need a portable PC-based laptop (not Mac) computer
- Microsoft Excel. As the class progresses, we will initially be performing quantification and pricing of the work using our laptops. We will begin these processes by hand but quickly transition into working in Microsoft Excel for both the takeoff and pricing exercises for the various scopes of work.
- OnCenter software's *ClassicOST* software. Later in the semester, you will be installing a free, student-version of this OnScreen Takeoff software onto your laptop. PCs are recommended platform. Macs are definitely NOT recommended. Mac users are responsible to purchase/install any additional software or plugins as required to run the OST program.
- Bluebeam. Revu has been providing free student licence keys for this software. We will request this program for your use. Bluebeam no longer supports the Mac platform.
- Gordian/RS Means-Building Construction Cost Data manual. These construction pricing reference manuals will be loaned out during class as needed. These books are used as our primary source of construction costs.

### **ARE/CNS Departmental Classroom Policy:**

The classroom environment will be managed similar to a professional office setting. Food, drinks, caps/hats, electronic devices (except as directed by your instructor), newspapers, tobacco products or other distracting / messy items WILL NOT be permitted in class. Daily housekeeping will be required as we share our room with other classes.

### **University and College of Engineering Policies:**

#### **1. Statement Regarding Academic Honesty**

Kansas State University has an Honor and Integrity System based on personal integrity, which is presumed to be sufficient assurance that, in academic matters, one's work is performed honestly and without unauthorized assistance. Undergraduate and graduate students, by registration, acknowledge the jurisdiction of the Honor and Integrity System. The policies and procedures of the [Honor and Integrity System](#) apply to all full and part-time students enrolled in undergraduate and graduate courses on-campus, off-campus, and via distance learning. A component vital to the Honor and Integrity System is the inclusion of the Honor Pledge which applies to all assignments, examinations, or other course work undertaken by students. The Honor Pledge is implied, whether or not it is stated: "On my honor, as a student, I have neither given nor received unauthorized aid on this academic

work." A grade of XF can result from a breach of academic honesty. The F indicates failure in the course; the X indicates the reason is an Honor Pledge violation.

## **2. Statement Regarding Students with Disabilities**

Students with disabilities who need classroom accommodations, access to technology, or information about emergency building/campus evacuation processes should contact the Student Access Center and/or their instructor. Services are available to students with a wide range of disabilities including, but not limited to, physical disabilities, medical conditions, learning disabilities, attention deficit disorder, depression, and anxiety. If you are a student enrolled in campus/online courses through the Manhattan or Olathe campuses, contact the Student Access Center at [accesscenter@k-state.edu](mailto:accesscenter@k-state.edu), 785-532-6441; for K-State Polytechnic campus, contact Julie Rowe, Diversity, Inclusion and Access Coordinator, at [jarowe@ksu.edu](mailto:jarowe@ksu.edu) or call 785-826-2971.

### **Additional Information for Faculty:**

Faculty members who need assistance with accommodating a student with a documented disability should contact the access services office on the appropriate campus. Assistance may include administration of course exams with extended time and/or distraction reduced environment or providing an alternate format of text materials.

## **3. Statement Defining Expectations for Classroom Conduct**

All student activities in the University, including this course, are governed by the [Student Judicial Conduct Code](#) as outlined in the Student Governing Association [By Laws](#), Article V, Section 3, number 2. Students who engage in behavior that disrupts the learning environment may be asked to leave the class.

## **4. Statement Regarding Wearing of Face Coverings**

To protect the health and safety of the K-State community, students, faculty, staff and visitors must wear face coverings over their mouths and noses while on K-State campuses in all hallways, public spaces, classrooms and other common areas of campus buildings, and when in offices or other work spaces or outdoor settings when 6-foot social distancing cannot be maintained. In addition, all students, faculty, and staff are required to take the [COVID-19 and Face Mask Safety training](#). Employees who need reasonable accommodations and assistance related to required face coverings may contact the ADA coordinator at [charlott@k-state.edu](mailto:charlott@k-state.edu), and students needing accommodations may contact the Student Access Center at [accesscenter@k-state.edu](mailto:accesscenter@k-state.edu).

In classrooms, faculty have the right to deny a student entry into the room if the student is not wearing a face covering. Students not wearing a face covering will be reminded to do so and offered a clean face covering, if one is available. If the student does not comply, the faculty member will ask the student to leave the space, and if available, join the class remotely. As a last resort, campus police will be called. The faculty members will complete the [Code of Conduct form](#) and the Office of Student Life will look further into the issue and take the non-compliance with the request to leave into consideration of further accountability measures.

At no point should the professor or other students put themselves into an unsafe situation while attempting to enforce the face-covering policy. Manhattan campus police: 785-532-6412

## **5. Classroom Cleaning Protocols**

Instructors will end class five minutes early to ensure classrooms and teaching labs are disinfected between every class change with cleaning supplies provided in each space. The class leaving the room will be expected to spray workspaces that were used during the class. The class entering the

room will be asked to wipe down the spaces that have been sprayed. Detailed information on cleaning protocols is available in the [COVID-19 Cleaning and Disinfecting Guidance](#) document.

