Brazosport College

Syllabus for EPCT 2431 - Industrial Hygiene Applications

Instructor: Samson Largo Office Phone: N/A Alt. Phone: 979-230-3618 Office: N/A Email: samson.largo@brazosport.edu Fax: 979-230-3341

I. COURSE DESCRIPTION

EPCT 2431 - Industrial Hygiene Applications. CIP 1505070011

A study of the industrial environment and its relation to worker's health. This course provides training in anticipation, recognition, evaluation, and controlling health hazards-particularly chemical, physical, biological, and ergonomic factors existing in the workplace and having injurious effects on workers. The course also introduces training in instrumentation use in monitoring and measuring health hazards in the workplace and covers current issues in industrial hygiene. **Credit Hours:** 4 (3 lecture, 1 lab)

Samuel Chamberlain

Om Chawla

Gary Hicks

Dr. Mitchell Seal

A. Prerequisite: EPCT 1441

Required skill level: College-level reading, writing and math.

II. COURSE OBJECTIVES

The following list of course goals will be addressed in the course.

- 1. Demonstrate an understanding of the impacts of hazards on workers
- 2. Understand, interpret, and apply regulations in a business environment.
- 3. Gather, manage, and analyze data
- 4. Understand and be able to apply professional standards.
- 5. Demonstrate the ability to apply this knowledge in an investigation of a particular area of industrial hygiene
- 6. Apply fundamental IH analysis and technical laboratory skills.

Assessment: Class discussion, quizzes and exams, Term Project

III. STUDENT LEARNING OUTCOMES

Identify the impact of hazards on workers; interpret and apply regulations in a business environment; gather, manage, and analyze data; apply professional standards; prepare a report on various areas of industrial hygiene based on student investigations.

IV. TEXTBOOK OR COURSE MATERIAL INFORMATION

A. Textbook

- 1. Fundamental of Industrial Hygiene, Plog, 6th Edition, National Safety Council Publisher, 2012. ISBN: 978-0-87912-312-3 (required)
- 2. Safety Glasses (required)

Quick Study Guides from BC Bookstore (You may save and reuse guides from prior classes)

| Algebra | Microbiology |
|------------------------|--------------------------------|
| Anatomy | Organic Chemistry Fundamentals |
| Chemistry | Periodic Table |
| Chemistry Lab Basics | Physics |
| Electronics | Physics Problem Solver |
| Essays and Term Papers | Respiratory System |
| First Aid | Senses |
| Materials Science | Weights and Measures |
| | |

Case Studies: Sixty Practical Applications of OH&S Control Principles, D. Jeff Burton, IVE Press, 2004, provided in Class.

Industrial Hygiene Workbook: The Occupational Health Sciences, D. Jeff Burton, IVE Press, 2004, provided in Class.

Required course materials may be available at the Brazosport College bookstore, on campus or online at http://www.brazosport.edu/bookstore. A student of this institution is not under any obligation to purchase a textbook from the college bookstore. The same textbook is/may also be available from an independent retailer, including an online retailer.

Required course materials are available at the Brazosport College bookstore, on campus or online at <u>http://brazosport.edu/bookstore/home.html.</u> A student of this institution is not under any obligation to purchase a textbook from the college bookstore. The same textbook is/may also be available from an independent retailer, including an online retailer.

For Distance Education Courses include the following: Contact the Brazosport College Bookstore with a credit card for course materials. Phone: 979-230-3651. Fax: 979-230-3653. Email: <u>bookstore@brazosport.edu</u> Website: <u>http://brazosport.edu/bookstore/home.html.</u>

B. Course Outline

This is a sample outline which may vary with individual instructors. It will also vary based on whether the course is a summer course or a fall/spring course. Students should contact their instructor for the outline of the course they are taking.

| Chap assig discu even Asso | Student Projects/ Responsibilities: Chapter Readings: Each student should come to class prepared to discuss the chapters assigned for that class. Students will be called upon in random order. All chapters will be discussed for each class. Current Events: Each student should come to class with a current events report about Industrial Hygiene from a credible news source {PBS, Reuters, BBC, Associated Press: Do NOT use Tabloids, TV, or New York Times} Calculator: You will need to have a basic scientific calculator to do sums, basic and log | | | | |
|--|--|--|--|--|--|
| Week | Date | Topics | | | |
| 1 | 1/16/19 | Industrial Hygiene Overview IH Lab and Equipment - tour | | | |
| 2 | 1/23/19 | Evaluation of Hazards Math / Chemistry Review | | | |
| 3 | 1/30/19 | Air Sampling / TLVs and BEIs | Term Project Topic Approved (10%) | | |
| 4 | | Direct Reading Instruments for gases, vapors, and particulates | | | |
| 5 | 2/13/19 | Control of Hazards – Methods of Control | Submit List of Resources for Term Project (10%) | | |
| 6 | 2/20/19 | Local Exhaust Ventilation | | | |
| 7 | 2/27/19 | Dilution Ventilation / General Ventilation | Submit 1 page outline of term project (10%) | | |
| 8 | 3/6/19 | MID TERM | | | |
| 9 | 3/13/19 | SPRING BREAK | | | |
| 10 | 3/20/19 | Respiratory Protection | | | |

