Affordable Learning Georgia Affordable Materials Grants  
Transformation Grants Final Report

*(or Textbook Transformation Grants, if R17 or earlier)*

Once you have completed this template, to submit your Final Report, go to the [Final Report submission](https://survey.zohopublic.com/zs/xTCCvG) form.

The final report submission form allows you to submit the following:

* This completed narrative document (required)
* Syllabus or syllabi (required)

*If multiple files, compress into one .zip folder*

* Qualitative/Quantitative Measures data files (optional, as needed)

*If multiple files, compress into one .zip folder*

* Photo of your team or a class of your students for future ALG promotions (optional)
* Invoice for the second half of the grant’s award amount (optional)

Follow the instructions on the webpage for uploading your documents. Based on receipt of this report, ALG will process the final payment for your grant. ALG will follow up in the future with post-project grantee surveys and may also request your participation in a publication, presentation, or other event.

# General Information

**Date: May 9, 2025**

**Grant Round: 25**

**Grant Number: 719**

**Institution Name(s): Kennesaw State University (KSU)**

**Project Lead: Robert Keyser**

**Team Members (Name, Title, Department, Institutions if different, and email address for each): Parisa Pooyan, Lecturer, Industrial and Systems Engineering, KSU; Lin Li, Associate Professor, Industrial and Systems Engineering, KSU; Suad Awad, Undergraduate Student, Industrial and Systems Engineering**

**Course Name(s) and Course Numbers: IET 3322 – Work Measurement & Ergonomics and ISYE 3450 Work Measurement Study**

**Semester Project Began: Summer 2024**

**Final Semester of Implementation: Spring 2025**

**Total Number of Students Affected During Project: IET 3322 = 53 students; ISYE 3450 = 42 students**

# Narrative

* 1. *Describe the key outcomes, whether positive, negative, or interesting, of your project. Include:*
* *Creating new textbooks was challenging because we wanted the learning materials to be current and ADA compliant, so Accessibility with all materials increased our prep time, but was well worth the effort to make learning for students who are hearing- or vision-impaired easier than using traditional textbooks.*
* *We received several positive comments in our end-of-course ALG survey in both courses.*
* *Students in IET 3322 and ISYE 3450 performed better using our ALG textbook vs. previous semester with a traditional textbook. I believe having accessible course materials in electronic form for easy download had a huge impact vs carrying a traditional textbook around.*
  1. *Describe lessons learned, including any things you would do differently next time.* 
     + *We had a good gameplan to begin the transformation project with four members on the team with clearly defined roles and expectations. Everyone delivered as expected. This was the result of meeting a few times before we actually began the transformation project to brainstorm, exchange ideas of what kind of materials we would provide to enhance the learning experience for students and to use as many copyright-free graphics, illustrations, images, charts, tables as necessary to convey concepts and results.*
  2. *Describe any materials you created or revised/remixed that will be shared with the public. Include the* [*open license your materials will be shared under*](https://creativecommons.org/share-your-work/)*—for most materials, this will be an Attribution 4.0 License (CC BY) as required in the Grants Request for Proposals.*
* *IET 3322 Textbook, PowerPoint slides*
* *ISYE 3450 Textbook, PowerPoint slides*

*Developing No-Cost-to-Student Learning Materials for IET 3322 and ISYE 3450 Undergraduate Work Measurement Courses © 2025 by*[*Robert Keyser*](https://facultyweb.kennesaw.edu/rkeyser/index.php)*is licensed under*[*CC BY 4.0 .*](https://creativecommons.org/licenses/by/4.0/?ref=chooser-v1)

# Quotes

*Provide three quotes from students evaluating their experience with the no-cost learning materials.*

* *I feel that I learned more in this course using the instructor’s low-cost, no-cost materials included in this course versus using traditional textbook materials.*
* *I would like to see more low-cost, no-cost course offerings in my degree program.*
* *I think having one in-depth document would be helpful to keep on the side.*

# Quantitative and Qualitative Measures

## Uniform Measurements Questions

*The following are uniform questions asked to all grant teams. Please answer these to the best of your knowledge.*

**Student Opinion of Materials**

**Was the overall student opinion about the materials used in the course positive, neutral, or negative?**

Total number of students affected in this project: \_\_\_\_\_98\_\_\_\_\_

* Positive: \_\_\_7\_\_\_\_ % of \_\_\_\_8\_\_\_\_ number of respondents
* Neutral: \_\_\_0\_\_\_\_ % of \_\_\_\_8\_\_\_\_ number of respondents
* Negative: \_\_\_1\_\_\_\_ % of \_\_\_\_8\_\_\_\_ number of respondents

**Student Learning Outcomes and Grades**

**Was the overall comparative impact on student performance in terms of learning outcomes and grades in the semester(s) of implementation over previous semesters positive, neutral, or negative?**

*Student outcomes should be described in detail in Section 3b.*

Choose One:

* \_x\_\_ Positive: Higher performance outcomes measured over previous semester(s)
* \_\_\_ Neutral: Same performance outcomes over previous semester(s)
* \_\_\_ Negative: Lower performance outcomes over previous semester(s)

**Student Drop/Fail/Withdraw (DFW) Rates**

**Was the overall comparative impact on Drop/Fail/Withdraw (DFW) rates in the semester(s) of implementation over previous semesters positive, neutral, or negative?**

*Depending on what you and your institution can measure, this may also be known as a drop/failure rate or a withdraw/failure rate.*

\_\_\_\_0\_\_\_% of students, out of a total \_\_\_98\_\_\_\_ students affected, dropped/failed/withdrew from the course in the final semester of implementation.

Choose One:

* \_\_\_ Positive: This is a lower percentage of students with D/F/W than previous semester(s)
* \_x\_\_ Neutral: This is the same percentage of students with D/F/W than previous semester(s)
* \_\_\_ Negative: This is a higher percentage of students with D/F/W than previous semester(s)

## Measures Narrative

*In this section, summarize the supporting impact data that you are submitting, including all quantitative and qualitative measures of impact on student success and experience. Include all measures as described in your proposal, along with any measures developed after the proposal submission.*

*[When submitting your final report, as noted above, you will also need to provide the separate file (or .zip with multiple files) of supporting data on the impact of your Textbook Transformation, such as surveys, analyzed data collected, etc.]*

* *Include measures such as:*
  + *Drop, fail, withdraw (DFW) delta rates = 0%*
  + *Course retention and completion rates = 100%*
  + *Average GPA = 3.68 = [(71\*4)+(23\*3)+(4\*2)+(0\*1)+(0\*0)/98 students]*
  + *Pre-and post-transformation DFW comparison: Pre-transformation = 3.33% (avg 1 out of 30 students); post-transformation = 0% (avg 0 out of 30 students for three semesters – SU24, FA24, SP25)*
  + *Student success in learning objectives = 100%, all students passed both courses during SU24, FA24, and SP25. No DFWs.*
  + *Surveys, interviews, and other qualitative measures. Pls see Appendix at bottom.*
* *Indicate any co-factors that might have influenced the outcomes.* 
  + - *As a hearing- and vision-impaired individual, I have an appreciation for accessible materials to enhance reading and comprehension of text and images. I believe by incorporating accessibility in all course materials (textbook, ppt slides, images, tables, videos, etc.), this helped students who may have had difficulty otherwise in navigating the course content.*
    - *Having a no-cost textbook in electronic format uploaded to D2L provided financial relief and convenience to students. This had to have a positive impact on student performance. During the three semesters (SU24, FA24, and SP25, most students in each course earned the course grade of A, followed by Bs and Cs. There were no DFWs during these three semesters.*

# Sustainability Plan

*Describe how your project team or department will offer the materials in the course(s) in the future, including the maintenance and updating of course materials.*

*Our course design, including all AGL materials, passed the Quality Matters review process at KSU. Typically, when a course passes the QM review process, we teach it for a minimum of three years before revising it, unless new developments in the field occur that we would adopt in the courses. In that case, we will make necessary changes to the textbook, ppt slides, handouts, and videos, and re-submit the course revision through the QM review process. We have all files in electronic format, so making changes is relatively straightforward. Once the course revision passes the QM review process, we will update the files in Creative Commons.*

# Future Affordable Materials Plans

*Describe any impacts or influences this project has had on your thinking about or selection of learning materials in this and other courses that you will teach in the future.*

*I am a strong proponent of low-cost, no-cost learning materials and am thankful that Affordable Learning Georgia offers these grant opportunities and hope it continues. I would like to apply for a future transformation project. This was my second ALG project, but first as the PI.*

# Future Scholarship Plans

*Describe any planned or actual papers, presentations, publications, or other professional activities that you expect to produce that reflect your work on this project.*

*Our plan is to prep/submit a journal manuscript to Journal of Higher Education Theory and Practice for publication this summer.*

# Description of Photograph (optional)

*This is where a team can list the names of the people shown in this separately uploaded photograph, along with their roles, if applicable.*

 *Robert Keyser, PhD, Associate Professor, ISYE*

 *Parisa Pooyan, PhD, Lecturer, ISYE*

 *Lin Li, PhD, Associate Professor, ISYE*

**Appendix A (IRB-FY24-549 Approval and ALG Survey Results)**

## PLEASE PRINT A COPY OF THIS CONSENT DOCUMENT FOR YOUR RECORDS, OR IFYOU DO NOT HAVE PRINT CAPABILITIES, YOU MAY CONTACT THE RESEARCHER TO OBTAIN A COPY.