## **Supplemental Syllabi Statements:**

### **1. Statement for Copyright Notification**

Copyright 2020 (Shannon E. Casebeer) as to this syllabus and all lectures. During this course students are prohibited from selling notes to or being paid for taking notes by any person or commercial firm without the express written permission of the professor teaching this course. In addition, students in this class are not authorized to provide class notes or other class-related materials to any other person or entity, other than sharing them directly with another student taking the class for purposes of studying, without prior written permission from the professor teaching this course.

### **2. Academic Freedom Statement**

Kansas State University is a community of students, faculty, and staff who work together to discover new knowledge, create new ideas, and share the results of their scholarly inquiry with the wider public. Although new ideas or research results may be controversial or challenge established views, the health and growth of any society requires frank intellectual exchange. Academic freedom protects this type of free exchange and is thus essential to any university's mission.

Moreover, academic freedom supports collaborative work in the pursuit of truth and the dissemination of knowledge in an environment of inquiry, respectful debate, and professionalism. Academic freedom is not limited to the classroom or to scientific and scholarly research but extends to the life of the university as well as to larger social and political questions. It is the right and responsibility of the university community to engage with such issues.

### **3. Weapons Policy Statement**

Kansas State University prohibits the possession of firearms, explosives, and other weapons on any University campus, with certain limited exceptions, including the lawful concealed carrying of handguns, as provided in the University Weapons Policy, found at <http://www.k-state.edu/police/weapons/index.html>.

You are encouraged to take the online weapons policy education module (<http://www.k-state.edu/police/weapons/index.html>) to ensure you understand the requirements of the policy, including the requirements related to concealed carrying of handguns on campus. Students possessing a concealed handgun on campus must be 21 years of age or older and otherwise lawfully eligible to carry. All carrying requirements of the policy must be observed in this class, including but not limited to the requirement that a concealed handgun be completely hidden from view, securely held in a holster that meets the specifications of the policy, carried without a chambered round of ammunition, and that any external safety be in the "on" position.

If an individual carries a concealed handgun in a personal carrier such as a backpack, purse, or handbag, the carrier must remain within the individual's exclusive and uninterrupted control. This includes wearing the carrier with a strap, carrying or holding the carrier, or setting the carrier next to or within the immediate reach of the individual.

Each individual who lawfully possesses a handgun on campus shall be wholly and solely responsible for carrying, storing and using that handgun in a safe manner and in accordance with the law, Board policy and University policy. All reports of suspected violation of the weapons policy are made to the University Police Department by picking up any Emergency Campus Phone or by calling 785-532-6412.

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If you are struggling with these issues, do not wait to seek assistance.

- Kansas State University Counseling Services ([k-state.edu/counseling/](http://k-state.edu/counseling/)) offers free and confidential services to assist you to meet these challenges.
- Lafene Health Center (<https://www.k-state.edu/lafene>) has specialized nurse practitioners to assist with mental health.
- The Office of Student Life ([k-state.edu/studentlife](http://k-state.edu/studentlife)) can direct you to additional resources.
- K-State Family Center offers individual, couple, and family counseling services on a sliding fee scale (<https://www.hhs.k-state.edu/familycenter/>).

Center for Advocacy, Response, and Education (CARE) provides free and confidential assistance for those in our K-State community who have been victimized by violence (<https://www.k-state.edu/care/>).r's discretion at any time during the semester.



**CNS 642 Construction Management  
Fall 2020**

**Instructor:** Steve Schaffner  
**Office:** Seaton 2081  
**Office Hours:** MW 2-4a, TU 8:30-11:00  
**E-mail:** [sschaffner@ksu.edu](mailto:sschaffner@ksu.edu)  
**Phone No.:** (317) 501-9003

**Course Description**

Per Catalog: An introduction to the business of construction; study of legal considerations, contract documents, bonds and insurance. Evaluation of the characteristics of the construction firm, organization structure, and financial performance.

**Class Schedule:** MWF 11:30p-12:20p Seaton 2014

**Student Learning Outcomes:** Upon completion of this course, the student shall be able demonstrate the ability to:

1. Analyzing construction documents for planning and mgmt. of construction process
2. Understand different methods of project delivery/roles/responsibilities of constituents
3. Understand The legal implications of contract, common & regulation law for management

**Grading Scale:**

<u>%</u>	<u>Grade:</u>	<u>Approximate Evaluation Values:</u>	
92-100	= A	Homework/Exercises	400 pts
83-91	= B	Exams	100 pts
72-82	= C	Final Paper	200 pts
65-71	= D	Total	700 pts

**Homework:** Homework will be assigned on a regular basis and be required to be turned in or uploaded to Canvas when due in the format prescribed. Late work will not be accepted for credit. The instructor may consider emergencies or other issues on a case-by-case basis. Points may be deducted from assignments that are not neat, organized, professional and grammatically correct. Assignments are to be completed

by individual effort, unless otherwise noted. However, working with others to increase understanding is encouraged.

### **Attendance/Participation Requirements:**

Attendance/Participation is expected for all class periods which you are scheduled to attend on campus per the matrix emailed and available on Canvas. This is your job and I will treat it as such. Therefore, if what you deem as an excusable issue occurs, you must contact me prior to the start of class by phone call, text and or email. Should you not contact the instructor and/or your absence is determined as unexcused, you will have 20 pts deducted.

### **Text/Reference Materials**

The text book will be provided in Canvas at no cost and can be downloaded as a PDF. Reference materials will also be provided by the instructor via Canvas.

