COMP 1302

Safety & Compliance

About Us

The College of Biomedical Equipment Technology (CBET) is a majority Veteran owned and operated private college offering Biomedical Equipment Technician (BMET), Healthcare Technology Management (HTM) and Healthcare Information Systems Management training at the certificate and associates degree levels. Our leadership team is comprised of individuals with decades of experience in the healthcare industry and education. Similarly, our instructional staff is comprised of industry experts and award-winning educators dedicated to providing quality education, training, and career services to our students.

Locations

Main Campus
105 Windy Meadows, Suites 201
Schertz, Texas 78154
www.cbet.edu

Mission

"The College of Biomedical Equipment Technology delivers premier education and training in Healthcare Technology Management and Information Technology to equip students to meet the evolving needs of the industries we serve."

About the Course

The **Safety and Compliance** course is designed as an Interactive Distance Learning (IDL) course including asynchronous and synchronous live virtual instruction. The participant experience includes an introduction to medical-focused safety programs and accreditation agencies. Students will participate in discussions on the material covered throughout the course and explain the importance of safety in work environment and distinguish between different accrediting agencies.

- Code of Federal Regulation
- Occupational Safety and Health Administration
- National Fire Protection Association
- Hazard Communication Program
- Radiation Protection Program
- The Joint Commission
- Det Norske Veritas

Course Description

Safety and Compliance is a 6-week course designed to introduce the student to federal regulations, accepted standards, and the accreditation process. The course will walk students through interpretation of federal regulations, National Fire Protection Association guidelines for health care facilities, as well as the examples of standards for both Det Norske Veritas and The Joint Commission. Also, it will provide students with insights to inspection protocols.

Learning Objectives

LO1. Define mandatory safety programs to comply with Federal regulations.

LO2. Understand the hazard communication program and its relevance in the BMET environment

LO3. Orient and apply lock-out/tag-out procedures.

LO4. Understand the purpose of a radiation protection program.

LO5. Apply NIAHO and analyze the difference between DNV-GL and TJC standards.

LO6. Discuss the accreditation process.

LO7. Employ federally compliant programs in the workplace.

Time-on-Task.

Time on task is the total learning time spent by a student in this course, including instructional time and time spent studying and completing course assignments and other activities (e.g., reading, research, writing, individual and group projects.) These activities are:

- Attending the weekly webinars
- Reading course presentations/ "lectures"
- Reviewing course notes
- Reading assignment references, books, or other course materials
- Participation in online discussions
- Conducting research
- Writing papers or other assignments
- Completing other assignments (e.g., projects)

- **The entire course Time-on-Task is 110 hours.**

Instructor

Crystal Watson serves as the primary instructor for English Composition 1301. In addition to English, she is also the instructor for Safety and Compliance 1302. Crystal is currently serving in the United States Air Force as a Senior Enlisted Leader in the Air Force District of Washington. Throughout the course, Crystal can be contacted directly through CANVAS messaging or via e-mail at cwatson@cbet.edu, during office hours, Monday through Friday, 0800-1700 CST.

Instructional Methods and Activities

The student online learning environment is structured to mirror the course syllabus and includes all the information students require to successfully navigate the course. The online learning environment referred to as CANVAS, provides a means for students to engage, communicate, and learn. CBET instructors will actively engage students in CANVAS via discussion board forums and other activities designed to cultivate student engagement and participation.

Online Classes (Daily). Students are expected to engage in CANVAS. Courses includes weekly assignments, quizzes, tests, and other requirements prescribed by the instructor. Students are responsible for completing weekly assignments in a timely manner as prescribed by the instructor(s). It is important to remember that in addition to the resulting grades, completion of weekly assignments is also used to measure student engagement, attendance, and participation

Weekly Live Webinars. Mandatory instructor led webinars will be conducted at least once per week (60 Minutes). Additionally, students may request one-on-one counseling or tutoring sessions based on the instructor's availability. Webinars are not optional; however, we understand that from time-to-time students may not be able to attend in person. If you cannot attend a live session, the webinars will be posted in CANVAS for review.