| 11 | 3/27/19 | Personal Protective Equipment | Submit Three Draft Slides of Term Project (10%) | |
|----|---------|---|--|--|
| 12 | | Occupational and Environmental Medicine Physician and Occupational Nurse Practical Application - Monitoring Methods, TWA, STEL | | |
| 13 | 4/10/19 | Environmental Health and Safety Practical Application – Radiation / Noise | Submit Two Pages Draft of Term Project (20%) | |
| 14 | 4/17/19 | Industrial Hygiene Program Practical Application – NIOSH Lifting Equation | | |
| 15 | 4/24/19 | Term Project Presentations Final Exam Review | | |
| 16 | 5/1/19 | Final Exam | | |

Outline

| Week | Activities |
|------|--|
| 1 | Topics: Occupational Health Programs |
| | Textbook Readings for Class Discussion: Industrial Hygiene OverviewChapter 1, 24 |
| | Case Studies: Sixty Practical Applications of OH&S Control Principles 13 – The Farm Worker's Dilemma |
| | Industrial Hygiene Workbook: The Occupational Health Sciences 1 – Overview of Industrial Hygiene Reference Literature |
| | Laboratory: Industrial Hygiene Evaluation MethodsIndustrial Hygiene Lab Tour and go over equipment |
| | Homework: To be Assigned by Instructor as appropriate |
| Week | Activities |
| 2 | Topics: Evaluation of Hazards Basis Approach to Hazard Recognition Description of Process Hazard Assessment Field Survey Monitoring and Sampling Industrial Hygiene Calculations Readings from Textbook: Be Prepared to Discuss in Class <i>Fundamentals Of Industrial Hygiene</i> Chapter 15 |

| Week 2 | | | | |
|-----------|---|--|--|--|
| (cont.) | Class Readings: | | | |
| | Case Studios: Sinty Practical Applications of OHLS Control Principles | | | |
| | Case Studies: Sixty Practical Applications of OH&S Control Principles | | | |
| | • 23 – Cut to the Heart Like a Laser | | | |
| | • 51 – The VDT Attack | | | |
| | Industrial Hygiene Workbook: The Occupational Health Sciences 5 – Physiology and Anatomy | | | |
| Week | Activities | | | |
| 3 | Topics: Air Sampling | | | |
| | • Types of air sampling | | | |
| | Air sampling equipment | | | |
| | Collection devices for gases and vapors | | | |
| | Collection devices for particulates | | | |
| | • Pumps and flow rates | | | |
| | • Sampling methods | | | |
| | Equipment Calibration | | | |
| | Sampling and Analytical Error | | | |
| | | | | |
| | Readings from Textbook: Be Prepared to Discuss in Class | | | |
| | Fundamentals Of Industrial Hygiene | | | |
| | • Chapter 16 | | | |
| | Class Readings: | | | |
| | | | | |
| | Industrial Hygiene Workbook: The Occupational Health Sciences | | | |
| | 10 – Environmental Evaluation: Air Sampling and Analysis | | | |
| | 16 – Air Pollution | | | |
| | | | | |
| | Laboratory: | | | |
| XXZL- | • Learn how to use IH lab equipment to conduct personal air monitoring | | | |
| Week 4 | Activities | | | |
| 4 | Topics: Direct Reading Instruments for Gases, Vapors, and Particulates Common Types of Instruments | | | |
| | Sensing Technologies (FIDs, PIDs, GCs, Mass Spectrometers) | | | |
| | Calibrations | | | |
| | Indoor air quality instruments | | | |
| | • Indoor an quanty instruments | | | |
| | Readings from Textbook: Be Prepared to Discuss in Class | | | |
| | Fundamentals Of Industrial Hygiene | | | |
| | Chapter 17: Direct Reading Instruments | | | |
| Week 4 | | | | |
| (cont.) | Case Studies: Sixty Practical Applications of OH&S Control Principles | | | |
| | • 30 – One Hot Momma | | | |
| | 29 – IAQ Complaints at Corporate Headquarters | | | |