IRB-FY24-549\_Survey on the Use of Low-Cost, No-Cost Materials in an Industrial Engineering Course

I agree to give my consent to participate in this research project. I understand that participation is voluntary and that I may withdraw my consent at any time without penalty.

I do not agree to participate and will be excluded from the remainder of the questions.

Thank you very much for agreeing to participate in this survey. Before continuing, please read and agree with the following statements.

I agree to participate in this study, and I affirm that I am 18 years of age or older. I understand that the intent of this research is to gather opinions and information to help gauge the satisfaction and usefulness of using low-cost, no-cost materials in an industrial engineering course.

Additionally..,

* I understand that my participation in this online survey is voluntary and that the time required to participate will not exceed 1O minutes.
* I understand that all information I provide is confidential and that my name will at no point be associated with any information I provide herein.
* I understand that my IP address will not be revealed.
* I understand that the research has no known risks or direct benefits to me.
* I have the right to stop participation at any time without penalty.
* I also understand that I do not respond in the affirmative to the following question, the survey will be terminated and no information will be collected.

I affirm that I am 18 years of age or older. Yes

No (survey will terminate here and no data will be recorded)

**ONLINE SURVEY CONSENT FORM**

**Introduction:** You are being invited to take part in a research study conducted by Dr. Robert Keyser, Dr. Parisa Pooyan, and Dr. Lin Li of Kennesaw State University. Before you decide to participate in this study, you should read this form and ask questions about anything that you do not understand.

**Description of Project:** This study will assess students' satisfaction with using low-cost, no-cost materials made available in two Industrial Engineering courses (JET 3322 and ISYE 3450). The effort to develop no-cost learning materials to replace traditional textbooks is supported by the Affordable Learning Georgia (ALG) grant. Course content and learning outcomes will adhere to the University catalog and the ISYE Department

curriculum. Student grades and student status will not be affected by participating or not participating in this survey.

**Explanation of Procedures:** The course survey will be collected at the end of the semester and analyzed by the researchers. Outcomes will be used to adjust the no-cost material and improve students' learning experience. The results will be submitted for publication if found to be meaningful.

**Time Required:** You are asked to complete an online survey consisting of 16 questions and your participation will require approximately 5 to 1O minutes. There are no known risks or discomforts associated with this survey. Participation in data collection is purely voluntary, and you are welcome to withdraw participation at any time without penalty. If you experience any discomfort related to participation, please contact Dr. Keyser at [rkeyser@kennesaw.edu.](mailto:rkeyser@kennesaw.edu)

**Confidentiality:** No identifiable information will be collected in the survey. Your responses will be kept strictly confidential, and digital data will be stored in secure computer files.

Any report of this research that is made available to the public will only include aggregated data. You must be 18 years of age or older to participate in this study.

Research at Kennesaw State University that involves human participants is carried out under the oversight of an Institutional Review Board. Questions or problems regarding these activities should be addressed to the Institutional Review Board, Kennesaw State University, 585 Cobb Avenue, KH3403, Kennesaw, GA 30144-5591, (470) 578-7721.

Reference Study #24-549.

## PLEASE PRINT A COPY OF THIS CONSENT DOCUMENT FOR YOUR RECORDS, OR IFYOU DO NOT HAVE PRINT CAPABILITIES, YOU MAY CONTACT THE RESEARCHER TO OBTAIN A COPY.

IRB-FY24-549\_Survey on the Use of Low-Cost, No-Cost Materials in an Industrial Engineering Course

I agree to give my consent to participate in this research project. I understand that participation is voluntary and that I may withdraw my consent at any time without penalty.

I do not agree to participate and will be excluded from the remainder of the questions.

Thank you very much for agreeing to participate in this survey. Before continuing, please read and agree with the following statements.

I agree to participate in this study, and I affirm that I am 18 years of age or older. I understand that the intent of this research is to gather opinions and information to help gauge the satisfaction and usefulness of using low-cost, no-cost materials in an industrial engineering course.

Additionally...

* + I understand that my participation in this online survey is voluntary and that the time required to participate will not exceed 1O minutes.
  + I understand that all information I provide is confidential and that my name will at no point be associated with any information I provide herein.
  + I understand that my IP address will not be revealed.
  + I understand that the research has no known risks or direct benefits to me.
  + I have the right to stop participation at any time without penalty.
* I also understand that I do not respond in the affirmative to the following question, the survey will be terminated and no information will be collected.

I affirm that I am 18 years of age or older. Yes

No (survey will terminate here and no data will be recorded)

**General Info**

### Q3

What section of the course are you enrolled in? ISYE 3450- Hybrid section (4)

IET 3322- Online section (3)

IET 3322- Hybrid section (1)

Unknown (1)

# Q4

What section of the course are you enrolled in? ISYE 3450- Hybrid section (4)

IET 3322- Online section (3)

IET 3322- Hybrid section (1)

# Q5

How many courses have you taken before this semester that were using no-cost learning materials as replacement of traditional textbook?

This is my first no-cost textbook course (3) This is my second no-cost textbook course (2)

I've had several no-cost textbook courses before. (3)

**Quantitative Survey Questions**

Please answer the following questions by clicking on your selection (Scale: 1 = strongly disagree to 5 = strongly agree)

Q6

I was satisfied with the quality of the no-cost materials provided in this course. 1 (Strongly disagree) to 5 (Strongly agree) 4 = (1), 5 = (7)

# Q7

The no-cost materials in this course helped ease my financial burden as I pursue my college degree.

1 (Strongly disagree) to 5 (Strongly agree) 4 = (1), 5 = (7)

# Q8

I would recommend to other students that taking a course with low cost, no cost materials provide the same or better quality of education versus taking a course with traditional textbook materials.

1 (Strongly disagree) to 5 (Strongly agree) 4 = (1), 5 = (7)

# Q9

I wish additional courses in my major offered low cost, no cost materials. 1 (Strongly disagree) to 5 (Strongly agree) 5 = (8)

# Q10

I believe that going from traditional textbooks to low cost, no cost materials in an industrial engineering course is the way of the future in higher learning.

1 (Strongly disagree) to 5 (Strongly agree) 3 = (1), 5 = (7)

# Q11

Are there any comments or suggestions you would like to add? Open response box (None)

# Q12

Please indicate your opinion on following statements regarding the no-cost learning material used in the course.

Strongly Agree Agree Disagree Strongly Disagree

I prefer the low-cost, no-cost model to learning versus traditional textbook learning. SA= 5, A = 2, SD = 1

I would like to see more low-cost, no-cost course offerings in my degree program.

## SA= 6, A= 1, SD = 1

It is easier to learn the subject matter by following the instructor's course notes than by following the traditional textbook materials.

## SA= 4, A= 3, D = 1

I feel that the instructor's course materials and tutorial videos explained concepts more clearly than by reading traditional textbook materials.

## SA= 5, A= 3

I feel that I learned more in this course using the instructor's low-cost, no-cost materials included in this course versus using traditional textbook materials.

## SA= 7, A= 1

Q13 Please provide any additional feedback on the no-cost learning material used in this course, e.g., what'w working or what's not, what needs to be improved, etc.

Open response box

I think having one in-depth document would be helpful to keep on the side.

**Demographic Information**

## Q14

What is your sex/gender? Male (8)

Female (0)

Prefer not to answer (0) Q15

What is your race/ethnicity?

American Indian/Alaska Native/Native American (0) Asian/Asian American (3)

Black/African American (0)

Hispanic/Latino(a) (1)

Native Hawaiian/Pacific Islander (0) White/Caucasian (4)

Other Q16

What is your age?

Slider bar to indicate age 18 to 70. 18 = (1}, 21 = (3), 22 = (2), 36, 37(Disagree}, 38

Thank you very much for taking the time to complete the survey. If you have any questions or comments regarding the survey, please feel free to contact us.

Dr. Robert Keyser at [rkeyser@kennesaw.edu](mailto:rkeyser@kennesaw.edu)

**Appendix B (IET 3322 Syllabus & Course Schedule)**

# **Spring 2025 Semester**

# **IET 3322 – Work Measurement & Ergonomics Course Syllabus**

**Instructor**:  Dr. Robert S. Keyser, Associate Professor

**Department:** Industrial & Systems Engineering, College of Engineering, Kennesaw State University

**Preferred Email Address**: Prefer D2L e-mail, alternately hootyhoo@kennesaw.edu

**Office:** M 113A

**Phone:** 470-578-7339

**Virtual Office hours only:** T 7:00am-8:00am; 9:30am-12:00pm | W 7:00am-8:00am; 11:00am-12:00pm

**Class meeting time and location:** W 8:00am-10:45am in M131and on Teams

## **Electronic Communications Statement**

The best way to reach me between class periods is using my D2L email. This way I will know what class you are in. I will reply as quickly as possible to emailed questions.  If you wish to meet with me in person, you can drop by my office during office hours.  For online students, I am also willing to meet with you via an ad-hoc Collaborate Ultra live session during the week, if necessary.

