



**College of Engineering Technology**

**COURSE SYLLABUS Fall 2017**

**ETEC 3374 Motion and Time Study**

Instructor: Terry Waugh PhD  
Pirkle 420-B  
2944-1198

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Office Hours: Mon - Wed. 2:30 – 4:30 or by appointment, (appointment encouraged)

Class: Mon – Wed 9:00 – 10:20  
Room - Pirkle 220

Required Text: Motion and Time Study for Lean Manufacturing  
by Fred Meyers and James Stewart

**COURSE OBJECTIVES:**

College of

To provide students knowledge on systematic and practical approaches of current motion and time study techniques which can be used in industrial and agriculture settings. Students will use problem-solving skills and creativity to determine the ideal method or approach to obtain a solution to increase efficiency.

**COURSE REQUIREMENTS:**

The student is expected to participate in class activities and discussion. All class members will be expected to participate in their work groups and in the presentations. Each group will present their research to the class on their assigned date. The group presentation should include a polished power point presentation, group paper, class activity with questions and answers given by work groups. All group members must be prepared to present on assigned dates.

**POLICY CONCERNING LATE ASSIGNMENTS AND MISSED EXAMS**

There will be in class quizzes totaling 225 pts, a group project 225 pts, a midterm exam and final exam (both essay) 225 pts each, it would be a rare exception that a student could make up a missed exam. If for some very good reason you can not take exam on given date contact me for arrangements. Real life emergencies will always be given consideration.

### ATTENDANCE POLICY:

I am required to record attendance. Students are asked to sign-in for each class, if you do not sign-in you are considered absent. Your grade will be affected if you miss student presentations, required material or in class Quizzes. I expect everyone to treat each other and myself with respect as I will always treat you with respect.

Your participation in group work is key to your success in this class. Make every attempt to be on time.

### GRADES AND ASSIGNMENTS:

Items in Syllabus are Subject to Change

The class will be broken into cooperative work groups. Each work group will present their projects to the class and lead discussion on their assigned date. I will give quizzes randomly with random values. The midterm and final exam will be 12 questions all essay where any subject we covered is fair game. It would be prudent to make backup copies of all assignments

### SPECIFIC GRADING CRITERIA:

Quizzes will total	225 pts
Group Project	225 pts
Mid Term	225 pts
Final	<u>225 pts</u>
<b>Total</b>	<b>900 pts</b>

Final grades will be based upon the following scale:

- A - 810 - 900
- B - 720 - 809
- C - 630 - 719
- D - 540 - 629

### ASSIGNMENT DATES:

These assignments and dates are subject to change:

Group projects and paper as assigned to each group

Quizzes will be random by date and value

Midterm Exam and Final Exam location and time will be announced

## LATE ASSIGNMENTS

I will not accept late assignments. If missing class for university event you may hand in assignments early.

## CELL PHONE USE

Please if you must use your phone leave the classroom, we want as little distractions as possible. **Turn your phone off** in class, not vibrate but off.

## CLASS STRUCTURE:

Monday classes will typically involve lecture and new material.

Wednesdays will usually consist of group presentations, Q&A by assigned groups, and some new material.

Quizzes can be given on any day. The midterm and final will consist of twelve questions to be answered in class. All are essay questions that must be answered completely. Any paper to me should be typed in **Arial font #12** the midterm and final should **not be over twelve pages**.

## COURSE OUTLINE:

1. Productivity
2. Definition and Scope of Motion and Time Study
3. History of Motion and Time Study
4. The general problem solving process
5. Work methods design
6. Process Analysis
7. Activity Charts- Man and Machine parts
8. Operation Analysis
9. Micro-motion Study
10. Fundamental and motions
11. Motion study, Film analysis
12. The use of fundamental hand motions
13. Principles of motion economy as related to the use of the human body
14. Principles of motion economy as related to the design of tools and equipment
15. Motion study, mechanization, and automation
16. Standardization written standard practice
17. Time study: time study equipment,, machining the time study
18. Time study: determining the rating factor
19. Introduce the MOST work measurement system

### **Expectations of Students**

...That you come to class with an open mind to diverse ideas; that you have read assigned reading and completed activities; **that as a result of your reading and experiences you will bring at least one question to each class**

### **STUDENTS WITH DISABILITIES POLICY:**

It is the policy of Sam Houston State University that individuals otherwise qualified shall not be excluded, solely by reason of their disability, from participation in any academic program of the university. Further, they shall not be denied the benefits of these programs nor shall they be subjected to discrimination. Students with disabilities that might affect their academic performance should register with the Office of Services for Students with Disabilities located in the Lee Drain Annex (telephone 936-294-3512, TDD 936-294-3786, and e-mail [disability@shsu.edu](mailto:disability@shsu.edu)). They should then make arrangements with their individual instructors so that appropriate strategies can be considered and helpful procedures can be developed to ensure that participation and achievement opportunities are not impaired.

SHSU adheres to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations for students with disabilities. If you have a disability that may affect adversely your work in this class, then I encourage you to register with the SHSU Services for Students with Disabilities and to talk with me about how I can best help you. All disclosures of disabilities will be kept strictly confidential. NOTE: No accommodation can be made until you register with the Services for Students with Disabilities. For a complete listing of the university policy, see:

<http://www.shsu.edu/dept/academic-affairs/documents/aps/students/811006.pdf>