

Brazosport College

Syllabus for EPCT 1441 - Principles of Industrial Hygiene

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I. COURSE DESCRIPTION

EPCT 1441 - Principles of Industrial Hygiene. CIP 1505070011

Basic concepts in threshold limits, dose response, and general recognition of occupational hazards, including sampling statistics, calibration, and equipment use. A study of the control of occupational hazards and sample collection and evaluation methods. **Credit Hours: 4** (3 lecture, 1 lab)

Samuel Chamberlain

Om Chawla

Gary Hicks

Jeff Detrick

August 2021

- A. **Prerequisite:** OSHT 1301 or OSHT 1405 or OSHT 2309, and CHEM 1305 and CHEM1105.

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. Comprehend fundamentals, explain terminology, and discuss concepts of industrial hygiene and toxicology.
2. Describe the anatomy and function of the lungs, ears, eyes, and skin, and explain the workings of the respiratory, circulatory, and metabolic systems.
3. Identify major health hazards found in the workplace and discuss their effects on the functioning of the human body system listed in #b above.
4. Identify and discuss routes of hazard exposure to the body, threshold limit values, and appropriate workplace exposure standards.
5. Demonstrate the ability to investigate an area of industrial hygiene.
6. Develop fundamental IH analysis and technical laboratory skills.

Assessment: Class discussion, quizzes and exams, and term project

III. STUDENT LEARNING OUTCOMES

Explain terminology and discuss concepts of industrial hygiene and toxicology; describe the anatomy and function of the routes of entry; explain the workings of the major body systems; identify major health hazards found in the workplace and discuss their effects; apply threshold limit values and other appropriate workplace exposure standards; and prepare a report based on research and investigation of an area of industrial hygiene.

IV. TEXTBOOK OR COURSE MATERIAL INFORMATION

A. Textbook

1. Fundamentals of Industrial Hygiene, PLOG, 6th Ed. 2012, National Safety Council Publisher. ISBN: 978-0-87912-312-3 (required)

Quick Study Guides from BC Bookstore on
(You may save and reuse guides from other courses)

Anatomy	Periodic Table
Chemistry	Physics
Chemistry Lab Basics	Respiratory System
Essays and Term Papers	Senses
First Aid	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://brazosport.edu/bookstore/home.html>. 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: bookstore@brazosport.edu. Website: <http://brazosport.edu/bookstore/home.html>.

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.

Week		Activity/Topics	
1	31-Aug-21	Introduction to Industrial Hygiene	Lab: Tour of Equipment and Safety Video
2	7-Sep-21	Anatomy, Physiology and Pathology	Lab: Personal Protective Equipment (PPE); Term Project Topic Approved (10%)
3	14-Sep-21	Industrial Toxicology	Lab: Calibration of Air Flows
4	21-Sep-21	Gases, Vapors, and Solvents	Lab: Respirators: Submit List of Resources for Term Project (10%)
5	28-Sep-21	Particulates	Lab: Calculating Volumes, PEL, TWA & Particulate Sample Train: Submit One Page Outline of Term Project (10%)
6	6-Oct-21	Industrial Noise	Lab: Measurement of Noise; Submit Three Draft Slides of Term Project (10%)
7	13-Oct-21	Ionizing Radiation	Lab: Radiation
8	20-Oct-21	Mid-Term Exam	
9	27-Oct-21	Nonionizing Radiation	Lab: IH Equipment Selection
10	2-Nov-21	Thermal Stress	Lab: How to assess Thermal Stress, Calculate WBGT; Submit Two Pages Draft of Term Project (20%)
11	9-Nov-21	Ergonomics	Lab: NIOSH Lifting Equation and REBA Assessment
12	16-Nov-21	Biological Hazards	Lab: Assessment of Biological hazards and what PPE is needed

Week		Activity/Topics	
13	23-Nov-21	Thanksgiving Holiday	
14	30-Nov-21	Industrial Hygiene Course Review & Bringing it all together	Lab: NIOSH Analytical Methods lookup exercise: Submit Final Term Project and Slides (No Late Submissions Accepted!)
15	7-Dec-21	Term Project Presentations (40%)	Review for Final
16	14-Dec-21	Final Exam	