## **Email Response Time**

I try to reply to all emails within 48 hours from the time you first transmit the email, unless I let you know in advance of travel prohibiting me from doing so (or if I have an emergency). At times I will send a mass email to the class or an announcement. This will be through D2L email and alternately with the campus mail.  I do not know your Yahoo or Gmail accounts, so do not expect any mass emails to those accounts.  CHECK YOUR D2L EMAIL ACCOUNTS FREQUENTLY!

**Required Textbook**

The required no-cost textbook is provided in the D2L learning modules. The development of this no-cost textbook, PowerPoint slides, and related course materials was supported by an Affordable Learning Georgia grant (ALG grant #719).

## **Course Description**

This course consists of an examination of the principles and practices of work analysis and work measurement. Emphasis is on a variety of analytical tools and the development of the student's skill in the use of a video timing device.

## **Course Learning Outcomes**

Students will be able to:

1. Develop a systemic understanding of business and manufacturing processes.
2. Analyze and create improvements relevant to manufacturing processes.
3. Employ the basic principles of work design and work measurement time studies.

## **Course Prerequisites**

None

## **KSU D2L Brightspace**

This course has a D2L course web site for use by registered students.  Any class handouts, slides, grades, announcements, and links will be available there, so please get in the habit of checking it often. To log in, go to: <https://kennesaw.view.usg.edu/>.  Your logon is the same as your KSU Net ID, and your net password.  There are help links on the website too.

**Class Schedule/Attendance**

This course will meet on Wednesdays on campus and online.  As this is a Hybrid 50% course, significant asynchronous outside work will be required to replace what would typically be the other 75-minute class period.  Attendance is strongly recommended for this course. Students who miss the live class for any reason are NOT exempt from the material covered during the class period(s) the student misses.

## **Course Schedule**

This course will meet on the dates indicated on the Course Schedule as posted on the course homepage.  This is a hybrid course so we will meet on Mondays each week in a classroom and the remainder of the week you are responsible for viewing the PowerPoint lectures and weekly problem solutions.

## **Assessment by Homework Assignments**

You will have (1) Syllabus quiz and (13) chapter HW assignments in this course. You will have one week to complete each HW assignment. Students will receive their grade within 5 days after the assignment due date. The lowest HW grade will be dropped.

## **Assessment by Exams**

There will be a Midterm Exam and a Final Exam in this course. Go to the Quizzes tab to access exams. Both exams are timed online exams consisting of T/F and M/C questions and problems. Only one attempt is allowed on all exams. Exams for all students are open-book/notes and online, **working alone** with no help from external resources such as people or technology.  Students will receive their grade after completing the exam. Online exams will open after the deadline has passed. Exam feedback for all questions will be provided once the quiz opens within 2 days after the assignment due date.

## **Assessment by Group Projects**

This course includes a Group Project where students will use the concepts of work measurement to video-record a task and calculate the standard time for completing the task. Students will self-enroll in groups of 2-4 students, depending on class size. Work element times will be measured using a timing instrument, such as a stopwatch, video, or smartphone. The Group Project will include five graded deliverables: (GP#1) – Discussion #1: group project topics, (GP#2) - Discussion #2: Reflections so far, (3) GP#3 - a time study record & an mp4 video file of the task under study, (GP#4) – a narrated PowerPoint presentation, and (GP#5) – Discussion #3: Metacognitive Reflections on the group project. Group Project Dropbox HW assignments (GP#3 and GP#4) and Discussions (GP#1, GP#2, and GP#5) will be graded using separate rubrics and feedback for each assessment and will be provided within 3 days after the assignment due date.

## **Grading Policy**

Your final grade in this course will be determined using the following weights for each component of this course: **Note:** **Your lowest HW grade will be dropped.**

|  |  |
| --- | --- |
| Component | Weight |
| Syllabus Quiz | 5% |
| (13) Chapter HW assignments, but the lowest grade will be dropped, so only the top 12 Quiz grades count | 35% |
| Group Project | 30% |
| GP#1: Disc. #1: Project Topic  (Group submission, one submission on behalf of the group) 8 pts |  |
| GP#2: Disc. #2: Reflections so far (Group submission whereby one member posts a reflection, and all others respond to that same group Discussion post to receive individual credit) 12 pts |  |
| GP#3: Dropbox: Time Study  Record & mp4 Video File  (Group submission, one submission on behalf of the group) 24 pts |  |
| GP#4: Dropbox: Narrated PPT  Presentation  (Group submission whereby all group members are required to have a speaking part) 24 pts |  |
| GP#5: Disc. #3: Metacognitive  Reflections  (Group submission whereby one member posts a reflection, and all others respond to that same group Discussion post to receive individual credit) 8 pts |  |
| Midterm Exam | 15% |
| Final Exam | 15% |
|  |  |
| Total | 100% |

## **Grading Scale**

**90 – 100 = A**

**80 to < 90 = B**

**70 to < 80 = C**

**60 to < 70 = D**

**< 60 = F**

**Note:** There are (21) graded assignments in this course. As such, there is no extra credit for this course. Since your lowest quiz grade will be dropped, your course letter grade will be determined by your course average using the assignment weights and grading scale shown above. For example, if your course average is 89.9, your course grade will be a B since you need a minimum course average of 90 for an A in the course. The dropped lowest grade quiz assignment represents a built-in curve in the course.

**Missed/Late Work**

No late assignments will be accepted. All missed/late assignments will receive a grade of zero. **Strictly enforced.**

## **Attendance Policy**

1. All students are expected to attend all class sessions beginning with the initial class session and continuing all the way through Final Exam Week.

2. Students who miss class for any reason are not exempt from the material covered during the class the student misses.

3. Interaction between the instructor and students for our Live Sessions occurs during open discussions and while working through problems.  
4. The instructor is not responsible for assisting students catch up on class material when the student is absent from class.  
5. Your attendance will not directly impact your grade in this course unless you are absent for an Exam or if you fail to complete an Assignment on time.  
6. It should be noted that students who attend class on a regular basis normally perform better on the Assignments and on Exams.  
7. However, simply being present in class does not guarantee that the student will receive a high grade or a passing grade in this course.

**Instructional Continuity Plan**

Kennesaw State University (KSU) may decide to close campuses, operate on a delayed schedule, or transition to remote instruction for inclement weather or in case of emergency.

The University will announce campus closures, delayed schedules, or remote instruction through KSU Alerts sent to your cell number on file and to your university email account. In addition, announcements will be posted on KSU’s home page: www.kennesaw.edu.

Our class continuity plan includes:

1. Communication: Please check D2l Brightspace or e-mail for necessary instructions.
2. Virtual Classes: If in-person classes are not possible, we may transition to virtual classes using MS Teams.
3. Assignments and Assessments: Deadlines for assignments and assessments may be adjusted to accommodate the emergency situation.

We understand that emergencies create unique challenges. If you need additional support during an emergency, reach out via Brightspace or e-mail. The university also offers resources such as counseling and academic support, which can be accessed remotely.

## **Calculators/Software**

You will need access to a calculator and/or Excel capable of performing basic engineering and/or financial math functions (available in the computer labs). All exams you will be allowed use of Excel on the classroom computers as well as pocket calculators.

## **Technology Skills Needed**

All students are expected to be familiar with:

1. Connecting to the internet.

2. Logging in to the course website (i.e. D2L Brightspace).

3. Using internet browsers (e.g., Internet Explorer, Firefox, Chrome, etc.).

4. Downloading and opening PDF, Word, and Excel documents.

5. Elementary use of Excel including Cell Referencing and using Math Functions, no VBA required.

## **Withdrawal**

Students who find that they cannot continue in college for the entire semester after being enrolled, because of illness or any other reason, need to complete an online form. To completely or partially withdraw from classes at KSU, a student must withdraw online at www.kennesaw.edu, under Owl Express, Student Services.

The date the withdrawal is submitted online will be considered the official KSU withdrawal date which will be used in the calculation of any tuition refund or refund to Federal student aid and/or HOPE scholarship programs. It is advisable to print the final page of the withdrawal for your records. Withdrawals submitted online **prior** to midnight on the last day to withdraw without academic penalty will receive a “W” grade. Withdrawals **after** midnight will receive a “WF”. Failure to complete the online withdrawal process will produce no withdrawal from classes. Call the Registrar’s Office at 770-423-6200 during business hours if assistance is needed.