### **Course philosophy:**

- 1. Attitude is Everything.** Do you Give A Sh#t? Do you have G.A.S.? A GAS attitude is paramount in your career and in this class.
- 2. Preparation & Discipline are not optional-they are minimum expectations.** It's your education and career. The true value of your career is in direct proportion to your commitment to excellence, no matter what your field of endeavor.
- 3. Your attendance and attention are required.** Tardiness and unexcused absences are not acceptable. You are to be ready to participate at the beginning of class and stay until class is over on assigned attendance days.
- 4. Communicate.** This is the key in our business. Your ability to communicate and work effectively as an individual as well as a team member is vital. Communication is not only being able to express thoughts verbally or in writing but includes listening and understanding as well. **All questions are welcomed!**
- 5. Professionalism.** Your work and actions should be professional in appearance and thought. Lack of attention to detail indicates carelessness or lack of professional demeanor.

### **Department Classroom Policy:**

The classroom is to be regarded as the "class office" and therefore professional behavior is expected at all times. Start preparing now for the expectations of future employers. **Your attention is required to participate. Cell phones and electronic devices should be put away during the lecture portion of the class.** If you or any of your devices interrupt class, then you will be asked to leave for the remainder of the class period. This will be indicated as an absence for the class period. A second disruptive occurrence results in dropping the class. (Department Policy)

No food or drink is permitted in the classroom. Also, no hats/caps, newspapers, electronic devices or other distracting items will be allowed.

## **University and College of Engineering Policies:**

Incorporated by reference through separate document **Fall 20 syllabi statements – Yunk**

### Course Topics

- Introduction to the business of construction
  - Business basics
  - Stakeholders and Delivery methods
  - Legal entities
  - Differing aspects of construction companies
  - Organizational structure
  - Marketing
  - Contract law
  - Contracts with the client
  - Sub Contracts
  - Codes and regulations
  - Bonds and insurance
  - Contract administration
    - Submittals
    - ASI's
    - RFI's
    - COP's
    - CO's
  - Corporate Philosophy
  - Leadership



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**CNS 643 - PRECONSTRUCTION SERVICES & DESIGN-BUILD**

\*\*\* FALL 2020 \*\*\*

**Instructor:** Mr. Shannon E. Casebeer  
**Office Locations:** Seaton Hall, Room 2083  
**Office Hours:** posted beside my office door  
**E-mail:** [scasebeer@k-state.edu](mailto:scasebeer@k-state.edu)  
**Phone:** 785-532-5964 (Dept. Office)

**PLEASE DO NOT MESSAGE ME THROUGH CANVAS, EMAIL IS PREFERRED. THANK YOU!**

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**CNS 643 - Preconstruction Services/Design-Build** (3 CR). Application of Value Engineering to the construction process, Conceptual Estimating, Onscreen take-off quantity surveying, Design-Build. Other project delivery types and their impact on the preconstruction efforts including general contractor pricing, fees, contingencies, risk, and schedule impacts. 3 hours recitation per week. Prerequisites: CNS 641, CNS 642, and CNS 645.

**Modality:** This course will be a blended course of in-person/on-campus class sessions and online virtual learning as directed by instructor. An Overview Schedule will be provided but it may be subject to change based on progress of the class and unforeseen pandemic impacts.

**Class Schedule:** Tue & Thu @ 9:30 am - 10:45am [IN-PERSON]

**Rooms:** Seaton 2071 & 2072 Large Computer Lab (for selected class dates indicated by instructor)

**Student Learning Outcomes:**

Upon completion of this course, the student shall demonstrate the following proficiencies:

- Develop an understanding of the topics and methods associated with Construction Managers providing preconstruction services to their clients.
- Understand the role CMs play in both design-assist and design-build contracts.
- Learn about and perform selected activities and processes associated with providing preconstruction services.
- Gain an understanding of DBIA materials to allow students, at their option, to pursue DBIA certification.
- ACCE Assessment Learning Outcome **17. Understand the basic principles of sustainable construction.** Students will gain a broader understanding of the concept of Sustainability as it relates to design and construction of the built environment, including how preconstruction services can support this concept.

**Evaluation:**

Final grades for this course will be earned on the basis of your performance on Assignments, Quizzes, Projects, Examinations and Class Participation.

Grades will be based upon a percentage of total points possible:  $\% \text{ grade} = \frac{\text{Points earned}}{\text{Total Points Possible}} \times 100$

Letter grade equivalent: A = 93 to 100

B = 84 to 92

C = 75 to 83

D = 66 to 74

F = 65 and below

NOTE: SYLLABUS GRADING SCALE SUPERSEDES ANY SCALE SHOWN IN THE K-STATE ONLINE CANVAS SYSTEM

**Approximate Evaluation Values:**

<u>CNS 643 Evaluation Components</u>	<u>Points</u>				
1 Assignments / Quizzes	600	71%			
2 Final Project	250	29%			
3 Exams	0				
4 Notebook	0				
5 Attendance	-1% penalty per tardy or unexcused absence				
	<b>Total</b>	<b>850 estimated</b>			

*Note: Instructor reserves the right to adjust course content and point values during the semester.*

**Exams & Quizzes:**

No exams are planned for this course. Short quizzes may be administered periodically to assess your level of attention and comprehension.