Week	Activities
1	<p>Topics: Introduction to Industrial Hygiene</p> <ul style="list-style-type: none"> • Class Housekeeping and Introductions • Review of Class Syllabus, Calendar, and Projects • Development and History of Workplace Safety and Health • What is Industrial Hygiene • What is an Industrial Hygienist • What other Occupations interact directly with the Industrial Hygienist • The Industrial Hygiene Program Elements <p>Readings from Textbook: Be Prepared to Discuss in Class <i>Fundamentals Of Industrial Hygiene</i></p> <ul style="list-style-type: none"> • Chapter One: Overview of Industrial Hygiene • Chapter Twenty Three: The Industrial Hygienist • Chapter Twenty-Four: The Safety Professional • Chapter Twenty-Five: The Occupational Medicine Physician • Chapter Twenty-Six: The Occupational Health Nurse • Chapter Twenty-Seven: The Industrial Hygiene Program <p>Class Readings:</p> <ul style="list-style-type: none"> • Discuss various Industrial Hygiene resources for students <p><i>Industrial Hygiene Workbook: The Occupational Health Sciences</i></p> <ul style="list-style-type: none"> • 2 – Industrial Hygiene – History and Objectives • 22 – Management • 24 – Terms to know <p>Class Activity:</p> <ul style="list-style-type: none"> • Current Events Discussion • Review Possible IH Term Projects <p>IH Laboratory Activity:</p> <ul style="list-style-type: none"> • Review Laboratory Dress Code and personal PPE (No Shorts, No Sandals, No Canvas Shoes, Must wear safety glasses when performing

1 (cont.)	<p>certain laboratory experiments per instructor guidance)</p> <ul style="list-style-type: none"> • Review SDS notebook for the IH Laboratory • Conduct Emergency Drill for IH Lab, fire and shower <p>Homework Assignment:</p> <ul style="list-style-type: none"> • Read text chapters for next Week • Identify initial ideas for IH term project.
Week	Activities
2	<p>Topics: Anatomy, Physiology and Pathology</p> <ul style="list-style-type: none"> • Lungs • Skin and Occupational Dermatoses • Ears • Eyes <p>Readings from Textbook: Be Prepared to Discuss in Class</p> <p><i>Fundamentals Of Industrial Hygiene</i></p> <ul style="list-style-type: none"> • Chapter Two: The Lungs • Chapter Three: The Skin and Occupational Dermatoses • Chapter Four: The Ears • Chapter Five: The Eyes <p>Class Readings:</p> <p><i>Case Studies: Sixty Practical Applications of OH&S Control Principles</i></p> <ul style="list-style-type: none"> • 36- Pesticide Mixing Kills Migrant Worker <p><i>Industrial Hygiene Workbook: The Occupational Health Sciences</i></p> <ul style="list-style-type: none"> • 5- Physiology and Anatomy <p>Class Activity:</p> <ul style="list-style-type: none"> • Chapter Review • Current Events Discussion • Term Project Selections Approved by Instructor (10%) • Select Dates for Presentations <p>SHEM DVD/Video: 40124 – The Story of OSHA</p> <p>IH Laboratory Activity:</p> <ul style="list-style-type: none"> • 1- Personal Protective Equipment (PPE) <p>Homework Assignment: Read text chapters for next Week.</p>
Week	Activities
3	Topics: Recognition of Hazards

	<ul style="list-style-type: none"> • Industrial Toxicology <p>Readings from Textbook: Be Prepared to Discuss in Class</p> <ul style="list-style-type: none"> • Chapter Six: Industrial Toxicology <p><i>Industrial Hygiene Laboratory Manual and Exercise</i></p> <ul style="list-style-type: none"> • 2- Calibration of Airflows <p>Class Readings:</p> <p><i>Case Studies: Sixty Practical Applications of OH&S Control Principles</i></p> <ul style="list-style-type: none"> • 5- Squelching the Mad Hatter Syndrome <p>Class Activity:</p> <ul style="list-style-type: none"> • Chapter Review • Current Events Discussion • Finish Term Project Selections <p>SHEM DVD/Video: Chemical Exposure CSB</p> <p>IH Laboratory Activity:</p> <ul style="list-style-type: none"> • Calibration of Airflows <p>Homework Assignment:</p> <ul style="list-style-type: none"> • One Page Proposal Due for term paper. • Read text chapters for next Week
Week	Activities
4	<p>Topics: Recognition of Hazards</p> <ul style="list-style-type: none"> • Gases, Vapors, and Solvents <p>Readings from Textbook: Be Prepared to Discuss in Class</p> <p><i>Fundamentals Of Industrial Hygiene</i></p> <ul style="list-style-type: none"> • Chapter Seven: Gases, Vapors, and Solvents <p><i>Industrial Hygiene Laboratory Manual and Exercise</i></p> <ul style="list-style-type: none"> • Laboratory #3: Respirators <p>Class Readings:</p> <p><i>Industrial Hygiene Workbook: The Occupational Health Sciences</i></p> <ul style="list-style-type: none"> • 13– Respiratory Protection <p>Class Activity:</p> <ul style="list-style-type: none"> • Chapter Review • Current Events Discussion • Submit List of Resources for Term Project (10%)