| | 35 - IAQ Complaints in an Office Complex 37 - IAQ Complaints Older Office Building 39 - Improbable + Unlikely = IAQ Trouble 41 - The No Smoking Dilemma 43 - Possible IAQ Problem at a Light Manufacturer 46 - Taking Air For Granted 49 - The Curse of Tobacco Smoke in a Nevada Bar 52 - Triple R Dilemma <i>Laboratory:</i> Learn how to use IH lab equipment to conduct direct reading surveys |
|------|--|
| WEEK | Activities |
| 5 | Topics: Methods of Control Engineering Controls at design stage Industrial Hygiene Control Methods Administrative Controls, PPE, Training Readings from Textbook: Be Prepared to Discuss in Class <i>Fundamentals Of Industrial Hygiene</i> Chapter 18: Methods of Control <i>Industrial Hygiene Workbook: Chapter 18</i> |
| Week | Activities |
| 6 | Topics: Local Exhaust Ventilation System Components Airflow and Pressure Principles LEV Performance Evaluation and Principles Fundamentals Of Industrial Hygiene Chapter 19: Local Exhaust Ventilation Case Studies: Sixty Practical Applications of OH&S Control Principles 11 – The Old Zinc – Plating Scam 34 – Permission to Emit 44 – Silica Exposure Leads to Loss of Pulmonary Function Industrial Hygiene Workbook: The Occupational Health Sciences |
| Week | Activities |
| 7 | Topics: Dilution Ventilation / General Ventilation Dilution ventilation systems Mechanical and Natural ventilation Calculating dilution ventilation airflow for health protection Fans for dilution ventilation HVAC Systems |

| Week 7 | Indoor Air Quality | | | |
|---------|---|--|--|--|
| (cont.) | Diagnosing IAQ Issues | | | |
| | | | | |
| | Readings from Textbook: Be Prepared to Discuss in Class | | | |
| | Fundamentals Of Industrial Hygiene | | | |
| | Chapter 20: Dilution Ventilation of Industrial Workplaces | | | |
| | Chapter 21: General Ventilation of Nonindustrial Occupancies | | | |
| | | | | |
| | Case Studies: Sixty Practical Applications of OH&S Control Principles | | | |
| | • 9 – Cooling Plastic Creates Exposure to Gas and Vapor | | | |
| | • 37 – IAQ Complaints Older Office Building | | | |
| | | | | |
| | Industrial Hygiene Laboratory: | | | |
| | Learn to use IAQ instruments / Measure air velocity in hoods and HVAC | | | |
| Week | Activities | | | |
| 8 | MID TERM | | | |
| Week | Activites | | | |
| 9 | SPRING BREAK | | | |
| Week | Activities | | | |
| 10 | Topics: Respiratory Protection | | | |
| | Respiratory Protection Programs | | | |
| | Classes of Respirators | | | |
| | Respiratory Selection | | | |
| | Respiratory Fit Testing | | | |
| | | | | |
| | Fundamentals Of Industrial Hygiene | | | |
| | Chapter 22: Respiratory Protection | | | |
| | Environmental Laboratory Exercises: | | | |
| | • Learn assigned protection factors (APF) | | | |
| | • Learn to use portacount (fit testing equipment) | | | |
| | • Learn to select respirator cartridge for chemical | | | |
| | • Learn to calculate service life and MUC | | | |
| Week | Activities | | | |
| 11 | TOPIC: | | | |
| | Personal Protective Equipment | | | |
| | PPE program | | | |
| | OSHA Standards for PPE | | | |
| | • Eye and Face Protection | | | |
| | Head Protection | | | |
| | Foot Protection | | | |
| | Chemical Protective Clothing | | | |
| | Readings from Textbook: Be Prepared to Discuss in Class | | | |
| | | | | |