**Notebooks:**

All students are expected to maintain a course notebook consisting of class notes, handouts, exercises, etc. The primary purpose of the required notebook is to promote the willingness of the student to maintain the course material for use as a future reference source in their careers. In addition, various materials provided may be referred to throughout the semester.

Notebooks should be in a neat, clean and organized 3-ring binder with clear pockets for a typed Front Cover insert and typed Spine Label insert. Include a typed, meaningful Table of Contents, Tabbed/labelled dividers that correspond to your TOC and course content materials consisting of any handouts, your written notes and the assigned work we perform. Front Covers and Spine Labels should indicate: Your Name, Kansas State University, the G.E. Johnson Department of Architectural Engineering and Construction Science, the course name/number, instructor's name/title and the semester. Covers should also include some artistic graphic element pertaining to the course. Notebooks will not be collected for grading.

**Homework:**

Unless stated otherwise, homework will be assigned for individual work and submission. Late work will not be accepted, except in real emergencies beyond the control and due to no fault or negligence of the student (severe illness, family emergencies, etc.). Late is defined as later than the date and time specified by the instructor for any particular assignment. See the instructor, in advance, if you experience an emergency that affects submission of assigned work. Some assignments will be partner assignments (2 people) and group assignments (4-5 people).

**Attendance:**

Due to COIVD19 mandated seating capacity limits, the class has been divided into Subgroups. In-person attendance is required at every class as indicated for your Subgroup. However, recognizing that certain personal circumstances may prohibit your attendance or cause you to be late, you will be allowed one (1) occurrence without penalty. Each absence or tardy after that will result in one percentage point (1%) being deducted from your final grade. Being tardy to class will be treated the same as an unexcused absence. Please be on time. When you are absent, you will miss handouts, lectures, notes, exercises and discussion. **It is your responsibility to obtain them from fellow students.** Do not request information and handouts from the instructor if you do not attend class.

**Textbook / Required Materials and Equipment:**

No textbook is yet required for this course, however, selected readings from provided handouts and other sources will be assigned.

**Classroom Policies:****CNS Departmental Classroom Policies:**

1. The classroom is to be regarded as the "class office" and therefore professional behavior is expected at all times.

2. Cell phones and other personal electronic devices are to be silenced and put away during class. If your device interrupts class, your device will be confiscated for the remainder of the class period. Your disruption will be counted as an absence for the class period.
3. No food or drink is permitted in the classroom.

## **University and College of Engineering Policies:**

### **1. Statement Regarding Academic Honesty**

Kansas State University has an Honor and Integrity System based on personal integrity, which is presumed to be sufficient assurance that, in academic matters, one's work is performed honestly and without unauthorized assistance. Undergraduate and graduate students, by registration, acknowledge the jurisdiction of the Honor and Integrity System. The policies and procedures of the [Honor and Integrity System](#) apply to all full and part-time students enrolled in undergraduate and graduate courses on-campus, off-campus, and via distance learning. A component vital to the Honor and Integrity System is the inclusion of the Honor Pledge which applies to all assignments, examinations, or other course work undertaken by students. The Honor Pledge is implied, whether or not it is stated: "On my honor, as a student, I have neither given nor received unauthorized aid on this academic work." A grade of XF can result from a breach of academic honesty. The F indicates failure in the course; the X indicates the reason is an Honor Pledge violation.

### **2. Statement Regarding Students with Disabilities**

Students with disabilities who need classroom accommodations, access to technology, or information about emergency building/campus evacuation processes should contact the Student Access Center and/or their instructor. Services are available to students with a wide range of disabilities including, but not limited to, physical disabilities, medical conditions, learning disabilities, attention deficit disorder, depression, and anxiety. If you are a student enrolled in campus/online courses through the Manhattan or Olathe campuses, contact the Student Access Center at [accesscenter@k-state.edu](mailto:accesscenter@k-state.edu), 785-532-6441; for K-State Polytechnic campus, contact Julie Rowe, Diversity, Inclusion and Access Coordinator, at [jarowe@ksu.edu](mailto:jarowe@ksu.edu) or call 785-826-2971.

### **Additional Information for Faculty:**

Faculty members who need assistance with accommodating a student with a documented disability should contact the access services office on the appropriate campus. Assistance may include administration of course exams with extended time and/or distraction reduced environment or providing an alternate format of text materials.

### **3. Statement Defining Expectations for Classroom Conduct**

All student activities in the University, including this course, are governed by the [Student Judicial Conduct Code](#) as outlined in the Student Governing Association [By Laws](#), Article V, Section 3, number 2. Students who engage in behavior that disrupts the learning environment may be asked to leave the class.

### **4. Statement Regarding Wearing of Face Coverings**

To protect the health and safety of the K-State community, students, faculty, staff and visitors must wear face coverings over their mouths and noses while on K-State campuses in all hallways, public spaces, classrooms and other common areas of campus buildings, and when in offices or other work spaces or outdoor settings when 6-foot social distancing cannot be maintained. In addition, all students, faculty, and staff are required to take the [COVID-19 and Face Mask Safety training](#). Employees who need reasonable accommodations and assistance related to required face coverings may contact the ADA coordinator at [charlott@k-state.edu](mailto:charlott@k-state.edu), and students needing accommodations may contact the Student Access Center at [accesscenter@k-state.edu](mailto:accesscenter@k-state.edu).

