# SAM HOUSTON STATE UNIVERSITY COLLEGE OF ARTS AND SCIENCES DEPARTMENT OF AGRICULTURAL AND INDUSTRIAL SCIENCES TECHNOLOGY PROGRAM

## COURSE DESCRIPTION LABORATORY ORGANIZATION AND MANAGEMENT

I.E. 591

#### **IE 591 LABORATORY ORGANIZATION AND MANAGEMENT**

IE 591 is a required course for a Bachelor in Industrial Technology Education Certification.

College of Arts and Sciences Department of Agriculture Technology Program

INSTRUCTOR: Dr. Nedom C. Muns

TEXT: No text.

LOCATION: Thomason Building 217

OFFICE: Thomason 203

OFFICE HOURS: 11:00 a.m. – 1:00 p.m. TTH

4:00 p.m. – 6:00 p.m. MW

Or as needed.

PHONE: 936-295-8323 Home

936-294-1191 936-294-1190

#### **COURSE DESCRIPTION:**

This course is designed to assist trade and industrial and health occupations education laboratory teachers in properly organizing and managing learning situations in the classroom or laboratory. The elimination of sex bias will be emphasized. The course includes: planning and organizing instructional facilities for effective learning; establishing record keeping systems; establishing systems to account for tools, equipment, materials, and supplies; utilizing organization, rotation, and progress charts; principles of class management, including directing, controlling, and supervising learning activities; and development of organizational, management, and safety plans to ensure acquisition of essential skills, knowledge, and desirable attitudes by students.

#### **STANDARDS MATRIX:**

			Standards:
Objectives/Learning Outcomes	Activities (* indicates field-based activity)	Performance Assessment	• State Standards • Specialty Organization Standards (ITEA)

The Student will develop a system of student management.	Lecture Hand-Outs Class Discussion	written assignments     exam	7.2k.7.3k.7.1s. 7.2s.7.6s.7.27s
The student will develop a system for record keeping	Lecture Hand-Outs Class Discussion	written assignments     exam	7 .3k, 7.4k, 7 .2s,7 .6s, 7 .16s, 7.17s
The Student will develop a plan for teaching safety	Lecture Hand-Outs Class Discussion Visual Aids	Written Assignments Exams	7.13k.7.14k.7.15k. 7.16k. 7.17k. 7.18k. 7.12s. 7.13s. 7.14s. 7.15s. 7.16s. 7.17s. 7.18s 7.19s 7.20s
The student will be able to establish a plan for repair, maintenance and purchase of tools and materials.	Lecture Hand-Outs Class Discussion	Written Assignments Exams	7.7k. 7.8k, 7.9k.7.1Ok, 7.11k. 7.12k, 7.1k. 7.5k, 7.6k, 7.8s, 7.9s, 7.1Os, 7.11s, 7.7s, 7.6s, 7.7s
The student will be able to develop a youth development program	Lecture Class Discussion Handouts Visual Aids	Written Assignments Exams	7. 19k,7.22k, 7.21s, 7.27s, 7.29s, 7.30s

Web address for state standards: http://www.sbec.state.tx.us Web address for specialty organization standards: http://www.iteawww.org/TAA/Listing.htm

**COURSE FORMAT:** The class will be taught utilizing lecture, class discussion, videos and handouts.

### ORGANIZATION AND MANAGEMENT OF INSTRUCTIONAL ENVIRONMENT shall include the following essential elements:

The student shall be provided opportunities to:

- 1. List the duties and responsibilities of the laboratory teacher.
- 2. Prepare a checklist for opening school.
- 3. Develop a tool storage, control, and inventory system.
- 4. Develop a material storage and control system.
- 5. Write specifications for the purchase of tools, equipment, and materials.
- 6. Prepare and/or use a competency profile for documenting and monitoring student achievement.
- 7. Develop a student management and supervision program.

- 8. Prepare a student class and/or shop responsibility chart.
- 9. Prepare a student class and/or shop duty rotation chart.
- 10. Prepare an emergency action plan.
- 11. Understand teacher liabilities and have knowledge of procedures designed to prevent teacher negligence and liability.
- 12. Complete an accident report.
- 13. Understand first aid rules and procedures.
- 14. Understand how to select jobs for student training.
- 15. Understand the state and local educational agency's requirements regarding student disciplining.
- 16. Develop computer programs for laboratory management
- 17. Develop a public relations program.
- 18. Understand how to prepare and maintain student attendance records and files including contact hour registers.
- 19. Prepare a travel report in accordance with TEA and local school district policies.
- 20. Design a floor plan for a new or existing facility to obtain maximum safe utilization of machines, equipment, floor area, and effective conservation of energy.
- 21. Participate in and have knowledge of approved development activities.
- 22. Outline the organizational structure for trade and industrial and/or health occupations education.
- 23. Write a descriptive title, course description, and prerequisites for a trade and industrial and/or health occupations education course.
- 24. Understand methods utilized for student recruitment and/or selection in the laboratory program.
- 25. Prepare a plan for closing a laboratory program at the end of the school year.
- 26. Explain the instructor responsibilities for working with an ARD committee.

- 27. Have knowledge that a program evaluation, which measures program effectiveness annually, is required.
- 28. Understand the use of computers for course management and record keeping.
- 29. Develop a plan to direct meaningful student activities for the first day of class.
- 30. Understand budgeting and reporting responsibilities.
- 31. Demonstrate knowledge of materials and procedures required to comply with the Texas Eye Safety Law (21.909 of the Texas Education Code).
- 32. Understand the need to document safety instruction presented in compliance with safety laws and regulations.
- 33. Establish a system for repairing and servicing tools and equipment in a vocational laboratory.