| | Fundamentals Of Industrial Hygiene |
|---------|---|
| Week 11 | Chapter 23: Personal Protective Equipment |
| (cont.) | |
| | Environmental Laboratory Exercises: |
| | • Learn Selection of PPE by using tools to determine the best barrier for |
| | various chemicals or particulates |
| | Use SDSs for PPE reference |
| Week | Activities |
| | |
| 12 | Topics: |
| | Occupational and Environmental Medicine |
| | Physician and Occupational Nurse |
| | Practical Application - Monitoring Methods, TWA, STEL |
| | |
| | Fundamentals Of Industrial Hygiene |
| | Chapter 26: Occupational and Environmental Medicine Physician |
| | Chapter 27 Occupational Nurse |
| | |
| | Laboratory Exercise: |
| | • Learn to search and use monitoring methods |
| Week | Activities |
| 13 | Topics: |
| | Environmental Health and Safety |
| | Practical Application – Radiation / Noise |
| | • Tractical Application - Radiation / Noise |
| | Fundamentals Of Industrial Hygiene |
| | Chapter 28: Environmental Health and Safety |
| | Chapter 28. Environmental freatmand Safety |
| | Laboratory Exercises: |
| | Learn radiation and noise practical calculations |
| | Learn to use Radiation and Noise Equipment |
| Week | Activities |
| 14 | |
| 14 | Topics: |
| | Industrial Hygiene Program |
| | Components of an Industrial Hygiene Program |
| | Establishing and Industrial Hygiene Program |
| | Benefits of an Industrial Hygiene Program |
| | |
| | Fundamentals Of Industrial Hygiene |
| | Chapter 29: Industrial Hygiene Program |
| | Laboratory Exercises: |
| | Practical Application – NIOSH Lifting Equation |
| Week | Activities |
| 15 | Final Review and Term Paper Presentations: |
| Week | Activities |
| 16 | FINAL EXAM |

Important Semester Dates:

Last Day to Withdraw from Classes– Check BC Academic Calendar at http://catalog.brazosport.edu/index.php

Office Hours:

For fulltime faculty, office hours may change from semester to semester. Current faculty office hours are included on the syllabus, see link: <u>https://brazosport.edu/faculty-and-staff/resources/course-syllabi-instructor-information/</u>

For an adjunct faculty, no office hours are required, and they are not assigned an office. To set up an appointment with an adjunct, contact the instructor as per the email address on the syllabus, see link: <u>https://brazosport.edu/faculty-and-staff/resources/course-syllabi-instructor-information/</u>

V. LAB REQUIREMENTS

Active participation in laboratory procedures, tests, sample collection and analysis is required.

VI. STUDENTS WITH DISABILITIES

Brazosport College is committed to providing equal education opportunities to every student. BC offers services for individuals with special needs and capabilities including counseling, tutoring, equipment, and software to assist students with special needs. For student to receive any accommodation, documentation must be completed in the Office of Disability Services. Please contact Phil Robertson, Special Populations Counselor at 979-230-3236 for further information.

VII. TITLE IX STATEMENT

Brazosport College faculty and staff are committed to supporting students and upholding the College District's non-discrimination policy. Under Title IX and Brazosport College's policy FFDA (Local), discrimination based on sex, gender, sexual orientation, gender identity, and gender expression is prohibited. If you experience an incident of discrimination, we encourage you to report it. While you may talk to a faculty or staff member at BC, please understand that they are "Responsible Employees" and must report what you tell them to college officials. You can also contact the Title IX Coordinators directly by using the contact information below. Additional information is found on the Sexual Misconduct webpage at <u>www.brazosport.edu/sexualmisconduct</u>

VIII. ACADEMIC HONESTY

Brazosport College assumes that students eligible to perform on the college level are familiar with the ordinary rules governing proper conduct including academic honesty. The principle of academic honesty is that all work presented by you is yours alone. Academic dishonesty including, but not limited to, cheating, plagiarism, and collusion shall be treated appropriately.

Academic dishonesty violates both the policies of this course and the Student Code of Conduct. In this class, any occurrence of academic dishonesty will be referred to the Dean of Student Services for prompt adjudication, and may, at a minimum, result in F, in this course. Sanctions may be imposed beyond your grade in this course by the Dean of Student Services.

Plagiarism is using another person's work or ideas without giving credit. Plagiarism is dishonest because it misrepresents the work of another as your own. This includes both copying the work verbatim or re-phrasing the ideas of another without properly acknowledging the source.

When preparing work for course requirements, students must be careful to differentiate between their ideas and language and information derived from other sources. Sources include but are not limited to published and unpublished materials, the Internet and information and opinions gained directly from other people including faculty or other students. Plagiarism is considered a violation of academic integrity and professional honesty. Please refer to the Brazosport College Student Guide for more information. This is available online at http://brazosport.edu/students/for-students/student-services/.

IX. ATTENDANCE AND WITHDRAWAL POLICIES

Class attendance contributes to your final grade, but you must attend class to successfully complete the course. If you are unable to complete this course, you must complete and submit a withdrawal form with the registrar's office. If the student decides to drop out of the class, it is the responsibility of the student to initiate a withdrawal before the withdrawal deadline in order to get a "W" on their transcript. If this is not done the student will receive a grade based on test grades and class grades earned during their attendance and absence (i.e., zeros on all missed materials, exams, skills tests, and final exam).

The Instructor may count tardiness as a partial absence. Since a significant part of the grade is based on class attendance, students are expected to be on time and attend the full class, until dismissed by the Instructor.