Students may, by means of the same online withdrawal and with the approval of the university Dean, withdraw from individual courses while retaining other courses on their schedules. This option may be exercised up until the W date on the Academic Calendar (on Registrar’s website). Failure to withdraw by the W date will mean that the student has elected to receive the final grade(s) earned in the course(s). The only exception to those withdrawal regulations will be for those instances that involve unusual and fully documented circumstances. In these rare cases, the policies of the university regarding hardship withdrawals will be strictly followed.

If any remaining coursework cannot be completed by the last class day, the instructor of this course will only consider assigning an incomplete grade to a student with an unusual and fully documented circumstance (must be verified by department chair or college dean), who is passing the course within two weeks of the last class day. If the final exam is among the assignments, the student’s grade will remain an “F” until it is taken, after which a grade change form will be submitted to the registrar, if necessary, once the other agreed upon conditions are met.

## **KSU Diversity Vision Statement**

It is our vision to create a strong multicultural and diverse educational environment at KSU in order to increase student satisfaction and to promote an understanding and awareness of people from various backgrounds upon graduation. In this way, KSU students will be educated for, and can effectively compete in the global society.

## **Course Enrollment Status Statement**

Students are solely responsible for managing their enrollment status in a class; nonattendance does not constitute a withdrawal.

## **Student Support Resources – Strategies for Success**

* Library, Tech Support, Tutoring, Writing Center, Advising, Bookstore, Resource Guide, Online Courses, other support resources: <http://learnonline.kennesaw.edu/resources/index.php>
* Accessibility Statements or VPAT for Technologies: <https://softchalkcloud.com/lesson/serve/jV10GKPfztZwQn/html>
* Academic and Student Services: <http://www.kennesaw.edu/currentstudents.php>

**KSU Campus Awareness, Resource & Empowerment (CARE) Services**

Any student who has difficulty affording groceries or accessing sufficient food to eat every day, or who lacks a safe and stable place to live, and believes this may affect their performance in the course, is urged to contact CARE Services (care.kennesaw.edu). The Campus Awareness, Resource & Empowerment (CARE) Services offers support to students who have experienced homelessness, food insecurity and/or the foster care system. Contact them at 470-578-5260 or careservices@kennesaw.edu for help.

**SPCEET CLUE Center**

The Southern Polytechnic College of Engineering and Engineering Technology CLUE (Collaborative Learning for Undergraduate Engineering) Center provides free peer-based academic support for a selection of engineering and engineering technology courses. Tutoring is offered Monday through Saturday, both face-to-face and online. Face-to-face tutoring is in room 306 of the Engineering Technology Center (Building Q) on a drop-in basis and online is by appointment. Tutoring for a given subject is available according to a weekly schedule, based on the tutors' availability. During those hours, students are welcome to receive tutoring from a peer who has already earned either an A or a B in the course. For additional information, visit the CLUE Center website.

## **Academic Honesty/Integrity/Ethics Statement**

Every KSU student is responsible for upholding the provisions of the [Student Code of Conduct](https://web.kennesaw.edu/scai/content/ksu-student-code-conduct), as published in the Undergraduate and Graduate Catalogs. Section 5c of the Student Code of Conduct addresses the university’s policy on academic honesty, including provisions regarding plagiarism and cheating, unauthorized access to university materials, misrepresentation/falsification of university records or academic work, malicious removal, retention, or destruction of library materials, malicious/intentional misuse of computer facilities and/or services, and misuse of student identification cards. Incidents of alleged academic misconduct will be handled through the established procedures of the Department of Student Conduct and Academic Integrity (SCAI), which includes either an “informal” resolution by a faculty member, resulting in a grade adjustment, or a formal hearing procedure, which may subject a student to the Code of Conduct’s minimum one semester suspension requirement.

The high quality of education at Kennesaw State University is reflected in the credits and degrees its students earn. ***All assignments that take place in and out of the classroom must be your own work and original for this course***. The protection of these high standards is crucial since the validity and equity of the University's grades and degrees depend upon it. Any student found to have violated any KSU academic honesty regulation after a hearing before a university hearing panel or before the Vice President for Student Success and Enrollment Services (or his/her designee) shall be suspended for at least one semester, unless the student persuades the deciding body that the circumstances of his or her behavior substantially mitigate the gravity of the violation. These regulations are designed to assist students in (1) developing appropriate attitudes about, and (2) understanding and following the university’s standards relating to academic honesty. The regulations protect students by helping them avoid committing infractions that may compromise the completion of their KSU degrees or damage their reputations. ***Any student caught cheating will fail the given assignment and be reported to the Office of Academic Affairs. No excuses. No exceptions.***

***Student Conduct Pledge/Statement:*** *As a member of the Kennesaw State University community of scholars, I understand that my actions are not only a reflection on myself, but also a reflection on the University and the larger body of scholars of which it is a part. Acting unethically, no matter how minor the offense, will be detrimental to my academic progress and self-image. It will also adversely affect all students, faculty, staff, the reputation of this University, and the value of the degrees it awards. Whether on campus or online, I understand that it is not only my personal responsibility, but also a duty to the entire KSU community that I act in a manner consistent with the highest level of academic integrity. Therefore, I promise that as a member of the Kennesaw State University community, I will not participate in any form of academic misconduct.*

**Policy on the Usage of Artificial Intelligence**

AI Use Prohibited:

You are expected to generate your own work in this class. When you submit any kind of work, you are asserting that you have created it completely on your own unless you indicate otherwise using quotation marks and proper citation for the source(s) you used to help you. Submitting content that has been generated by someone other than you, or that was created or assisted by an AI generative tool is cheating and constitutes a violation of the KSU Code of Academic Integrity.

**Types of Academic Misconduct:**

1) **Cheating:** Receiving, attempting to receive, knowingly giving or attempting to give unauthorized assistance in the preparation of any work required to be submitted for credit (including examinations, laboratory reports, essays, themes, term papers, etc.) is considered cheating, as is engaging in any behavior that a professor prohibits as academic misconduct in the syllabus or class discussion. Unless specifically authorized, using and/or having access to electronic devices during an examination, quiz, test or other assessment is automatically considered cheating, regardless of the student’s reason for using/accessing the device;

2) **Plagiarism:** Including direct quotations from other sources into work required to be submitted

for credit without indicating them as such by quotation marks, block quotes or other appropriate formatting. Incorporating the work of someone (e.g. ideas, theories, data, figures, graphs, programs, electronic based information, illustrations, etc.) into a paper or project without due acknowledgement;

3) **Self-Plagiarism:** Submitting any work for credit which was not authored specifically and originally for the assignment in question without the prior permission of the professor receiving that assignment. Most commonly, this means submitting the same, or substantially the same, paper or other assignment for credit in more than one class;

**4) Misrepresentation and/or Falsification:** Knowingly providing false information in completing University forms or applications (including admissions forms, scholarship applications, time sheets, false or counterfeit transcripts, etc.) or in any work submitted for credit. This includes providing fabricated/altered documents to substantiate an excused absence (such as to meet attendance requirements or have the chance to make**-**up a missed exam). Signing in for another student or having another individual sign in on a student’s behalf on an attendance sheet also constitutes a violation of this code section.

5) **Unauthorized Access to University Materials:** Taking, attempting to take, stealing or in any unauthorized manner otherwise procuring, gaining access to, altering or destroying any material pertaining to the conduct of a class (including tests, examinations, grade change forms, grade rolls, roll books, laboratory equipment, University grade records in written or computerized form, etc.).

6) Malicious**/Intentional Misuse of Computer Facilities/Services:** Maliciously or intentionally misusing university-controlled computer facilities and services. This includes violations of state and federal laws (e.g. copyright violations, unauthorized access to systems, alteration/damage/destruction, or attempted alteration/damage/destruction, use for profit, etc.) or a department's rules for computer usage (e.g. account violations, damage, or destruction of the system and/or its performance, unauthorized copying of electronic information, use of threatening or obscene language, etc.).

7) Malicious **Removal, Retention or Destruction of University Resource Materials**: Misplacing, taking, destroying any item or part of an item belonging to or in the protection of the University (or the attempt thereof) with the intention of bringing about an undue disadvantage in the academic pursuits of other Kennesaw State University students.

These examples of academic dishonesty shall not be construed to be comprehensive, and infractions will be dealt with on an individual basis according to university policies and procedures. It is the obligation of each student to assist in the enforcement of academic standards.

*See: The KSU Student Code of Conduct at**KSU Codes of Conduct-2015.pdf*

**Enforcement:** This policy is strictly enforced. Please note, ***I reserve the right to select any paper and/or assignment that are turned in for a grade for plagiarism review. Plagiarism review consists of running your paper/assignment through various search engines and databases at my disposal in order to check for “borrowed” or “bought” information. Students will be required to use TurnItIn.Com to have their papers reviewed for plagiarism.*** If you are found in violation of academic dishonesty, then you will be subject to the enforcement policies and procedures, as outlined by the University and the Department.