4 (cont.)	Homework Assignment: <ul style="list-style-type: none"> • Read text chapters for next Week.
Week	Activities
5	<p>Topics: Recognition of hazards</p> <ul style="list-style-type: none"> • Particulates <p>Readings from Textbook: Be Prepared to Discuss in Class</p> <p><i>Fundamentals Of Industrial Hygiene</i></p> <ul style="list-style-type: none"> • Chapter Eight: Particulates <p><i>Case Studies: Sixty Practical Applications of OH&S Control Principles</i></p> <ul style="list-style-type: none"> • 17: Scrap Recycling Facility Controls <p>Class Activity:</p> <ul style="list-style-type: none"> • Chapter Review • Current Events Discussion • Submit One Page Outline of Term Project (10%) <p>IH Laboratory Activity:</p> <ul style="list-style-type: none"> • Calculating Volumes, TWA, and PEL & Particulate Sampling Train setup <p>Homework Assignment: Read text chapters for next Week.</p>
Week	Activities
6	<p>Topics: Recognition of Hazards</p> <ul style="list-style-type: none"> • Industrial Noise <p>Readings from Textbook: Be Prepared to Discuss in Class</p> <ul style="list-style-type: none"> • Chapter Nine: Industrial Noise <p>Class Readings:</p> <p><i>Case Studies: Sixty Practical Applications of OH&S Control Principles</i></p> <ul style="list-style-type: none"> • 15- A case of noise at the Airport <p><i>Industrial Hygiene Workbook: The Occupational Health Sciences</i></p> <ul style="list-style-type: none"> • 19 – Sound, Noise and Hearing <p>IH Laboratory Activity:</p> <ul style="list-style-type: none"> • Measurement of Noise <p>SHEM DVD/Video: Effects of Noise on hearing</p> <p>Class Activity</p> <ul style="list-style-type: none"> • Submit Three Draft Slides of Term Project (10%)

	Homework Assignment: Read text chapters for next Week.
Week	Activities
7	<p>Topics: Recognition of Hazards</p> <ul style="list-style-type: none"> • Ionizing Radiation <p>Readings from Textbook: Be Prepared to Discuss in Class</p> <p><i>Fundamentals Of Industrial Hygiene</i></p> <ul style="list-style-type: none"> • Chapter Ten: Ionizing Radiation <p>Industrial Hygiene Laboratory Manual Laboratory #10 Radiation</p> <p>Class Readings: <i>Industrial Hygiene Workbook: The Occupational Health Sciences</i></p> <ul style="list-style-type: none"> • 21- Ionizing Radiation <p>IH Laboratory Activity:</p> <ul style="list-style-type: none"> • Radiation <p>Homework Assignment: Prepare for Midterm Exam</p>
Week	Activities
8	<p>MID TERM EXAM</p> <p>Homework Assignment: Read text chapters for next Week.</p>
Week	Activities
9	<p>Topics: Recognition of Hazards</p> <ul style="list-style-type: none"> • Nonionizing Radiation <p>Readings from Textbook: Be Prepared to Discuss in Class</p> <p><i>Fundamentals Of Industrial Hygiene</i></p> <ul style="list-style-type: none"> • Chapter Eleven: Nonionizing Radiation <p>Class Readings:</p> <p><i>Case Studies: Sixty Practical Applications of OH&S Control Principles</i></p> <ul style="list-style-type: none"> • 15 – A Case of Noise at the Airport • 20 – The Ballmill blues <p><i>Noise Measurement Manual</i>, 3rd ed Queensland Government Environmental Protection Agency</p> <p>IH Laboratory Activity:</p> <ul style="list-style-type: none"> • Industrial Hygiene Equipment Selection • Give a scenario for the students to determine what equipment is needed • Create a sampling plan for the equipment selected.