<u>Students who miss 3 or more classes in a Fall or Spring Session will usually be assumed to have abandoned the class and may be WITHDRAWN before the last drop date assigned by the college. After the last withdrawal date, a failing grade of "F" may be assigned for missing 3 or more classes and/or withdrawn from the class by the instructor. It is the Student's responsibility to contact the Instructor and explain any and all missed class time.</u>

Since attendance is so important a part of the learning experience it has become necessary to modify the grading system. Full Fall and Spring Semesters have typically about 15 weeks of classes depending on holidays and exams schedule. For regular classes that means about 13 weeks of educational activity aside from mid-term and finals. <u>Someone missing 3 classes then has missed almost 25% of course content.</u>

Partial class attendance, arriving late or leaving early can result in a % loss of that day's attendance. For all absences after the 3rd absence each absence will count as 2 classes missed or as determined by the instructor.

General Brazosport College Policies and Procedures apply to self-initiated course withdrawal and the time period within which that may occur. Please check with the current published College information for details, especially to determine the last date of withdrawal from a course.

X. COURSE REQUIREMENTS AND GRADING POLICY

A. Grading:

| Midterm Exam: | 20% |
|-----------------------|-----|
| Final Exam: | 20% |
| Overhead Presentation | 20% |
| | |

EPCT 2431 Industrial Hygiene Applications

| Term Paper | 20% |
|------------------------------|-----|
| Attendance and Participation | 20% |

B. Scoring:

A (90 - 100%) -- Unqualified and unsurpassed mastery of the learning outcomes B (80 - 89.9%) -- Unqualified mastery of the learning outcomes C (70 - 79.9%) -- Qualified mastery of the learning outcomes D (60 - 69.9%) -- Mastery of the learning outcomes but with significant qualifications F (0 - 59.9%) -- Has not mastered the learning outcomes I (Incomplete) -- Failed to complete assigned components.

Honest and serious participation in each of the five course elements is required to pass the course. A failing grade will be assigned regardless of the overall score if the student fails to complete any one of the following items:

- (1) Complete the mid-term exam
- (2) Submit a term paper
- (3) Complete the final exam.

C. Testing:

A Mid Term and a Final Exam are required. A variety of quizzes or assignments in place of quizzes may be presented at the discretion of the Instructor.

D. Make-Up Policy:

<u>A student will normally be given only 5 days in which to make up missed exams,</u> <u>guizzes or homework.</u> Students who miss class delay the ability of other students to receive timely feedback on their work. It is the responsibility of each student to contact the Instructor on the day of an absence or the day following the absence and to make time to come in before the next class to clear up the missed exam. The Instructor is usually expected to give a score of zero to exams, quizzes or assignments and/or apply an appropriate penalty pursuant to the syllabus requirements.

XI. STUDENT CONDUCT STATEMENT

Students are expected to be aware of and follow the Brazosport College Student Code of Conduct. Students have violated the Code if they "fail to comply with any lawful directions, verbal or written, of any official at BC." Lawful directions include precautions and requirements taken to prevent the spread of COVID-19 at Brazosport College. Students who do not follow safety requirements, including the wearing of a mask, may be removed from class by their instructor and referred to the Dean of Student Services.

XII. COVID-19 STATEMENT

At Brazosport College, all of us, including faculty, staff and students, share a common goal this spring semester, to keep our classes running in the safest manner possible and avoid any disruption to your progress in achieving your educational and career goals. To that end, we ask and encourage you to conduct yourself in the following manner while on campus this semester:

• Every day, perform a self-health check prior to coming to campus and stay home if sick.

- To the greatest extent possible, maintain your distance between you and other students, faculty, and staff while on campus.
- Wear a properly fitted face covering over your mouth and nose while indoors on campus. If you do not have a mask, they will be available to you in all classrooms this spring.
- Practice good hygiene, washing your hands regularly and/or using hand sanitizer.
- The most effective way to protect yourself from Covid-19 is through vaccination. The vaccine is readily available and at no cost to you. Vaccine information and availability can be found at <u>https://brazosport.edu/coronavirus/vaccine/</u>.

If at any time this semester you begin to experience Covid symptoms, or if you are exposed to someone who has tested positive for Covid-19, please take the following steps:

- Stay home if you're feeling sick and minimize your contact with others.
- Alert the College by completing the Covid-19 Exposure Report Form online at <u>https://brazosport.edu/coronavirus/report/</u>. Be sure to provide accurate contact information, including a working phone number that you will answer.
- After submitting the report, you will be promptly contacted by a member of our Rapid Response Team, who will ask you some specific questions about your situation and provide you with guidance moving forward.
- If it is determined that you should not come to class, your instructor will be notified. Please know that your instructor will consider course adjustments and potential make-up work <u>only if your case has been reported</u> to Brazosport College, and they've been notified by our response team. Your instructor will work with you to determine how to manage any make-up work.