Online Discussion Forum (daily/weekly). CANVAS includes a discussion board with weekly prompts and instructions for completing daily/weekly assignments. Students are required to respond to all weekly discussion board topics and instructor-directed prompts. Responses must be substantive and meet the minimum word count requirement. Additionally, students are required to engage with peers by responding to no fewer than two student responses per week. Student participation and attendance in CANVAS is reported to the Director of Education on a weekly basis and the information is used, in part, to measure attendance and participation in the course.

Late/Make-up work. All assignments must be completed on time and as instructed to receive full credit. Make-up work shall:
1. Be supervised by an instructor approved for the subject being made up.
2. Require the student to demonstrate the same knowledge or competence expected of a student who attended the scheduled class session.
3. No more than 5% of the missed work can be made up. All work must be completed and submitted within seven (7) calendar days of its original due date. All coursework must be submitted no later than six (6) calendar days after the course ends.

Week 1/Module 1 Understanding Federal Codes and Regulations

Learning Objective 1. Define mandatory safety programs to comply with Federal regulations.	
TLO 1	Understand the intricacies of accreditation agencies and organizations
TLO 2	Dissect the parts of a federal regulation.
	Recognize the difference between OSHA, NIOSH, and OSHRC.
TLO 3	Explain and apply NFPA 99 and 101.

Module 1 Overview. The first course module requires students to demonstrate understanding of federal regulations as it applies to the healthcare environment, OSHA and the safety regulations aligned with the agency, and NFPA.

Discussion Questions.

Discussion Question (DQ) 1 – *Introduce yourself to the class by describing your (1) professional background, (2) where you work currently, and (3) your knowledge level of compliance and accreditation. If you are already in the BMET industry, describe your career objectives related to this program. [Minimum 200-word response for full credit]*

Discussion Question (DQ) 2 – *For this discussion, we are going to work toward applying what you learned from this week's material. Answer the following questions: (1) What is the difference between safety, regulatory compliance, and regulations? What benefits does an accreditation carry for a facility? (2) Using the website provided, select and OSHA rule that applies to BMET. Summarize the regulatory requirement and describe how to comply with the selected rule and how it is important to the BMET field. [200-word minimum response due by Thursday and at least two responses to your peers of 150-word minimum due by Sunday]*

Webinar Session (60 Minutes). The Module 1 webinar will include a course overview and instructions to improve the student's ability to access the materials. Following the introductory portion, we will explore; Code of Federal Regulations, OSHA, NIOSHA, and NFPA.

Assignments.

Assignment 1. Week 1 Webinar Recap - students must upload a Word document summarizing the information presented during the week referencing the reading assignments, video assignments, discussion questions, and webinar. [200-word minimum, due by Sunday 11:59 PM Central Time]

Quiz.

Unit 1 Quiz. 14-questions covering the material presented in the reading, video, and webinar. No time limit, 100 points.

Time-on-Task. The Time-on-Task for this module is 18 hours.

Week 2/Module 2 Hazard Communication Program

Learning Objective 2. Understand the hazard communication program and its relevance in the BMET environment	
TLO 1	Identify required components of HCS program
TLO 2	Interpret key information from Safety Data Sheet
TLO 3	Understand how to obtain a SDS
TLO 4	Explain the use and application of NFPA 99
TLO 5	Recognize the importance of safety testing

Module 2 Overview. During week 2 students will develop an understanding of the hazard communication program, safety data sheet, and more in-depth knowledge on NFPA 99.

Discussion Questions.

Discussion Question (DQ) 1 – *For this discussion, we are going to work toward applying what you learned from this week's material. Answer the following questions: (1): [Review the OSHA.gov/stateplans/ site, scroll down to the map. Select your state and indicate if it has a state plan and what the plan covers. If your state does not have an approved state plan, describe how OSHA regulations are enforced. (2) Obtain an SDS for a material you would find in a hospital setting, and one a BMET would likely use. What information is described in each section? Provide the name of the material you selected and the SDS specific information. 200-word minimum response due by Thursday and at least two responses to your peers of 150-word minimum due by Sunday]*

Webinar Session (60 Minutes). The week 2 webinar will be oriented towards the hazard communication program and the required components for legal compliance. Students will also learn how to obtain and interpret a Safety Data Sheet. Finally, discuss how HCS and NFPA 99 influence the operation of a maintenance shop.

Assignments.