	Homework Assignment: Read text chapters for next Week.
Week	Activities
10	<p>Topics: Recognition of Hazards</p> <ul style="list-style-type: none"> • Thermal Stress <p>Readings from Textbook: Be Prepared to Discuss in Class</p> <p><i>Fundamentals Of Industrial Hygiene</i></p> <ul style="list-style-type: none"> • Chapter Twelve: Thermal Stress <p>Class Readings:</p> <p><i>Case Studies: Sixty Practical Applications of OH&S Control Principles</i></p> <ul style="list-style-type: none"> • 30- One Hot Momma <p><i>Industrial Hygiene Workbook: The Occupational Health Sciences</i></p> <ul style="list-style-type: none"> • 18- Thermal Environments <p>SHEM DVD/Video: Heat illness prevention video</p> <p>IH Laboratory Activity:</p> <ul style="list-style-type: none"> • How to assess Thermal Stress, Calculate WBGT <p>Class Activity</p> <ul style="list-style-type: none"> • Submit Two Pages Draft of Term Project (20%) <p>Homework Assignment: Read text chapters for next Week.</p>
Week	Activities
11	<p>Topics: Recognition of Hazards</p> <ul style="list-style-type: none"> • Ergonomics <p>Readings from Textbook: Be Prepared to Discuss in Class</p> <p><i>Fundamentals Of Industrial Hygiene</i></p> <ul style="list-style-type: none"> • Chapter Thirteen: Ergonomics <p>Class Readings:</p> <p><i>Case Studies: Sixty Practical Applications of OH&S Control Principles</i></p> <ul style="list-style-type: none"> • 51- The VDT Attack <p><i>Industrial Hygiene Workbook: The Occupational Health Sciences</i></p> <ul style="list-style-type: none"> • 17- Ergonomics and Human Factors <p>SHEM DVD/Video: Ergonomics Video</p>

11 (cont.)	Laboratory Exercise: <ul style="list-style-type: none"> • NIOSH Lifting Equation and REBA Assessment Homework Assignment: Read text chapters for next Week.
Week	Activities
12	Topics: Recognition of Hazards <ul style="list-style-type: none"> • Biological Hazards Readings from Textbook: Be Prepared to Discuss in Class <i>Fundamentals Of Industrial Hygiene</i> <ul style="list-style-type: none"> • Chapter Fourteen: Biological Hazards Class Readings: <i>Case Studies: Sixty Practical Applications of OH&S Control Principles</i> <ul style="list-style-type: none"> • 57- Mold Spores <i>Industrial Hygiene Workbook: The Occupational Health Sciences</i> <ul style="list-style-type: none"> • 10-Biological Monitoring Laboratory Exercise: <ul style="list-style-type: none"> • Assessment of Biological hazards and what PPE is needed Homework Assignment: Read text chapters for next Week.
Week	Activities
13	Thanksgiving Holiday
Week	Activities
14	Topics: Course Review Readings from Textbook: Be Prepared to Discuss in Class <i>Fundamentals Of Industrial Hygiene</i> <ul style="list-style-type: none"> • All chapters covered in the syllabus Laboratory Exercise: <ul style="list-style-type: none"> • NIOSH Analytical Methods lookup exercise Class Exercise Submit Final Term Project and Slides (No Late Submissions Accepted as this the last Week before Actual Presentation)
Week	Activities
15	<ul style="list-style-type: none"> • Topics: Project Presentation (40%) and Review for Final

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>

V. 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.

VI. 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
www.brazosport.edu/sexualmisconduct

VII. 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 resource, author or entity's work or ideas without giving credit for the ideas or material they take from another resource or student. 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/>.

VIII. 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.

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.

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 dropped. It is the Student's responsibility to contact the Instructor and explain any and all missed class time.

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. Someone missing 3 classes then has missed almost 25% of course content. 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.

IX. COURSE REQUIREMENTS AND GRADING POLICY

A. Grading:

Mid Term Exam	20%
Final Exam:	20%
Assignments and Quizzes:	20%
Term Project	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:

A student will normally be given only one week in which to make up missed quizzes or assignments. Students who miss class delay the ability of other students to received timely feedback on their work. It is the responsibility of each student to contact the Instructor on the day following the absence and to make time to come in before the next class to clear up the missed quiz or assignment. **The Instructor is usually expected to give a score of zero to quizzes or assignments that are two weeks or more late.**

X. 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.

XI. COVID-19 STATEMENT

At Brazosport College, all of us, including faculty, staff and students, share a common goal this fall 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 fall.
- 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 <https://brazosport.edu/coronavirus/vaccine/>.