In classrooms, faculty have the right to deny a student entry into the room if the student is not wearing a face covering. Students not wearing a face covering will be reminded to do so and offered a clean face covering, if one is available. If the student does not comply, the faculty member will ask the student to leave the space, and if available, join the class remotely. As a last resort, campus police will be called. The faculty members will complete the [Code of Conduct form](#) and the Office of Student Life will look further into the issue and take the non-compliance with the request to leave into consideration of further accountability measures.

At no point should the professor or other students put themselves into an unsafe situation while attempting to enforce the face-covering policy. Manhattan campus police: 785-532-6412

## 5. Classroom Cleaning Protocols

Instructors will end class five minutes early to ensure classrooms and teaching labs are disinfected between every class change with cleaning supplies provided in each space. The class leaving the room will be expected to spray workspaces that were used during the class. The class entering the room will be asked to wipe down the spaces that have been sprayed. Detailed information on cleaning protocols is available in the [COVID-19 Cleaning and Disinfecting Guidance](#) document.

## Supplemental Syllabi Statements:

### 1. Statement for Copyright Notification

Copyright 2020 (Shannon E. Casebeer) as to this syllabus and all lectures. During this course students are prohibited from selling notes to or being paid for taking notes by any person or commercial firm without the express written permission of the professor teaching this course. In addition, students in this class are not authorized to provide class notes or other class-related materials to any other person or entity, other than sharing them directly with another student taking the class for purposes of studying, without prior written permission from the professor teaching this course.

### 2. Academic Freedom Statement

Kansas State University is a community of students, faculty, and staff who work together to discover new knowledge, create new ideas, and share the results of their scholarly inquiry with the wider public. Although new ideas or research results may be controversial or challenge established views, the health and growth of any society requires frank intellectual exchange. Academic freedom protects this type of free exchange and is thus essential to any university's mission.

Moreover, academic freedom supports collaborative work in the pursuit of truth and the dissemination of knowledge in an environment of inquiry, respectful debate, and professionalism. Academic freedom is not limited to the classroom or to scientific and scholarly research but extends to the life of the university as well as to larger social and political questions. It is the right and responsibility of the university community to engage with such issues.

### 3. Weapons Policy Statement

Kansas State University prohibits the possession of firearms, explosives, and other weapons on any University campus, with certain limited exceptions, including the lawful concealed carrying of handguns, as provided in the University Weapons Policy, found at <http://www.k-state.edu/police/weapons/index.html>.

You are encouraged to take the online weapons policy education module (<http://www.k-state.edu/police/weapons/index.html>) to ensure you understand the requirements of the policy, including the requirements related to concealed carrying of handguns on campus. Students possessing a concealed handgun on campus must be 21 years of age or older and otherwise lawfully eligible to carry. All carrying requirements of the policy must be observed in this class, including but not limited

to the requirement that a concealed handgun be completely hidden from view, securely held in a holster that meets the specifications of the policy, carried without a chambered round of ammunition, and that any external safety be in the "on" position.

If an individual carries a concealed handgun in a personal carrier such as a backpack, purse, or handbag, the carrier must remain within the individual's exclusive and uninterrupted control. This includes wearing the carrier with a strap, carrying or holding the carrier, or setting the carrier next to or within the immediate reach of the individual.

Each individual who lawfully possesses a handgun on campus shall be wholly and solely responsible for carrying, storing and using that handgun in a safe manner and in accordance with the law, Board policy and University policy. All reports of suspected violation of the weapons policy are made to the University Police Department by picking up any Emergency Campus Phone or by calling 785-532-6412.

#### 4. Campus Safety Statement

Kansas State University is committed to providing a safe teaching and learning environment for student and faculty members. In order to enhance your safety in the unlikely case of a campus emergency make sure that you know where and how to quickly exit your classroom and how to follow any emergency directives. To view additional campus emergency information go to the University's main page, [www.k-state.edu](http://www.k-state.edu), and click on the Emergency Information button, located at the bottom of the page.

#### 5. Student Resources Statement

K-State has many resources to help contribute to student success. These resources include accommodations for academics, paying for college, student life, health and safety, and others found at [www.k-state.edu/onestop](http://www.k-state.edu/onestop)

#### 6. Statement on Mental Health

Your mental health and good relationships are vital to your overall well-being. Symptoms of mental health issues may include excessive sadness or worry, thoughts of death or self-harm, inability to concentrate, lack of motivation, or substance abuse. Although problems can occur anytime for anyone, you should pay extra attention to your mental health if you are feeling academic or financial stress, discrimination, or have experienced a traumatic event, such as loss of a friend or family member, sexual assault or other physical or emotional abuse.

If you are struggling with these issues, do not wait to seek assistance.

- Kansas State University Counseling Services ([k-state.edu/counseling/](http://k-state.edu/counseling/)) offers free and confidential services to assist you to meet these challenges.
- Lafene Health Center (<https://www.k-state.edu/lafene>) has specialized nurse practitioners to assist with mental health.
- The Office of Student Life ([k-state.edu/studentlife](http://k-state.edu/studentlife)) can direct you to additional resources.
- K-State Family Center offers individual, couple, and family counseling services on a sliding fee scale (<https://www.hhs.k-state.edu/familycenter/>).