Assignment 1. BMETs often travel within the hospital to serve customers and complete their mission. What hazards may the BMET encounter? Describe how the hazards can be mitigated to ensure there is a safe working environment? How would a new BMET learn about safety hazards in the workplace?

Assignment 2. Week 2 Webinar Recap - students must upload a Word document summarizing the information presented during the week referencing the reading assignments, video assignments, discussion questions, and webinar. [200-word minimum, due by Sunday 11:59 PM Central Time]

Unit 2 Quiz. 10-questions covering the material presented in the reading, video, and webinar. No time limit, 100 points.

Time-on-Task. The Time-on-Task for this module is 18 hours.

Week 3/Module 3 Lock-out/Tag-out and Life Safety

Learning Objective 3. Orient and apply lock-out/tag-out procedures.	
TLO 1	Understand purpose and scope of lock-out/tag-out procedures
TLO 2	Critically think and apply concepts to professional setting
TLO 3	Define affected and authorized employee
TLO 4	Recognize the importance of an energy control program
TLO5	Identify protective hardware and material used for lock-out/tag-out procedures

Module 3 Overview. During module 3 students will develop and demonstrate an understanding of the safety element of lock-out/tag-out procedures.

Discussion Question.

Discussion Question (DQ) – (1) *What is the purpose of a lock out/tag out? Briefly describe the order of operation for application of control? (2)Describe an example when lock out tag out is not needed even though there is an energy hazard present. How does the BMET prevent the situation from becoming a lock out/tag out situation (Example: repair, some maintenance)? Or describe a time when you have received an electrical shock and explain if/how the use of a lock out/tag out program would have prevented the incident. (3) In your opinion what is the most important requirement in NFPA 101, and why? [200-word minimum response due by Thursday and at least two responses to your peers of 150-word minimum due by Sunday]*

Webinar Session (60 Minutes). The week 3 webinar will be oriented towards lock-out/tag-out procedures. Students will focus on the control of hazard energy, scope of practice, the purpose of lock-out/tag-out, how to apply the rules in the work-center, and protection equipment.

Assignments.

Assignment 1. Utilizing the provided link, answer the following questions. 1) Why is it important to write clear and concise LOTO procedures? 2) What were the 6 tips provided in the document? Which tip do you believe is the most important? Why? 3) As a BMET, what role do you have in the LOTO program? Explain role. . [250-word minimum, due by Sunday 11:59 PM Central Time]

Assignment 2. Week 3 Webinar Recap- students must upload a Word document summarizing the information presented during the week referencing the reading assignments, video assignments, discussion questions, and webinar. [200-word minimum, due by Sunday 11:59 PM Central Time]

Unit 3 Quiz. 15-questions covering the material presented in the reading, video, and webinar. No time limit, 100 points.

Time-on-Task. The Time-on-Task for this module is 19 hours.

Week 4/Module 4 Radiation Protection Program

Learning Objective 4. Understand the purpose of a radiation protection program	
TLO 1	Identify the required components of a legally compliant radiation protection program
TLO 2	Discuss methods for monitoring radiation exposure
TLO 3	Identify different accreditation agencies
TLO 4	Describe the application of TJC standard as they apply to BMETs

Module 4 Overview. During module 4 students will develop understanding of radiation protection, the intent of the program, and accreditation programs alignment to radiation standards..

Discussion Questions.

- *Discussion Question (DQ) 1 –(1) BMET departments and service units have not always had a core focus on radiation protection. Why do you believe this occurred? (2) Discuss levels of radiation exposure and possible outcomes of a large dose delivered at one time (acute), and the same dose delivered over a long period of time (chronic). (3) Why is monitoring an important component for a radiation protection program?*

Webinar Session (60 Minutes). The module 4 webinar will include be orientated towards: the purpose and intent of a radiation protection program, the minimum requirements, ionizing radiation sources, and protection.

Assignments.

Assignment 1. Provide the required components of a legally compliant radiation protection program.

Assignment 2. Using the references provided, Identify Accreditation Organizations. What is the purpose of accreditation? Describe TJC and DNV accreditations as they apply to the BMET department. Are there specialty areas that can be accredited? Provide a list of the specialty areas.