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 <https://brazosport.edu/coronavirus/report/>. 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 only if your case has been reported 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 (located in BC Central B-Wing) is scheduled to be open from 8 AM to 6 PM Tuesday through Thursday during the Fall 2021 semester. While walk-ins are available, your visit will be easier if you pre-register by creating an account at www.mychn.org. 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 <https://brazosport.edu/coronavirus/>, 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.

XII. 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.

XIII. 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.

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; it 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.
- 3) **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.**
- 4) You should make every effort to stay on track with the assignments, as it is very difficult to “play catch-up.”
- 5) If for any reason you should fall behind in their work, (illness, accident, temporary duty, etc.) contact the instructor immediately.
- 6) 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.
- 7) 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.*
- 8) 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.**

- 9) **The minimum penalty for behavior violations is failure in the course.**
- 10) At times, life situations occur where you will need to make hard choices between getting a good grade in a course (and 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.
- 11) 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 www.microsoft.com 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 anti-virus 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.
- 6) **Telecommunication Devices:**
 - 1) All cell phones, “Blackberry” e-mail type devices, and PDA’s **MUST** be turned completely off and stowed so that you cannot access them in the classroom.
 - 2) 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.
 - 3) Cheating via use of telecommunications devices will result in an immediate **ZERO** for the test involved and may result in further penalties.

- 7) **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.
- 8) **College Website** www.brazosport.edu 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.
- 9) **Classroom Copyright:** An implicit copyright of original work not otherwise referenced from others exists for all class materials. Visual or audio recording of class activity is restricted to the College and Instructor. No class material or activity may be recorded or posted on the Internet except by approval of the Instructor.
- 10) **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.

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

A five-page term research paper and ten Power-point slides are required on a relevant topic. This must be original work not a duplication of work for another class. The instructor may provide a list of topics for students to choose from or may ask students to submit a topic for instructor approval.

General Guidelines for a successful Book Report/ Research Paper and Power-point Slide Development and Slide Presentation includes but is not limited to:

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 of these 2 pages count as part of the assignment but must be included)**
- **Use Spellcheck for spelling and grammar and sentence structure**
- **Paragraphs should include main points and complete sentences**
- **No more than ½ page of graphics for the assignment**
- **Nor more than ½ 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:
I will 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 limits that is set by the instructor!
- Practice, Practice, Practice

YOU ARE HIGHLY ENCOURAGED TO CONSULT THE WRITING CENTER FOR ASSISTANCE. REMEMBER: THIS TERM PROJECT COUNTS FOR 20% OF YOUR GRADE!

Due Dates for EPCT 1441 Term Paper Project:

The due dates are for your safety so that if you have problems the Professor or Instructor can help you recover before end of term. If you wait until the last moment, you can fail the course. For EPCT 1441, since the final presentations of the Term project are due the week (Week 15) before the final exam, no term project will be accepted after MIDNIGHT of Wednesday’s Class for Week 14. Failure to submit before midnight will result in the grade points accumulated to that point and a zero for the remaining 40% of the term project.

XV. OTHER STUDENT SERVICES INFORMATION

Information about the Library is available at <http://brazosport.edu/students/for-students/places-services/library/about-the-library/> 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 Sciences and Process Technology 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	979-230-3355

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 <http://geni.us/BRAZO> 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:**WECM Course****Principles of Industrial Hygiene**

CIP	Rubric	Number	Course Title	Status	Semester Credit Hrs	Min Cont Hrs	Max Cont Hrs
15.0507	EPCT	1341	Principles of Industrial Hygiene	Active	3	48	128
15.0507	EPCT	1441	Principles of Industrial Hygiene	Active	4	64	128

Course Level: Intermediate

Course Description: Basic concepts in threshold limits, dose response, and general recognition of occupational hazards, including sampling statistics, calibration, and equipment use. A study of the control of occupational hazards and sample collection and evaluation methods.

End-of-Course Outcomes: Explain terminology and discuss concepts of industrial hygiene and toxicology; describe the anatomy and function of the routes of entry; explain the workings of the major body systems; identify major health hazards found in the workplace and discuss their effects; apply threshold limit values and other appropriate workplace exposure standards; and prepare a report based on research and investigation of an area of industrial hygiene.

Cross Reference(s): EPCT 1041: Principles of Industrial Hygiene

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

Year: 2010