## **Disruption of the Classroom**

Faculty members are responsible for maintaining discipline in the classroom setting to the extent that all students in that class have an opportunity to participate in the learning process. Free exchange of ideas through appropriate dialogue is a necessary and important part of the learning process. Outside the classroom, other areas of the campus provide support services, which are also important to the total learning process. Sometimes the faculty or staff member may be confronted with a situation where the conduct of a particular student or students is so inappropriate that it impedes the natural and necessary learning process. All incidents of disciplinary violations of the KSU Student Code of Conduct outside of residence hall property shall be reported to the Department of Student Conduct and Academic Integrity (SCAI).

* If the situation is not imminently dangerous, the faculty or staff member may control the immediate situation by requiring the student(s) to meet specific criteria (not speaking during the remainder of the class period, leaving the classroom or office area immediately, etc.), or the faculty member may choose to dismiss the class for the remainder of the period to avoid a confrontation.
* In situations where a student's conduct is both disruptive and poses imminent danger to the health and safety of himself/herself or others, immediately contact the KSU Police at [(470) 578-6666](callto:%28470%29%20578-6666). The responding officer at the time of notification shall remove the student from the area immediately.
* Immediately report the incident to the SCAI Dept. and/or the Office of the Dean for Students and for possible handling under the "Interim Suspension" policy, described in Section III below.
* The SCAI officer will investigate the incident and will advise as to the appropriate course of action in each situation.
* See <http://scai.kennesaw.edu/students/general-info/conduct-violation.php> for more information.

## **Student Records/FERPA**

Kennesaw State University adheres to the Family Educational Rights & Privacy Act of 1974 – FERPA. See the following link for more information:

<http://www.usg.edu/information_technology_handbook/section9/tech/9.5_privacy_and_security>

**Student Rights and Responsibilities**

Students of Kennesaw State University are entitled to an environment that is conducive to learning and individual growth. To this end, students enrolling at Kennesaw State University assume a responsibility to abide by the policies and regulations expressed in this section. By doing so, students may fulfill their responsibilities and enjoy the exercise of their own rights while also respecting the rights of others. All rights and responsibilities may be found in the University Catalog at catalog.kennesaw.edu.

## **Sexual Misconduct Policy**

Kennesaw State University adheres to KSU’s policy prohibiting sexual misconduct both in and out of the classroom. Questions about this policy should be directed to the KSU Equal Employment Opportunity (EEO) and Title IX officer by telephone at (470) 578-2614. You may also visit the University’s EEO website <http://www.kennesaw.edu/eeo/index.html> for more information.

## **Americans with Disabilities Act (ADA) – Support Services**

In compliance with applicable disability law, qualified students with a disability may be entitled to *reasonable accommodation*.Any student with a documented disability (hidden or visible) needing academic adjustments, including classroom or test accommodations is requested to notify the instructor within the first two weeks of the course. Verification from KSU disAbled Student Support Services is required. All discussions and documentation will remain confidential.

Disabled Student Support Services:

Joe Mack Wilson Student Center, Suite 160, 470.578.6644

Please visit the <https://sds.kennesaw.edu/> for more information.

**Curriculum, Instruction, and Assessment Policies**

KSU’s Curriculum, Instruction, and Assessment policies can be found at this website: <https://cia.kennesaw.edu/instructional-resources/syllabus-policy.php>

## **Copyright Law**

Kennesaw State University adheres to USG’s policy to respect the right of copyright. Holders and comply with copyright laws as set forth in the United States Copyright act. For more information, see the following link to USG’s policy: <http://www.usg.edu/copyright/>

## **Web Accessibility**

Kennesaw State University follows the guidelines of the Universal Design for Learning standard of web accessibility. Faculty use Word, PDF, and HTML formats when communicating electronic information to students whenever possible and appropriate in light of the goals of the course. Faculty are trained to use Web Accessibility Evaluation tools, e.g., WAVE ([www.wave.webaim.org](http://www.wave.webaim.org)), and make adjustments as possible and appropriate in light of the goals of the course. For free resources available to students on web accessibility, please visit the Web Accessibility Resources page at the Distance Learning Center: [http://www.kennesaw.edu/dlc/facultyresources/index.php#](http://www.kennesaw.edu/dlc/facultyresources/index.php)

## **Electronic Recording and Social Media**

Electronic recording performed without the consent of the people being recorded chills the free exchange of ideas. Academic freedom, free inquiry, and freedom of expression should not be limited by the fear that one’s brainstorming, polemic discourse, speculative inquiry, or any other kind of expressed curiosity made within the space of a university classroom will be made public without one’s consent. This fear is unacceptable regardless of whether one is in an online, hybrid, or face-to-face classroom setting. Accordingly, no person shall make public any electronically recorded class discussion without the written permission of the instructor. This policy is not intended to discourage electronic recording in the classroom or the use of social media when such actions are performed with the written consent of the instructor, and others as appropriate. Note: Faculty accommodate all reasonable requests to electronically record a class discussion; these requests must be documented by the DisAbled Student Support Services available at: <https://sds.kennesaw.edu/>

**IET 3322 – Work Measurement & Ergonomics**

**Course Schedule**

**Calendar Dates for Spring Semester 2025**

All **Assignments** must be completed and submitted by the Due Date below. Students are expected to attend all class sessions beginning with the initial class session and continuing all the way through Final Exam Week. The last day to withdraw from this course with a grade of "W" is Friday, March 28, 2025. **Note:** Except for exams, all other assignments are due by 8:00am on their respective due dates.

**Tentative Schedule:**

| **Day** | **Date** | **Week** | **Topics** | **Due Date** |
| --- | --- | --- | --- | --- |
| W | 1/8 | 1 | Introduction/Syllabus/Course Schedule/Group Project/Syllabus Quiz  Ch01 – Operation Process Chart |  |
| W | 1/15 | 2 | Ch02 – Flow Process Chart and Flow Diagram | Syllabus Quiz  HW1/Ch01 |
| W | 1/22 | 3 | Ch03 – Manual Work | HW2/Ch02 |
| W | 1/29 | 4 | Ch04 – Workflow and Yield  GP#1: One submission on behalf of the group but show all names who deserve credit. Remember to include details such as steps you intend to analyze in your process. | HW3/Ch03  GP#1: (Disc#1) Topics in Discussions tab |
| W | 2/5 | 5 | Ch05 – Manual Assembly Lines | HW4/Ch04 |
| W | 2/12 | 6 | Ch06 – Motion Economy and Work Design | HW5/Ch05 |
| W | 2/19 | 7 | Ch07 – Allowance for Personal Time, Fatigue, and Delays | HW6/Ch06 |
| W | 2/26 | 8 | Ch08 – Performance Rating  GP#2: Each group should begin a thread. All group members must post to their group’s thread to receive credit. Names left off the submission will not receive credit. | HW7/Ch07  GP#2: (Disc#2) Reflections so far in Discussions tab |
| W | 3/5 | 9 | **Midterm Exam – Chs. 01 – 08 (4:00am-11:59pm D2L exam)** | HW8/Ch08  Midterm Exam |
| W | 3/12 |  | ***Spring Break Week (no class)*** |  |
| W | 3/19 | 10 | Ch09 – Direct Time Study/Ink, Inc./Static Examples |  |
| W | 3/26 | 11 | Ch10 – Direct Time Study/Static & Dynamic Examples | HW9/Ch09 |
| W | 4/2 | 12 | Ch11 – Predetermined Motion Time Systems | HW10/Ch10 |
| W | 4/9 | 13 | Ch12 – Standard Data Systems  GP#3: One submission on behalf of the group but show all names who deserve credit. Names left off the submission will not receive credit. | HW11/Ch11  GP#3: Time Study Record & mp4 Video File |
| W | 4/16 | 14 | Ch13 – Work Sampling  GP#4: Each group should begin a thread. All group members must post to their group’s thread to receive credit. | HW12/Ch12  GP#4: Dropbox Narrated PPT Presentation |
| W | 4/23 | 15 | Ch14 – Workplace Safety and Health  GP#5: Each group should begin a thread. All group members must post to their group’s thread to receive credit. Names left off the submission will not receive credit. | HW13/Ch13  GP#5: (Disc. #3)  Metacognitive Reflections in Discussions tab |
| W | 4/30 | 16 | **Final Exam – Chs. 09 – 14 (4:00am-11:59pm D2L exam)** | Final Exam |

**Appendix C (ISYE 3450 Syllabus & Course Schedule)**

# **Spring 2025 Semester**

# **ISYE 3450 – Work Measurement Study Course Syllabus**

**Instructor**:  Dr. Robert S. Keyser, Associate Professor

**Department:** Industrial & Systems Engineering, College of Engineering, Kennesaw State University

**Preferred Email Address**: Prefer D2L e-mail, alternately [rkeyser@kennesaw.edu](mailto:rkeyser@kennesaw.edu)

**Office:** M 113A

**Phone:** 470-578-7339

**Virtual Office hours only:** T 7:00am-8:00am; 9:30am-12:00pm | W 7:00am-8:00am; 11:00am-12:00pm

**Class meeting time and location:** T 8:00am-9:15am in M133

## **Electronic Communications Statement**

The best way to reach me between class periods is using my D2L email. This way I will know what class you are in. I will reply as quickly as possible to emailed questions.  If you wish to meet with me in person, you can drop by my office during office hours.  For online students, I am also willing to meet with you via an ad-hoc Collaborate Ultra live session during the week, if necessary.