The Community Health Network (CHN) Clinic at Brazosport College is located in BC Central B-Wing. While walk-ins are available, your visit will be easier if you pre-register by creating an account at <u>www.mychn.org</u>. In addition to providing health and behavioral services, CHN also provides COVID vaccinations and testing. All insurance is accepted, and healthcare is provided on a sliding scale including no cost for those who need it.

Throughout the semester, please regularly check the College's Covid-19 information page at <u>https://brazosport.edu/coronavirus/</u>, where the latest updates and guidelines will be posted. As members of the BC community, all of us share a responsibility to each other to be as safe as possible.

XIII. CAMPUS CLOSURE STATEMENT

Brazosport College is committed to the health and safety of all students, staff, and faculty and adheres to all federal and state guidelines. The College intends to stay open for the duration of the semester and provide access to classes and support services on campus in the safest way possible. The College will also comply with lawful orders given by applicable authorities, including the Governor of Texas, up to and including campus closure. It is possible that on campus activities may be moved online and/or postpone if such orders are given.

XIV. STUDENT RESPONSIBILITIES

Students are expected to fully participate in this course. The following criteria are intended to assist you in being successful in this course:

- 1. Understand the syllabus requirements
- 2. Use appropriate time management skills
- 3. Communicate with the instructor
- 4. Complete course work on time, and
- 5. Utilize online components (such as Desire2Learn) as required.
- 6. Participate in class discussions
- 7. Show respect for students and instructors

A. Housekeeping:

- 1) Keep the room ready for the next class. When you leave each evening, the room is to be returned to the condition it was in when you arrived, or better.
- 2) We do not want to look like we were raised in a barn. Keep it clean and place all trash in the proper containers before you leave.
- **3)** Do not alter the computer or audio-visual electronics. Improper use of computer and other equipment in violation of Brazosport College policies may result in penalties according to College rules.

B. Expectations:

- 1) You are largely responsible for your own success or failure as a student.
- 2) As a minimum, students are expected to read the assigned chapter(s) each week. Being prepared is a necessary part of your continuing education and a vital part of the construction industry.
- 3) We expect all assignments to be completed on time and to the best of your ability.
- 4) While we encourage cooperation with your fellow students, academic honesty is the standard; you are solely responsible for your own work.
- 5) We expect and will demand adult behavior in the classroom, both physical and on-line. We expect to have fun and hope you do too.
- 6) You are expected to abide by the Student Code of Conduct at all times and come to class prepared and alert. No sunglasses or sleeping in class will be allowed.
- 7) If there is a problem with the material call upon the instructor first for help.
- 8) There are no bad questions. Always ask if you are unsure.

C. Student Responsibilities:

- 1) This is not a self-paced course but requires weekly interaction with the class and the instructor.
- 2) It is your responsibility to read the syllabus and other information provided by the instructor, and to follow the instructions contained therein. If you fail to submit assignment(s) or tests on time, the instructor has the option of not accepting the late work! If the instructor accepts late work, 20 points per day penalty will apply for any assignment, for a maximum time of 5 days. Additional deductions may apply based on meeting the requirements of the assignment. No assignment will be accepted after 5 days unless the instructor deems special circumstances apply.
- 3) You should make every effort to stay on track with the assignments, as it is very difficult to "play catch-up."

- 4) If for any reason you should fall behind in their work, (illness, accident, temporary duty, etc.) contact the instructor immediately.
- 5) You must complete exams/papers and assignments prior to the end of the scheduled term, or risk being graded zero for that work and run the risk of failure of the course
- 6) All forms of communication between students and course instructors will be conducted at a professional level. Profanity, threats of violence, or acts of physical or verbal intimidation will not be tolerated. Failure to maintain a professional demeanor during all interactions will result in security being alerted and may result in course failure or academic suspension. There will be no second chances for being disruptive or disrespectful in words or actions during class.
- 7) Students who are found to have violated any of the behavioral expectations outlined in the syllabus will be subject to disciplinary action. Penalties may include but are not limited to failure on the assignment, failure in the course, suspension from the program or expulsion from the school. There is zero tolerance for academic dishonesty or unprofessional behavior in this course. The minimum penalty for behavior violations is failure in the course.
- 8) At times, life situations occur where you will need to make hard choices between getting a good grade in a course (or even finishing it) and other priorities in your life, such as a job, family, etc. It is up to each student to make those choices. Occasionally, one will have to make the commendable choice that job or family must take priority and then live with the consequences that has on your studies and GPA. The College has an ethical obligation to ensure that a level playing field is provided for all students, so those who make the hard choices don't get short changed by students who ask for extra time to get their school work done when they haven't made those hard choices.
- 9) Extensions/Incompletes are NOT a right, but a VERY RARE exception that are granted only in the most extraordinary of situations. If you feel that you will require an extension/incomplete (again, the exception, not the rule), it is your responsibility to contact the instructor BEFORE THE END OF THE COURSE and make this request. In most cases, written third party documentation will be required to support your request. It is at the discretion of the instructor whether an extension/incomplete will be granted and for what length of time it will be granted, with an absolute maximum extension period of 90 days.