Center for Advocacy, Response, and Education (CARE) provides free and confidential assistance for those in our K-State community who have been victimized by violence (<https://www.k-state.edu/care/>).r's discretion at any time during the semester.

#### Course Topics List:

See course overview schedule for topics, dates and deadlines.

**CNS 645 Construction Scheduling & Cost Control**  
**Fall 2020**

**Instructor:** Katie Loughmiller  
**Office:** Seaton 2037  
**Office Hours:** Monday 4:00-5:30 (via Teams) Tuesday 2:30-3:30 (in-person)  
Wednesday 4:30-5:30 (via Teams) Thursday 12:30-1:20 (in-person)  
Friday 10:00-11:30 (via Teams)  
**E-mail:** [loughmil@k-state.edu](mailto:loughmil@k-state.edu)

**\*\* You are welcome to use Teams during my in-person office hours\*\***

I will be using Microsoft Teams this semester as an additional communication tool. This will be the best method to contact me outside of class (video, voice or chat).

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**Course Description**

Construction cost reporting and control. Construction planning, both long-term and short-interval, construction scheduling, monitoring, and controlling. Computer application.

Prerequisites: CNS440, concurrent with CNS 641

<b><u>Class Schedule:</u></b>	M (Group A)	12:30-1:20	Seaton 2014
	W (Group B)	12:30-1:20	Seaton 2014
	F (Full Class)	online lecture or lab	

**Student Learning Outcomes**

Upon completion of this course, students should demonstrate the following proficiencies:

1. Understand building components and how to establish relationships, sequencing and project control during construction.
2. Apply current methods and standards used in construction scheduling.
3. Analyze various construction schedules to confirm accuracy of activity relationships and overall critical path.
4. Evaluate production and cost control in relation to construction schedules.
5. Determine activity durations based on productivity rates and industry resources.
6. Create overall project schedules and shot-interval schedules for various types of construction projects.
7. Construct project schedules and present as a project-team using scheduling knowledge gained throughout the course.

## Evaluation

### Grade Scale:

93-100	= A
85-92	= B
78-86	= C
70-77	= D

### Course Content:

Homework/Labs	30%
Exam	25%
Projects	35%
Participation	10%

**Homework/Labs:** Homework and lab assignments will typically be due on Fridays at midnight unless specifically noted otherwise. All assignments/labs will be submitted via Canvas. Feedback and comments will be provided within the Canvas assignment.

**Projects:** There will be two projects throughout the semester that will incorporate content from lectures, homework and labs. All projects will be individual projects, there will be no group work.

**Exam:** There will be one exam during the semester and no final exam.

Exam Dates: October 26 (Group A) /October 28 (Group B)

### Course philosophy:

- 1. Preparation is not optional-it is a minimum expectation.*** It's your education and career. The true value of your career is in direct proportion to your commitment to excellence, no matter what your field of endeavor. Remember the road to success is always under construction; so be prepared to endure the process.
- 2. Your attendance and attention are required.*** It is a portion of your grade in the course. Tardiness is not acceptable. You are to be ready to participate at the beginning of class, and stay until class is over.
- 3. Communicate.*** This is the key in our business. Your ability to communicate and work effectively as an individual as well as a team member is vital. Communication is not only being able to express thoughts verbally or in writing, but includes listening and understanding as well. **All questions are welcomed!**
- 4. Professionalism.*** Your work and actions should be professional in appearance and thought. Lack of attention to detail indicates carelessness or lack of professional demeanor.

### Class Format:

**Lectures:** Video lectures will be posted on Canvas on the Wednesday evening of the prior week. You will be expected to review these lectures prior to class.

**In-Class:** The in-person portion of this class will be a review of key topics in the video lectures, additional example problems, introduction of assignments and an opportunity to ask questions. **\*\*If the University**



requires classes to move 100% online there will be live Zoom classes offered each week at our regular class times. These will be recorded and posted to Canvas.

**Attendance:** No attendance will be tracked in this course. This course is an investment in your future career and your commitment to attending class is your responsibility. If you are sick or required to quarantine it is your responsibility to contact the instructor prior to class to make arrangements for missed content. The instructor reserves the right to not invest any out of class time into students who are not active participants in the course.

**Late Work:**

All homework is due at the time, date and location specified. Late work will be reviewed at the instructor's convenience, but will receive a grade of **ZERO (0)**. "**Late**" is defined as work turned in after the due date/time. Real emergencies, as determined at the sole discretion of the instructor, that delay submission of an assignment may be considered on an individual basis. Company visits are not real emergencies. Make arrangements in advance with the instructor if you will be absent for a company visit.

**Text / Reference Materials**

Textbook: All course materials will be available online through the Canvas Course.

**Department Classroom Policy:**

The classroom is to be regarded as the "class office" and therefore professional behavior is expected at all times. Start preparing now for the expectations of future employers. **All cell phones and electronic devices are to be turned off during class.** If any of these devices interrupt class, then you will be asked to leave for the remainder of the class period. This will be indicated as an absence for the class period. A second disruptive occurrence results in dropping the class. (Department Policy)

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contact the Student Access Center at [accesscenter@k-state.edu](mailto:accesscenter@k-state.edu), 785-532-6441; for K-State Polytechnic campus, contact Julie Rowe, Diversity, Inclusion and Access Coordinator, at [jarowe@ksu.edu](mailto:jarowe@ksu.edu) or call 785-826-2971.