## **Email Response Time**

I try to reply to all emails within 48 hours from the time you first transmit the email, unless I let you know in advance of travel prohibiting me from doing so (or if I have an emergency). At times I will send a mass email to the class or an announcement. This will be through D2L email and alternately with the campus mail.  I do not know your Yahoo or Gmail accounts, so do not expect any mass emails to those accounts.  CHECK YOUR D2L EMAIL ACCOUNTS FREQUENTLY!

**Required Textbook**

The required textbook is provided in the D2L learning modules. The development of this no-cost textbook, PowerPoint slides, and related course materials was supported by an Affordable Learning Georgia grant (ALG grant #719).

## **Course Description**

This course consists of an examination of the principles and practices of work analysis and work measurement. Emphasis is on a variety of analytical tools and the development of the student's skill in the use of a video timing device.

## **Course Learning Outcomes**

Students will be able to:

1. Develop a systemic understanding of business and manufacturing processes.
2. Analyze and create improvements relevant to manufacturing processes.
3. Employ the basic principles of work design and work measurement time studies.

## **Course Prerequisites**

ISYE 2600 or MATH 2332 and Engineering Standing

## **KSU D2L Brightspace**

This course has a D2L course web site for use by registered students.  Any class handouts, slides, grades, announcements, and links will be available there, so please get in the habit of checking it often. To log in, go to: <https://kennesaw.view.usg.edu/>.  Your logon is the same as your KSU Net ID, and your net password.  There are help links on the website too.

**Class Schedule/Attendance**

This course will meet on Thursdays on campus.  As this is a Hybrid 50% course, significant asynchronous outside work will be required to replace what would typically be the other 75-minute class period.  Attendance is strongly recommended for this course. Students who miss the live class for any reason are NOT exempt from the material covered during the class period(s) the student misses.

## **Course Schedule**

This course will meet on the dates indicated on the Course Schedule as posted on the course homepage.  This is a hybrid course so we will meet on Mondays each week in a classroom and the remainder of the week you are responsible for viewing the PowerPoint lectures and weekly problem solutions.

## **Assessment by Quizzes**

You will have (1) Syllabus quiz and (13) chapter quizzes in this course. All quizzes are timed, 75-minute online quizzes consisting of T/F and M/C questions and problems. You will be allowed one attempt, but the lowest score will be dropped. Quizzes for all students are open-book/notes and online, **working alone** with no help from external resources such as people or technology. Students will receive their grade after completing the quiz. Online quizzes will open after the deadline has passed. Quiz feedback for all questions will be provided once the quiz opens within 3 days after the assignment due date. The lowest quiz grade will be dropped.

## **Assessment by Exams**

There will be a Midterm Exam and a Final Exam in this course. Go to the Quizzes tab to access exams. Both exams are timed online exams consisting of T/F and M/C questions and problems. Only one attempt is allowed on all exams. Exams for all students are open-book/notes and online, **working alone** with no help from external resources such as people or technology.  Students will receive their grade after completing the exam. Online exams will open after the deadline has passed. Exam feedback for all questions will be provided once the quiz opens within 2 days after the assignment due date.

## **Assessment by WorkStudy 7 Project (Extra Credit)**

This course includes a Group Project where students will provide an instructional narrated ppt presentation ***or*** an mp4 video file of how to use the WorkStudy 7 time study app.

## **Assessment by Group Projects**

This course includes a Group Project where students will use the concepts of work measurement to video-record a task and calculate the standard time for completing the task. Students will self-enroll in groups of 2-4 students, depending on class size. Work element times will be measured using a timing instrument, such as a stopwatch, video, or smartphone. The Group Project will include five graded deliverables: (GP#1) – Discussion #1: group project topics, (GP#2) - Discussion #2: Reflections so far, (3) GP#3 - a time study record & an mp4 video file of the task under study, (GP#4) – a narrated PowerPoint presentation, and (GP#5) – Discussion #3: Metacognitive Reflections on the group project. Group Project Dropbox HW assignments (GP#3 and GP#4) and Discussions (GP#1, GP#2, and GP#5) will be graded using separate rubrics and feedback for each assessment and will be provided within 3 days after the assignment due date.

## **Grading Policy**

Your final grade in this course will be determined using the following weights for each component of this course: **Note:** **Your lowest Quiz grade will be dropped.**

|  |  |
| --- | --- |
| Component | Weight |
| Syllabus Quiz | 5% |
| (13) Chapter Quizzes, but the lowest grade will be dropped, so only the top 12 Quiz grades count | 35% |
| WorkStudy 7 Project (Extra Credit) | 5% |
| Group Project | 30% |
| GP#1: Disc. #1: Project Topic  (Group submission, one submission on behalf of the group) 8 pts |  |
| GP#2: Disc. #2: Reflections so far (Group submission whereby one member posts a reflection, and all others respond to that same group Discussion post to receive individual credit) 12 pts |  |
| GP#3: Dropbox: Time Study  Record & mp4 Video File  (Group submission, one submission on behalf of the group) 24 pts |  |
| GP#4: Dropbox: Narrated PPT  Presentation  (Group submission whereby all group members are required to have a speaking part) 24 pts |  |
| GP#5: Disc. #3: Metacognitive  Reflections  (Group submission whereby one member posts a reflection, and all others respond to that same group Discussion post to receive individual credit) 8 pts |  |
| Midterm Exam | 15% |
| Final Exam | 15% |
| Total | 100% |

## **Grading Scale**

**90 – 100 = A**

**80 to < 90 = B**

**70 to < 80 = C**

**60 to < 70 = D**

**< 60 = F**

**Note:** There are (21) graded assignments in this course. As such, there is no extra credit for this course. Since your lowest quiz grade will be dropped, your course letter grade will be determined by your course average using the assignment weights and grading scale shown above. For example, if your course average is 89.9, your course grade will be a B since you need a minimum course average of 90 for an A in the course. The dropped lowest grade quiz assignment represents a built-in curve in the course.

**Missed/Late Work**

No late assignments will be accepted. All missed/late assignments will receive a grade of zero. **Strictly enforced.**

## **Attendance Policy**

1. All students are expected to attend all class sessions beginning with the initial class session and continuing all the way through Final Exam Week.

2. Students who miss class for any reason are not exempt from the material covered during the class the student misses.

3. Interaction between the instructor and students for our Live Sessions occurs during open discussions and while working through problems.  
4. The instructor is not responsible for assisting students catch up on class material when the student is absent from class.  
5. Your attendance will not directly impact your grade in this course unless you are absent for an Exam or if you fail to complete an Assignment on time.  
6. It should be noted that students who attend class on a regular basis normally perform better on the Assignments and on Exams.  
7. However, simply being present in class does not guarantee that the student will receive a high grade or a passing grade in this course.

**Instructional Continuity Plan**

Kennesaw State University (KSU) may decide to close campuses, operate on a delayed schedule, or transition to remote instruction for inclement weather or in case of emergency.

The University will announce campus closures, delayed schedules, or remote instruction through KSU Alerts sent to your cell number on file and to your university email account. In addition, announcements will be posted on KSU’s home page: www.kennesaw.edu.

Our class continuity plan includes:

1. Communication: Please check D2l Brightspace or e-mail for necessary instructions.
2. Virtual Classes: If in-person classes are not possible, we may transition to virtual classes using MS Teams.
3. Assignments and Assessments: Deadlines for assignments and assessments may be adjusted to accommodate the emergency situation.

We understand that emergencies create unique challenges. If you need additional support during an emergency, reach out via Brightspace or e-mail. The university also offers resources such as counseling and academic support, which can be accessed remotely.

## **Calculators/Software**

You will need access to a calculator and/or Excel capable of performing basic engineering and/or financial math functions (available in the computer labs). All exams you will be allowed use of Excel on the classroom computers as well as pocket calculators.

## **Technology Skills Needed**

All students are expected to be familiar with:

1. Connecting to the internet.

2. Logging in to the course website (i.e. D2L Brightspace).

3. Using internet browsers (e.g., Internet Explorer, Firefox, Chrome, etc.).

4. Downloading and opening PDF, Word, and Excel documents.

5. Elementary use of Excel including Cell Referencing and using Math Functions, no VBA required.

## **Withdrawal**

Students who find that they cannot continue in college for the entire semester after being enrolled, because of illness or any other reason, need to complete an online form. To completely or partially withdraw from classes at KSU, a student must withdraw online at www.kennesaw.edu, under Owl Express, Student Services.