D. Student Computer Responsibilities:

- 1) It is a fact of life that we must use computers to complete class work, access presentations and take some tests. You should have a computer, software, and internet access at hand to do this. If you do not, at best consult with the LAC in E-201. There are numerous campus resources available to you.
- 2) The default software being used is Microsoft Word for text documents and Microsoft PowerPoint for presentations. At a minimum, readers for these programs are downloadable free from the <u>www.microsoft.com</u> website.
- **3)** The computer ate my homework is not an acceptable excuse. It is a fact of life that computers are not perfectly reliable, and those computers using Windows have a certain reputation. Users should learn how to survive and readily recover from crashed programs and the need to reboot. When creating your own work, you should save the document after each page and learn how to recover from computer problems. If worse comes to worse, read the manuals.

- 4) The instructor generally cannot help you solve your computer problems. Exception problems with our files, in which case the Instructor will help to the best of ability.
- 5) You are responsible for your own SPAM and viruses. No one should use personal computers, email, or the Internet for these courses without possessing their own antivirus software. If you open a strange email and get your computer infected with a virus, it is your own doing and your own responsibility. You should learn how to block unwanted email.

E. Telecommunication Devices:

All electronic devices including but not limited to cell phones, "Blackberry" e-mail type devices, and PDA's MUST be turned off and placed so that you cannot access them in the classroom. CELL PHONES WILL NOT BE ALLOWED AS A CALCULATOR OR FOR ANY OTHER PURPOSE!!!!!!

- 1. Calculators are for sale in the BC Bookstore to support math problems, as long as they do not have stored test information they may be used.
- 2. Cheating or unauthorized use of cell phones or via use of telecommunications devices will result in an immediate ZERO for the test involved and may result in further penalties.
- 3. Backpacks and other additional non-course materials carried into the classroom must be placed on the floor.
- **F. BC Computer Accounts:** Each student is expected to go to IT services and obtain a computer account, BEFORE the second class of the term. They can be reached at 979-230-3266. You may need to call for an appointment before class for evening classes. Improper use of computer accounts in violation of Brazosport College policies may result in penalties according to College rules. Be aware that ALL online activity is monitored and logged; you have NO right to privacy.
- **G.** College Website <u>www.brazosport.edu</u> You should learn to use the college website to find most student information. If you need to take computer classes to learn to use the internet or other computer programs, please check with LAC in E-201.
- **H. Notes on Schedule:** A general sixteen-week recommended schedule follows in this document. The instructor will adjust it to meet the details of the specific semester schedule, recognizing variances due to Brazosport College exam schedules, State and Federal Holidays and the availability of such items as a guest speaker.

XV. PROJECTS, ASSIGNMENTS, PORTFOLIOS, SERVICE LEARNING, INTERNSHIPS, ETC.

A. Term Paper

A ten page report on a relevant topic or book report. This must be original work not a duplication of work for another class.

Book Report/Research Paper Guidance

- > MUST be submitted in MS Word (No PDF, No Notes, etc.)
- Format is 12 point Font, Times New Roman, 1.5 line spacing and 1 inch margins all around and page numbers at bottom right

- FIRST page is the COVER Page (Include Name, Date, Semester, Instructor, Course, Report Title and Author, if applicable) and
- LAST page is the BIBLIOGRAPY page (Neither the FIRST page or the Last page count as part of the assignment)
- > Use Spellcheck for spelling and grammar and sentence structure
- > Paragraphs should include main points and complete sentences
- > No more than ¹/₂ page of graphics for the assignment
- > Nor more than ¹/₂ page of quotes for the assignment
- Do not use "quotes" for quotes. Use single space, block and indented one inch: For example: In his book Beyond Belief, Johnny Depp stated: If I were to sail the Black Pearl around the World in search of gold, diamonds, rubies, etc.