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limited to the classroom or to scientific and scholarly research, but extends to the life of the university as well as to larger social and political questions. It is the right and responsibility of the university community to engage with such issues.

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If you are struggling with these issues, do not wait to seek assistance.

- Kansas State University Counseling Services ([k-state.edu/counseling/](http://k-state.edu/counseling/)) offers free and confidential services to assist you to meet these challenges.
- Lafene Health Center (<https://www.k-state.edu/lafene>) has specialized nurse practitioners to assist with mental health.
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**CNS 646 Construction Financial Management  
Fall 2020**

**Instructor:** Katie Loughmiller  
**Office:** Seaton 2037  
**Office Hours:** Monday 4:00-5:30 (via Teams) Tuesday 2:30-3:30 (in-person)  
Wednesday 4:30-5:30 (via Teams) Thursday 12:30-1:20 (in-person)  
Friday 10:00-11:30 (via Teams)  
**E-mail:** [loughmil@k-state.edu](mailto:loughmil@k-state.edu)

**\*\* You are welcome to use Teams during my in-person office hours\*\***

I will be using Microsoft Teams this semester as an additional communication tool. This will be the best method to contact me outside of class (video, voice or chat).

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**Course Description**

Construction cost reporting and control. Construction planning, both long-term and short-interval, construction scheduling, monitoring, and controlling. Computer application.

Prerequisites: CNS641, CNS642, CNS645

**Class Schedule:**

T (Group A)	1:30-2:20	Seaton 2014
Th (Group B)	1:30-2:20	Seaton 2014

**Student Learning Outcomes**

Upon completion of this course, students should demonstrate the following proficiencies:

1. Develop a business plan for a small construction firm.
2. Understand the fundamentals of construction accounting, accounting systems, and financial statements.
3. Analyze construction costs accounting systems and cost reports.
4. Evaluate construction cash flow to determine corporate financing needs.

**Evaluation**

**Grade Scale:**

93-100	= A
85-92	= B
78-84	= C
70-77	= D

**Approximate Course Grade Weighting:**

In-Class/Online Participation	25%
Assignments	50%
Final Project	25%

- Participation:** Each week there will be a collection of articles and podcasts related to the topics covered in lecture. You will be required to read/listen to 1-2 and be prepared to discuss in-class or online. This will be the graded component of participation.
- Assignments:** Assignments will be posted weekly and will be due on Fridays at midnight. All assignments will be submitted via Canvas. Feedback and comments will be provide within the Canvas assignment.
- Final Project:** The final project will be assigned in Week 13 and due during Week 15.

**Course philosophy:**

1. ***Preparation is not optional-it is a minimum expectation.*** It's your education and career. The true value of your career is in direct proportion to your commitment to excellence, no matter what your field of endeavor. Remember the road to success is always under construction; so be prepared to endure the process.
2. ***Your attendance and attention is required.*** It is a portion of your grade in the course. Tardiness is not acceptable. You are to be ready to participate at the beginning of class, and stay until class is over.
3. ***Communicate.*** This is the key in our business. Your ability to communicate and work effectively as an individual as well as a team member is vital. Communication is not only being able to express thoughts verbally or in writing, but includes listening and understanding as well. **All questions are welcomed!**
4. ***Professionalism.*** Your work and actions should be professional in appearance and thought. Lack of attention to detail indicates carelessness or lack of professional demeanor.

**Attendance Requirements:**

**Lectures:** Video lectures will be posted on Canvas on the Thursday evening of the prior week. You will be expected to review these lectures prior to class.

**In-Class:** The in-person portion of this class will be a review of key topics in the video lectures, discussion of the articles/podcasts assigned for the week and an opportunity to ask questions. **\*\*If the University requires classes to move 100% online there will be live Zoom classes offered each week at our regular class times. These will be recorded and posted to Canvas.**

**Attendance:** No attendance will be tracked in this course. This course is an investment in your future career and your commitment to attending class is your responsibility. If you are sick or required to quarantine it is your responsibility to contact the instructor prior to class to make arrangements for missed content. The instructor reserves the right to not invest any out of class time into students who are not active participants in the course.

**Late Work:**

All homework is due at the time, date and location specified. Late work will be reviewed at the instructor's convenience, but will receive a grade of **ZERO (0)**. **"Late"** is defined as work turned in after the due date/time. Real emergencies, as determined at the sole discretion of the instructor, that delay submission of an assignment may be considered on an individual basis. Company visits are not real emergencies. Make arrangements in advance with the instructor if you will be absent for a company visit.

## **Text / Reference Materials** (provided on canvas)

Textbook: All course materials will be available online through the Canvas Course.

## **Department Classroom Policy:**

The classroom is to be regarded as the “class office” and therefore professional behavior is expected at all times. Start preparing now for the expectations of future employers. **All cell phones and electronic devices are to be turned off during class.** If any of these devices interrupt class, then you will be asked to leave for the remainder of the class period. This will be indicated as an absence for the class period. A second disruptive occurrence results in dropping the class. (Department Policy)

No food or drink is permitted in the classroom. Also no hats/caps, newspapers, electronic devices or other distracting items will be allowed.