#### **COURSE CONTENT:**

- I. Factors that affect laboratory management
  - A. Teacher
  - B. Student
  - C. Laboratory Facilities
- II. Starting the school year
  - A. When to arrive
  - B. Meeting the administrator

  - C. Getting acquainted D. Looking up records
  - E. Checking inventories
  - F. Reconditioning and ordering equipment
  - G. Determining needed supplies and ordering
  - H. Use of courses of study
  - I. Home room and other duties
  - J. Meeting classes for the first time
- III. Safety Instruction and Accident Prevention
  - A. The importance of safety
    - 1. Teacher liability
    - 2. Contributing factors to accidents
    - 3. Displays and exhibit of student work
    - 4. Teachers role as a citizen of school and community
- IV. Development of a Safety Plan
  - A. Forms
    - 1. Insurance waiver/purchase
    - 2. Student safety pledge
    - 3. Parent permission
    - 4. Safety rules
    - 5. Cognitive safety test
    - 6. Psychomotor safety test
    - 7. Accident Reports

- 8. Accident Safety Drills
- 9. Safety Posters/films/videos

#### V. Class Organization and Management

- A. Student participation in organization and management
- B. Making assignments
- C. Care of Tools
  - 1. Tool panels
  - 2. Tool rooms
  - 3. Tool kits
  - 4. Free access versus control
- D. Record keeping
  - 1. Tools and equipment
  - 2. Supplies
  - 3. Student accounts
  - 4. Tool inventory and identification
- E. Handling supplies
  - 1. Requisition blanks
  - 2. Writing complete purchase descriptions
  - 3. Supply clerks
  - 4. Free verse controlled supply access
  - 5. Continuous inventory
- F. Housekeeping methods
  - 1. Organizational procedures
  - 2. Identification of responsibilities
- G. Organizational procedures of general laboratories versus Unit laboratories

#### VI. <u>Discipline in the Industrial technology laboratories</u>

- A. Interpretation of discipline
  - 1. The teacher as a factor in discipline
  - 2. The student as a factor in discipline
  - 3. Working conditions affecting discipline
  - 4. Elements of good discipline
  - 5. Maintaining good discipline

#### VII. Media for teaching

- A. Project method
  - 1. Core
  - 2. Core elective
  - 3. Free elective
  - 4. Mass-produced
  - 5. Production versus individual project
- B. Conceptual approach
- C. Experimental approach

#### VIII. Handicapped Students

- A. Special Students
- B. Laws
- C. Safety

#### IX. Closing: the School Year

- A. Maintaining class organization and preventing idleness
- B. Reconditioning and storage of tools and equipment
- C. Preparing equipment and supply inventories
- D. Closing accounts
  - 1. Student bills
  - 2. Supply bills

- E. Preparing orders for tools and equipment needed for the new year.
- F. Evaluating student achievement and recording of permanent grades

#### **GRADING**:

There will be a minimum of two exams and a final exam. An assignment sheet will be given to indicate assignments for evaluation. Regular exams will have the same value as class assignments. All missed exams must be made up within one week. All material must be submitted by the indicated date. No work will be accepted during the week before final exams.

#### **ATTENDANCE:**

Every student is expected to attend and be on time for all classes. Students that miss more than three (3) classes will have their final averaged reduced by three (3) points for each two (2) absentees beyond the three given absentees. Three tardies will equate to one absentee.

#### STUDENT DISABILITY POLICY:

Students with a disability which affects their academic performance are expected to arrange for a conference with the instructor in order that appropriate strategies can be considered to ensure that participation and achievement opportunities are not impaired."

#### **ACADEMIC DISHONESTY:**

Include an academic dishonesty statement policy that is, at minimum, compatible with Academic Policy Statement 810213 and the Faculty Handbook

All students are expected to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain complete honesty and integrity in the academic experiences both in and out of the classroom. Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action. The University and its official representatives may initiate disciplinary proceedings against a student accused of any form of academic dishonesty including, but not limited to, cheating on an examination or other academic work which is to be submitted, plagiarism, collusion and the abuse of resource materials.

#### **CLASSROOM RULES OF CONDUCT:**

According to Section 5 of the Student Handbook, students are expected to assist in maintaining a classroom environment that that is conducive to learning. Therefore, an instructor's policy regarding classroom disturbances and their penalties must be included on the syllabus. Students will refrain from behavior in the classroom that intentionally or unintentionally disrupts the learning process and, thus, impedes the mission of the university. Cellular telephones and pagers must be turned off before class begins. Students are prohibited from eating in class, using tobacco products, making offensive remarks, reading newspapers, sleeping, talking at inappropriate times, wearing inappropriate clothing, or engaging in any other form of distraction. Inappropriate behavior in the classroom shall result in a directive to leave class. Students who are especially disruptive also may be reported to the Dean of Students for disciplinary action in accordance with university policy.

#### **VISITORS IN THE CLASSROOM:**

According to the Faculty Handbook a statement regarding the instructor's policy on classroom visitors should be included on the syllabus.

Unannounced visitors to class must present a current, official SHSU identification card to be permitted in the classroom. They must not present a disruption to the class by their attendance. If the visitor is not a registered student, it is at the instructor's discretion whether or not the visitor will be allowed to remain in the classroom.

This policy is not intended to discourage the occasional visiting of classes by responsible persons. Obviously, however, the visiting of a particular class should be occasional and not regular, and it should in no way constitute interference with registered members of the class or the educational process.

#### **RELIGIOUS HOLIDAYS:**

University policy states that a student who is absent from class for the observance of a religious holy day to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence. Not later than the 15th calendar day after the first day of the semester, or the 7th calendar day after the first day of a summer session, the student must notify the instructor of each scheduled class that he/she would be absent for a religious holy day.