Consult the Writing Center often for guidance!

Slide Format Guidance:

- ✓ Use SHEM Master Slide with WHITE background
- ✓ Slide 1 is your COVER (Introductory) SLIDE and does NOT count as the assignment
- ✓ Slides should have 3-6 bullet points per slide
- ✓ Heading on slides should be 32-36 point and BOLDFACE font
- ✓ Bullet Points in Body should be 22-24 point font
- ✓ Everything in Times New Roman
- ✓ Illustrations (graphics/pictures) support the main points of the slides
- ✓ Illustrations (graphics/pictures) is limited to 25% of the slide and is limited to no more than 25% of the slides in the assignment
- ✓ Last slide is your BIBLIOGRAPHY (References) SLIDE and does NOT count as part of the assignment)
- ✓ Slides should have most current up-to-date information on subject

Slide Presentation Guidance:

- Practice, Practice, Practice
- When presenting Each slide should communicate a key "take away" for audience
- Introduction and key points presented in a logical order
- Present more information than just read the slides
- Cite personal examples during presentation
- Establish eye contact with audience
- Engage audience in discussion
- State conclusions and/or recommendations clearly
- Answer audience questions sufficiently
- Consider your time limit that is set by the instructor!
- Practice, Practice, Practice

Due Dates For Term Paper Projects:

For all Fall and Spring Term Sixteen Week Classes: Term Project is due on or before Lesson 11 by the end of class, before midnight at the latest. An optional date/time may be assigned as determined by the instructor.

This due date is for your success so that if you have problems the Instructor can help you recover before end of term. If you wait until the last moment to complete the term project you can fail the course.

Late Penalties Apply:

For the Term Project 20 points per day penalty will apply after midnight of Class 11 (or the assigned date and time by the Instructor). Additional deductions may apply based on the content and meeting syllabus requirements. No Term Project paper will be accepted after 5 days unless the instructor deems special circumstances apply.

XVI. OTHER STUDENT SERVICES INFORMATION

Information about the Library is available at <u>http://brazosport.edu/students/for-students/places-services/library/about-the-library/</u> or by calling 979-230-3310.

For assistance with online courses, an open computer lab, online and make-up testing, audio/visual services, and study skills, visit Learning Services next to the Library, call 979-230-3253, or visit http://brazosport.edu/students/for-students/places-services/learning-services/

For drop-in math tutoring, the writing center, supplemental instruction and other tutoring including e-tutoring, visit the Student Success Center, call 979-230-3527, or visit http://brazosport.edu/students/for-students/student-success-center/

To contact the Physical Science and Process Technologies Department call 979-230-3618.

The Student Services provides assistance in the following:

| Counseling and Advising | 979-230-3040 |
|-------------------------|--------------|
| Financial Aid | 979-230-3294 |
| Student Life | 979230-3355 |

To reach the Information Technology Department for computer, email, or other technical assistance call the Helpdesk at 979-230-3266.



Get the information you need – when you need it. Click <u>http://geni.us/BRAZO</u> to install **BC Connect** on your mobile device to receive reminders, explore careers, map your educational plan, be in the know about events, find out about scholarships, achieve your goals and much more.

STATE OF TEXAS WORKFORCE EDUCATION COURSE MANUAL REQUIREMENTS:



WORKFORCE EDUCATION COURSE MANUAL, 2006-2007

WECM Course

Industrial Hygiene Applications

| CIP | Rubric | Number | Course Title | Status | Semester Credit Hrs. | Min Cont. Hrs. | Max Cont. Hrs. |
|---------|--------|--------|------------------------------------|--------|-------------------------|-------------------|-------------------|
| 15.0507 | EPCT | 2331 | Industrial Hygiene Applications | Active | 3 | 48 | 96 |
| 15.0507 | EPCT | 2431 | Industrial Hygiene Applications | Active | 4 | 64 | 96 |

Course Level: Advanced

Course Description: A study of the industrial environment and its relation to worker's health. This course provides training in anticipation, recognition, evaluation, and controlling health hazards--particularly chemical, physical, biological, and ergonomic factors existing in the workplace and having injurious effects on workers. The course also introduces training in instrumentation used in monitoring and measuring health hazards in the workplace and covers current issues in industrial hygiene.

Learning Outcomes: Identify the impact of hazards on workers; interpret and apply regulations in a business environment; gather, manage, and analyze data; apply professional standards; prepare a report on various areas of industrial hygiene based on student investigations.

Lab Recommended

Cross Reference(s): EPCT 2031: Industrial Hygiene Applications

CIP Code Description: 15.0507 (Environmental Engineering Technology/Environmental Technology)

Year: 2006