## **University Policies/Statements:**

### **Statement Regarding Academic Honesty**

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### **Statement Regarding Students with Disabilities**

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### **Statement Regarding Wearing of Face Coverings**

To protect the health and safety of the K-State community, students, faculty, staff and visitors must wear face coverings over their mouths and noses while on K-State campuses in all hallways, public spaces, classrooms and other common areas of campus buildings, and when in offices or other work spaces or outdoor settings when 6-foot social distancing cannot be maintained. In addition, all students, faculty, and



staff are required to take the [COVID-19 and Face Mask Safety training](#). Employees who need reasonable accommodations and assistance related to required face coverings may contact the ADA coordinator at [charlott@k-state.edu](mailto:charlott@k-state.edu), and students needing accommodations may contact the Student Access Center at [accesscenter@k-state.edu](mailto:accesscenter@k-state.edu).

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At no point should the professor or other students put themselves into an unsafe situation while attempting to enforce the face-covering policy. Manhattan campus police: 785-532-6412

### **Statement for [Copyright](#) Notification**

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K-State has many resources to help contribute to student success. These resources include accommodations for academics, paying for college, student life, health and safety, and others found at [www.k-state.edu/onestop](http://www.k-state.edu/onestop)

## Statement on Mental Health

Your mental health and good relationships are vital to your overall well-being. Symptoms of mental health issues may include excessive sadness or worry, thoughts of death or self-harm, inability to concentrate, lack of motivation, or substance abuse. Although problems can occur anytime for anyone, you should pay extra attention to your mental health if you are feeling academic or financial stress, discrimination, or have experienced a traumatic event, such as loss of a friend or family member, sexual assault or other physical or emotional abuse.

If you are struggling with these issues, do not wait to seek assistance.

- Kansas State University Counseling Services ([k-state.edu/counseling/](http://k-state.edu/counseling/)) offers free and confidential services to assist you to meet these challenges.
- Lafene Health Center (<https://www.k-state.edu/lafene>) has specialized nurse practitioners to assist with mental health.
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**CNS 660 – Construction Operations**  
**Fall 2020**

**Instructor:** Katie Loughmiller  
**Office:** Seaton 2037  
**Office Hours:** Monday 4:00-5:30 (via Teams) Tuesday 2:30-3:30 (in-person)  
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**E-mail:** [loughmil@k-state.edu](mailto:loughmil@k-state.edu)

**\*\* You are welcome to use Teams during my in-person office hours\*\***

I will be using Microsoft Teams this semester as an additional communication tool. This will be the best method to contact me outside of class (video, voice or chat).

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**Course Description**

Shop drawing and submittal processes, field and office practices, change orders, construction safety standards and practice, pre-construction planning, expediting, short-interval planning.

**Prerequisites:** CNS 641, 642, 645. Pr. or conc.: CNS 650.

**Class Schedule:**

M (Group A)	1:30-2:20	Seaton 2014
W (Group B)	1:30-2:20	Seaton 2014
Friday	By Appt (Each Team will be assigned a weekly time)	

**Student Learning Outcomes**

Upon completion of this course, students should demonstrate the following proficiencies:

1. Understand effective contracting methods, operating strategies, tactics, procedures, records, and forms.
2. Apply the principals of sound documentation necessary to effectively direct and control field operations in the construction industry.
3. Analyze, evaluating and creating billing information to manage financial components of project management.
4. Analyze and evaluating production components to manage field operations.
5. Understand and appreciate the need for team involvement and participation.

**Evaluation**

**Grade Scale:**

A	93-100%
B	85-92%
C	78-84%
D	70-77%
F	69% and below

Grades will be based on percentage of points possible:  

$$\% \text{ grade} = \frac{\text{Points earned}}{\text{Total Points Possible}} \times 100$$

**Approximate Evaluation Values:**

College of Business Project	450 points
Professional Development	100 points
Assignments	200 points
<b>Total</b>	<b>750 points</b>

**College of Business Project:** The major component of this class is the group project using the College of Business construction project. As a part of the project, each group will create an overall project binder, an executive summary, and present to a panel of industry professionals. Additionally, your individual grade on this project will be adjusted based on your group’s evaluation of your effort.

Pre-construction Submittal	- 50 Points
Final Project Submittal	- 200 Points
Executive Summary	- 50 Points
Final Presentation	- 100 Points
Team Evaluation	- 50 Points

**Professional Development:** After graduation, you will be responsible for your own continuing education. That process will be starting during this, your last semester at K-State. During the semester, you will be required to read two personal or professional development book, approved by the instructor, and submit a written summary of the book and how it can be used during the 1<sup>st</sup> five years of your career.

Book Review #1	Due October 15 <sup>th</sup>
Book Review #2	Due December 4 <sup>th</sup>

**Assignments:** Assignments will typically be due on Fridays at midnight unless specifically noted otherwise. All assignments will be submitted via Canvas. Feedback and comments will be provided within the Canvas assignment.

**Class Format:**

**Lectures:** Video lectures will be posted on Canvas on the Wednesday evening of the prior week. You will be expected to review these lectures prior to class.

**In-Class:** The in-person portion of this class will be a review of key topics in the video lectures, additional example problems, introduction of assignments and an opportunity to ask questions. \*\*If the University requires classes to move 100% online there will be live Zoom classes offered each week at our regular class times. These will be recorded and posted to Canvas.

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### **Textbook / Required Materials**

There is no required textbook. You will be responsible for obtaining the books required in association with the Professional Development portion of this course.

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