The date the withdrawal is submitted online will be considered the official KSU withdrawal date which will be used in the calculation of any tuition refund or refund to Federal student aid and/or HOPE scholarship programs. It is advisable to print the final page of the withdrawal for your records. Withdrawals submitted online **prior** to midnight on the last day to withdraw without academic penalty will receive a “W” grade. Withdrawals **after** midnight will receive a “WF”. Failure to complete the online withdrawal process will produce no withdrawal from classes. Call the Registrar’s Office at 770-423-6200 during business hours if assistance is needed.

Students may, by means of the same online withdrawal and with the approval of the university Dean, withdraw from individual courses while retaining other courses on their schedules. This option may be exercised up until the W date on the Academic Calendar (on Registrar’s website). Failure to withdraw by the W date will mean that the student has elected to receive the final grade(s) earned in the course(s). The only exception to those withdrawal regulations will be for those instances that involve unusual and fully documented circumstances. In these rare cases, the policies of the university regarding hardship withdrawals will be strictly followed.

If any remaining coursework cannot be completed by the last class day, the instructor of this course will only consider assigning an incomplete grade to a student with an unusual and fully documented circumstance (must be verified by department chair or college dean), who is passing the course within two weeks of the last class day. If the final exam is among the assignments, the student’s grade will remain an “F” until it is taken, after which a grade change form will be submitted to the registrar, if necessary, once the other agreed upon conditions are met.

## **KSU Diversity Vision Statement**

It is our vision to create a strong multicultural and diverse educational environment at KSU to increase student satisfaction and to promote an understanding and awareness of people from various backgrounds upon graduation. In this way, KSU students will be educated for, and can effectively compete in the global society.

## **Course Enrollment Status Statement**

Students are solely responsible for managing their enrollment status in a class; nonattendance does not constitute a withdrawal.

## **Student Support Resources – Strategies for Success**

* Library, Tech Support, Tutoring, Writing Center, Advising, Bookstore, Resource Guide, Online Courses, other support resources: <http://learnonline.kennesaw.edu/resources/index.php>
* Accessibility Statements or VPAT for Technologies: <https://softchalkcloud.com/lesson/serve/jV10GKPfztZwQn/html>
* Academic and Student Services: <http://www.kennesaw.edu/currentstudents.php>

**KSU Campus Awareness, Resource & Empowerment (CARE) Services**

Any student who has difficulty affording groceries or accessing sufficient food to eat every day, or who lacks a safe and stable place to live, and believes this may affect their performance in the course, is urged to contact CARE Services (care.kennesaw.edu). The Campus Awareness, Resource & Empowerment (CARE) Services offers support to students who have experienced homelessness, food insecurity and/or the foster care system. Contact them at 470-578-5260 or careservices@kennesaw.edu for help.

**SPCEET CLUE Center**

The Southern Polytechnic College of Engineering and Engineering Technology CLUE (Collaborative Learning for Undergraduate Engineering) Center provides free peer-based academic support for a selection of engineering and engineering technology courses. Tutoring is offered Monday through Saturday, both face-to-face and online. Face-to-face tutoring is in room 306 of the Engineering Technology Center (Building Q) on a drop-in basis and online is by appointment. Tutoring for a given subject is available according to a weekly schedule, based on the tutors' availability. During those hours, students are welcome to receive tutoring from a peer who has already earned either an A or a B in the course. For additional information, visit the CLUE Center website.

## **Academic Honesty/Integrity/Ethics Statement**

Every KSU student is responsible for upholding the provisions of the [Student Code of Conduct](https://web.kennesaw.edu/scai/content/ksu-student-code-conduct), as published in the Undergraduate and Graduate Catalogs. Section 5c of the Student Code of Conduct addresses the university’s policy on academic honesty, including provisions regarding plagiarism and cheating, unauthorized access to university materials, misrepresentation/falsification of university records or academic work, malicious removal, retention, or destruction of library materials, malicious/intentional misuse of computer facilities and/or services, and misuse of student identification cards. Incidents of alleged academic misconduct will be handled through the established procedures of the Department of Student Conduct and Academic Integrity (SCAI), which includes either an “informal” resolution by a faculty member, resulting in a grade adjustment, or a formal hearing procedure, which may subject a student to the Code of Conduct’s minimum one semester suspension requirement.

The high quality of education at Kennesaw State University is reflected in the credits and degrees its students earn. ***All assignments that take place in and out of the classroom must be your own work and original for this course***. The protection of these high standards is crucial since the validity and equity of the University's grades and degrees depend upon it. Any student found to have violated any KSU academic honesty regulation after a hearing before a university hearing panel or before the Vice President for Student Success and Enrollment Services (or his/her designee) shall be suspended for at least one semester, unless the student persuades the deciding body that the circumstances of his or her behavior substantially mitigate the gravity of the violation. These regulations are designed to assist students in (1) developing appropriate attitudes about, and (2) understanding and following the university’s standards relating to academic honesty. The regulations protect students by helping them avoid committing infractions that may compromise the completion of their KSU degrees or damage their reputations. ***Any student caught cheating will fail the given assignment and be reported to the Office of Academic Affairs. No excuses. No exceptions.***

***Student Conduct Pledge/Statement:*** *As a member of the Kennesaw State University community of scholars, I understand that my actions are not only a reflection on myself, but also a reflection on the University and the larger body of scholars of which it is a part. Acting unethically, no matter how minor the offense, will be detrimental to my academic progress and self-image. It will also adversely affect all students, faculty, staff, the reputation of this University, and the value of the degrees it awards. Whether on campus or online, I understand that it is not only my personal responsibility, but also a duty to the entire KSU community that I act in a manner consistent with the highest level of academic integrity. Therefore, I promise that as a member of the Kennesaw State University community, I will not participate in any form of academic misconduct.*

**Policy on the Usage of Artificial Intelligence**

AI Use Prohibited:

You are expected to generate your own work in this class. When you submit any kind of work, you are asserting that you have created it completely on your own unless you indicate otherwise usingquotation marks and proper citation for the source(s) you used to help you. Submitting content that has been generated by someone other than you, or that was created or assisted by an AI generative tool is cheating and constitutes a violation of the KSU Code of Academic Integrity.

**Types of Academic Misconduct:**

1) **Cheating:** Receiving, attempting to receive, knowingly giving or attempting to give unauthorized assistance in the preparation of any work required to be submitted for credit (including examinations, laboratory reports, essays, themes, term papers, etc.) is considered cheating, as is engaging in any behavior that a professor prohibits as academic misconduct in the syllabus or class discussion. Unless specifically authorized, using and/or having access to electronic devices during an examination, quiz, test or other assessment is automatically considered cheating, regardless of the student’s reason for using/accessing the device;

2) **Plagiarism:** Including direct quotations from other sources into work required to be submitted

for credit without indicating them as such by quotation marks, block quotes or other appropriate formatting. Incorporating the work of someone (e.g. ideas, theories, data, figures, graphs, programs, electronic based information, illustrations, etc.) into a paper or project without due acknowledgement;

3) **Self-Plagiarism:** Submitting any work for credit which was not authored specifically and originally for the assignment in question without the prior permission of the professor receiving that assignment. Most commonly, this means submitting the same, or substantially the same, paper or other assignment for credit in more than one class;

**4) Misrepresentation and/or Falsification:** Knowingly providing false information in completing University forms or applications (including admissions forms, scholarship applications, time sheets, false or counterfeit transcripts, etc.) or in any work submitted for credit. This includes providing fabricated/altered documents to substantiate an excused absence (such as to meet attendance requirements or have the chance to make**-**up a missed exam). Signing in for another student or having another individual sign in on a student’s behalf on an attendance sheet also constitutes a violation of this code section.

5) **Unauthorized Access to University Materials:** Taking, attempting to take, stealing or in any unauthorized manner otherwise procuring, gaining access to, altering or destroying any material pertaining to the conduct of a class (including tests, examinations, grade change forms, grade rolls, roll books, laboratory equipment, University grade records in written or computerized form, etc.).

6) Malicious**/Intentional Misuse of Computer Facilities/Services:** Maliciously or intentionally misusing university-controlled computer facilities and services. This includes violations of state and federal laws (e.g. copyright violations, unauthorized access to systems, alteration/damage/destruction, or attempted alteration/damage/destruction, use for profit, etc.) or a department's rules for computer usage (e.g. account violations, damage, or destruction of the system and/or its performance, unauthorized copying of electronic information, use of threatening or obscene language, etc.).

7) Malicious **Removal, Retention or Destruction of University Resource Materials**: Misplacing, taking, destroying any item or part of an item belonging to or in the protection of the University (or the attempt thereof) with the intention of bringing about an undue disadvantage in the academic pursuits of other Kennesaw State University students.

These examples of academic dishonesty shall not be construed to be comprehensive, and infractions will be dealt with on an individual basis according to university policies and procedures. It is the obligation of each student to assist in the enforcement of academic standards.

