

## **Special Topics in Instrumentation Technology/Technician (INTC 1391)**



**Credit:** 3 semester credit hours (3 hours lecture)

**Prerequisite/Co-requisite:** INCR 1402 & INTC 1301

### **Course Description**

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency.

### **Required Textbook and Materials**

NONE

### **Course Objectives** (with applicable SCANS skills after each)

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

1. Learning outcomes/objectives are determined by local occupational need and business and industry trends. (SCANS C3.3, C4.3, C5.3, C13.2, C19.4, F1.5, F2.5, F5.5, F6.3, F10.4, F11.4, F13.3, F14.4)

### **SCANS Skills and Competencies**

Beginning in the late 1980's, the U.S. Department of Labor Secretary's Commission on Achieving Necessary Skills (SCANS) conducted extensive research and interviews with business owners, union leaders, supervisors, and laborers in a wide variety of work settings to determine what knowledge workers needed in order to perform well on a job. In 1991 the Commission announced its findings in *What Work Requires in Schools*. In its research, the Commission determined that "workplace know-how" consists of two elements: foundation skills and workplace competencies. The three-part foundation skills and five-part workplace competences are further defined in the SCANS attachment.

### **Course Outline**

#### **A. Introduction to OSHA Regulations**

1. Background
2. Enforcement
3. Recordkeeping
4. Compliance Assistance

#### **B. NEC (National Electric Code)**

1. Article 100 Definitions
2. Article 110 Electrical Installations
3. Article 250 Grounding and Bonding
4. Article 430 Motor Controls

#### **C. OSHA Hazards Assessments Requirements**

1. Hazard Assessment

Approved mm/yyyy

- 2. Training
- 3. Personal Protective Equipment
- D. OSHA Certification of Compliance Requirements
  - 1. Introduction
  - 2. Voluntary Training Guidelines
  - 3. Index of Training Requirements
  - 4. General Industry Training Requirements, 29 CFR Part 1910
  - 5. Federal Employee Programs Training Requirements, 29 CFR Part 1960
- E. Electrical Safety
  - 1. OSHA 1910.301 thru 1910.333
- F. Interview Technique and Skills
  - 1. Job Interview Process
  - 2. Pre-Interview
  - 3. Interview
  - 4. Post Interview.

### **Grade Scale**

90 – 100	A
80 – 89	B
70 – 79	C
60 – 69	D
0 – 59	F

### **Course Evaluation**

Final grades will be calculated according to the following criteria:

Major Tests/Papers	100%
--------------------	------

### **Course Requirements**

- 1. Students will demonstrate a basic understanding of OSHA regulations.
- 2. Students will demonstrate a basic understanding of the NEC.
- 3. Students will demonstrate a knowledge of personal protective gear.
- 4. Students will be able to explain electrical safety.
- 5. Students will participate in Project Interview.

### **Attendance Policy:**

INTC-1391  
Course Syllabi

1. Missing more than 20% of classes will result in an automatic “F” for the course.
2. Absences are counted for unexcused, excused and coming to class late.
3. Missing more than 20% of a class period will count as an absence.
4. Being tardy 3 times equals 1 absence.

### **Course Policies**

1. No food, drinks, or use of tobacco products in class.
2. No foul or harsh language will be tolerated
3. Turn off all Cell Phones during lectures
4. Headphones may be worn only upon Instructor approval
5. Do not bring children to class.
6. No Cheating of any kind will be tolerated. Students caught cheating or helping someone to cheat can and will be removed from the class for the semester. Cheating can result from expulsion from LIT.
7. If you wish to drop a course, the student is responsible for initiating and completing the drop process. If you stop coming to class and fail to drop the course, you will earn an ‘F’ in the course.
8. Internet Usage
  - a. Classroom computers have access to the internet.
  - b. Student usage of the internet will be monitored.
  - c. Any unauthorized use of the internet will not be tolerated.
  - d. Improper usage of the internet, such as profanity, pornography, gambling, etc... will result in disciplinary action not limited to expulsion from LIT.

### **Disabilities Statement**

The Americans with Disabilities Act of 1992 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. Among other things, these statutes require that all students with documented disabilities be guaranteed a learning environment that provides for reasonable accommodations for their disabilities. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409) 880-1737 or visit the office in Student Services, Cecil Beeson Building.

### **Course Schedule**

INTC-1391  
Course Syllabi

<b>Week</b>	<b>Topic</b>	<b>Reference</b>
1	Course introduction and policies	Online Handouts
2/3/4/5	NEC	NFPA.org
6/7	Intro to OSHA regulations	Osha.gov
8/9	OSHA hazards assessment requirements	Osha.gov
10/11/12	OSHA certification of compliance	Osha.gov
13/14	Electrical safety	Osha.gov
15/16	Interview Skills and techniques	Project Interview

**Contact Information:**

**Instructor:** Mr. Weldon Jacobs  
**Office:** Building: T4 Room: 105  
**Telephone:** (409) 880-8232  
**E-mail:** [weldon.jacobs@lit.edu](mailto:weldon.jacobs@lit.edu)  
**Office Hours:** Posted on instructor's door