*See: The KSU Student Code of Conduct at**KSU Codes of Conduct-2015.pdf*

**Enforcement:** This policy is strictly enforced. Please note, ***I reserve the right to select any paper and/or assignment that are turned in for a grade for plagiarism review. Plagiarism review consists of running your paper/assignment through various search engines and databases at my disposal in order to check for “borrowed” or “bought” information. Students will be required to use TurnItIn.Com to have their papers reviewed for plagiarism.*** If you are found in violation of academic dishonesty, then you will be subject to the enforcement policies and procedures, as outlined by the University and the Department.

## **Disruption of the Classroom**

Faculty members are responsible for maintaining discipline in the classroom setting to the extent that all students in that class have an opportunity to participate in the learning process. Free exchange of ideas through appropriate dialogue is a necessary and important part of the learning process. Outside the classroom, other areas of the campus provide support services, which are also important to the total learning process. Sometimes the faculty or staff member may be confronted with a situation where the conduct of a particular student or students is so inappropriate that it impedes the natural and necessary learning process. All incidents of disciplinary violations of the KSU Student Code of Conduct outside of residence hall property shall be reported to the Department of Student Conduct and Academic Integrity (SCAI).

* If the situation is not imminently dangerous, the faculty or staff member may control the immediate situation by requiring the student(s) to meet specific criteria (not speaking during the remainder of the class period, leaving the classroom or office area immediately, etc.), or the faculty member may choose to dismiss the class for the remainder of the period to avoid a confrontation.
* In situations where a student's conduct is both disruptive and poses imminent danger to the health and safety of himself/herself or others, immediately contact the KSU Police at [(470) 578-6666](callto:%28470%29%20578-6666). The responding officer at the time of notification shall remove the student from the area immediately.
* Immediately report the incident to the SCAI Dept. and/or the Office of the Dean for Students and for possible handling under the "Interim Suspension" policy, described in Section III below.
* The SCAI officer will investigate the incident and will advise as to the appropriate course of action in each situation.
* See <http://scai.kennesaw.edu/students/general-info/conduct-violation.php> for more information.

## **Student Records/FERPA**

Kennesaw State University adheres to the Family Educational Rights & Privacy Act of 1974 – FERPA. See the following link for more information:

<http://www.usg.edu/information_technology_handbook/section9/tech/9.5_privacy_and_security>

**Student Rights and Responsibilities**

Students of Kennesaw State University are entitled to an environment that is conducive to learning and individual growth. To this end, students enrolling at Kennesaw State University assume a responsibility to abide by the policies and regulations expressed in this section. By doing so, students may fulfill their responsibilities and enjoy the exercise of their own rights while also respecting the rights of others. All rights and responsibilities may be found in the University Catalog at catalog.kennesaw.edu.

## **Sexual Misconduct Policy**

Kennesaw State University adheres to KSU’s policy prohibiting sexual misconduct both in and out of the classroom. Questions about this policy should be directed to the KSU Equal Employment Opportunity (EEO) and Title IX officer by telephone at (470) 578-2614. You may also visit the University’s EEO website <http://www.kennesaw.edu/eeo/index.html> for more information.

## **Americans with Disabilities Act (ADA) – Support Services**

In compliance with applicable disability law, qualified students with a disability may be entitled to *reasonable accommodation*.Any student with a documented disability (hidden or visible) needing academic adjustments, including classroom or test accommodations is requested to notify the instructor within the first two weeks of the course. Verification from KSU disAbled Student Support Services is required. All discussions and documentation will remain confidential.

Disabled Student Support Services:

Joe Mack Wilson Student Center, Suite 160, 470.578.6644

Please visit the <https://sds.kennesaw.edu/> for more information.

**Curriculum, Instruction, and Assessment Policies**

KSU’s Curriculum, Instruction, and Assessment policies can be found at this website: <https://cia.kennesaw.edu/instructional-resources/syllabus-policy.php>

## **Copyright Law**

Kennesaw State University adheres to USG’s policy to respect the right of copyright. Holders and comply with copyright laws as set forth in the United States Copyright act. For more information, see the following link to USG’s policy: <http://www.usg.edu/copyright/>

## **Web Accessibility**

Kennesaw State University follows the guidelines of the Universal Design for Learning standard of web accessibility. Faculty use Word, PDF, and HTML formats when communicating electronic information to students whenever possible and appropriate in light of the goals of the course. Faculty are trained to use Web Accessibility Evaluation tools, e.g., WAVE ([www.wave.webaim.org](http://www.wave.webaim.org)), and make adjustments as possible and appropriate in light of the goals of the course. For free resources available to students on web accessibility, please visit the Web Accessibility Resources page at the Distance Learning Center: [http://www.kennesaw.edu/dlc/facultyresources/index.php#](http://www.kennesaw.edu/dlc/facultyresources/index.php)

## **Electronic Recording and Social Media**

Electronic recording performed without the consent of the people being recorded chills the free exchange of ideas. Academic freedom, free inquiry, and freedom of expression should not be limited by the fear that one’s brainstorming, polemic discourse, speculative inquiry, or any other kind of expressed curiosity made within the space of a university classroom will be made public without one’s consent. This fear is unacceptable regardless of whether one is in an online, hybrid, or face-to-face classroom setting. Accordingly, no person shall make public any electronically recorded class discussion without the written permission of the instructor. This policy is not intended to discourage electronic recording in the classroom or the use of social media when such actions are performed with the written consent of the instructor, and others as appropriate. Note: Faculty accommodate all reasonable requests to electronically record a class discussion; these requests must be documented by the DisAbled Student Support Services available at: <https://sds.kennesaw.edu/>

**ISYE 3450 – Work Measurement Study**

**Course Schedule**

**Calendar Dates for Spring Semester 2025**

All Assignments must be completed and submitted by the Due Date below. Students are expected to attend all class sessions beginning with the initial class session and continuing all the way through Final Exam Week. The last day to withdraw from this course with a grade of "W" is Friday, March 28, 2025. Note: Except for exams, all other assignments are due by 8:00am on their respective due dates.

**Tentative Schedule:**

| Day | Date | Week | Topics | Due Date |
| --- | --- | --- | --- | --- |
| T | 1/7 | 1 | Introduction/Syllabus/Course Schedule/Group Project/WorkStudy 7/Syllabus Quiz/Schedule AI talk in Feb with Yingying Kang/Accenture  Ch01 – Introduction to Work Measurement |  |
| T | 1/14 | 2 | Ch02 – Charting and Diagramming | Syllabus Quiz  Q1/Ch01 |
| T | 1/21 | 3 | Ch03 – Manual Work  GP#1: One submission on behalf of the group but show all names who deserve credit. Remember to include details such as steps you intend to analyze in your process. | Q2/Ch02  GP#1: (Disc#1) Topics in Discussions tab |
| T | 1/28 | 4 | Ch04 – Workflow and Yield | Q3/Ch03 |
| T | 2/4 | 5 | Ch05 – Manual Assembly Lines | Q4/Ch04 |
| T | 2/11 | 6 | Ch06 – Motion Economy and Work Design | Q5/Ch05 |
| T | 2/18 | 7 | Ch07 – Allowance for Personal Time, Fatigue, and Delays | Q6/Ch06 |
| T | 2/25 | 8 | Ch08 – Performance Rating  Dr. Yingying Kang, Assurant, Director of AI and Data Science (Guest Speaker)  GP#2: Each group should begin a thread. All group members must post to their group’s thread to receive credit. Names left off the submission will not receive credit. | Q7/Ch07  GP#2: (Disc#2) Reflections so far in Discussions tab |
| T | 3/4 | 9 | Midterm Exam – Chs. 01 – 08 (8:00am-9:15am in-class exam)  Open notes/calculator/pen allowed. No other electronic devices allowed. | Q8/Ch08  Midterm Exam |
| T | 3/11 |  | *Spring Break Week (no class)* |  |
| T | 3/18 | 10 | Ch09 – Direct Time Study/Ink, Inc./Static Examples |  |
| T | 3/25 | 11 | Ch10 – Direct Time Study/Static & Dynamic Examples |  |
| T | 4/1 | 12 | Ch11 – Predetermined Motion Time Systems | Q9/Ch09 |
| T | 4/8 | 13 | Ch12 – Standard Data Systems  GP#3: One submission on behalf of the group but show all names who deserve credit. Names left off the submission will not receive credit. | Q10/Ch11  GP#3: Time Study Record & mp4 Video File |
| T | 4/15 | 14 | Ch13 – Work Sampling  GP#4: Each group should begin a thread. All group members must post to their group’s thread to receive credit. | Q11/Ch12  WorkStudy 7 assignment  (Extra credit)  GP#4: Dropbox Narrated PPT Presentation |
| T | 4/22 | 15 | Ch14 – Workplace Safety and Health  GP#5: Each group should begin a thread. All group members must post to their group’s thread to receive credit. Names left off the submission will not receive credit. | Q12/Ch13  GP#5: (Disc. #3)  Metacognitive Reflections in Discussions tab |
| T | 4/29 | 16 | Final Exam – Chs. 07 – 14 (8:00am-9:15am in-class exam).  Open notes/calculator/pen allowed. No other electronic devices allowed. | Q13/Ch14  Final Exam |