Assignment 3. Week 4 Webinar Recap - students must upload a Word document summarizing the information presented during the week referencing the reading assignments, video assignments, discussion questions, and webinar. [250-word minimum, due by Sunday 11:59 PM Central Time]

Unit 4 Quiz. 10-questions covering the material presented in the reading, video, and webinar. No time limit, 100 points.

Time-on-Task. The Time-on-Task for this module is 18 hours.

Week 5/Module 5 DNV and NIAHO Standards

Learning Objective 5. Apply NIAHO and analyze the difference between DNV-GL and TJC standards.	
TLO 1	Define NIAHO, DNV, and TJC
TLO 2	Apply accreditation knowledge to professional setting
TLO 3	Understand how the Life Safety and Infection Control elements apply to BMETs

Module 5 Overview. During module 5 students will develop and demonstrate an understanding of the NIAHO standards, programs, and facilities. Students will gain knowledge on the accreditation process and the inspectable elements related to BMETs.

Discussion Questions.

Discussion Question (DQ) – *(1) Describe the different NIAHO standards for facility types. What is the rationale for this practice? (2) Of the BMET related accreditation standards which one do you feel is the most important, and why?*
(1) [200-word minimum response due by Thursday and at least two responses to your peers of 150-word minimum due by Sunday]

Webinar Session (60 Minutes). The module 5 webinar will include be orientated towards: NIAHO standards, NIAHO programs, NIAHO facilities, and accreditation application as it refers the BMET working environment.

Assignments.

Assignment 1. Week 5 Webinar Recap - students must upload a Word document summarizing the information presented during the week referencing the reading assignments, video assignments, discussion questions, and webinar. [250-word minimum, due by Sunday 11:59 PM Central Time]

Unit 5 Quiz. 10-questions covering the material presented in the reading, video, and webinar. No-minute time limit, 100 points.

Time-on-Task. The Time-on-Task for this module is 18 hours.

Week 6/Module 6 Accreditation Program Process

Learning Objective 6. Discuss the accreditation process	
TLO 1	Understand the accreditation application process
TLO 2	Identify the survey preparation items
TLO 3	Review survey order of activities
TLO 4	Apply knowledge to develop corrective action plans

Module 6 Overview. During module 5 students will review DNV and NIAHO standards, learn about the accreditation application process, survey preparation and expectations, reports, and corrective action plans.

Discussion Questions.

Discussion Question (DQ) 1 – *During or after an accreditation, or OSHA inspection it is possible for the facility to show it has done on the spot corrections. What are the recourses for facilities who have items of non-compliance not corrected at the time of the inspection? Under what circumstances is a re-inspections required?. [200-word minimum response due by Thursday and at least two responses to your peers of 150-word minimum due by Sunday]*

Webinar Session (60 Minutes). The module 5 webinar will include be orientated towards: applying NIAHO standards to the accreditation program process which includes the application, survey, and post-survey requirements.

Assignments.

Assignment 1. Week 6 Webinar Recap - students must upload a Word document summarizing the information presented during the week referencing the reading assignments, video assignments, discussion questions, and webinar. [250-word minimum, due by Sunday 11:59 PM Central Time]

Unit 5 Quiz*. 5-questions covering the material presented in the reading, video, and webinar. No time limit, 100 points.*

Final Exam. 40 questions covering the materials presented over the 6-week course. No time limit, 100 points (25% of course grade)

Time-on-Task. The Time-on-Task for this module is 19 hours.

Note: Please remember to complete the end of course survey prior to the end of the last day of class.

Course Grade Distribution

Participation (Discussion Boards and Written)	30%
Homework assignments	30%
Weekly Quizzes	25%
Final Exam	15%

Discussion Board Grading Criteria

Students are required to respond to all weekly discussion board topics and instructor-directed prompts. Responses must be substantive and meet the minimum word count requirement. Additionally, students are required to engage with peers by responding to no fewer than two peer-to-peer responses per week. The following rubric is used as a guide by instructors to evaluate and grade student responses to discussion questions and peer-to-peer engagement:

	Beginning 0-25 Points	Developing 25-50 Points	Accomplished 50-75 Points	Exemplary 75 to 100 Points
Weekly Discussion Question Responses (Minimum of two 200-word responses per week).	Contributes fewer than the required 2 Discussion Question (DQ) responses.	Contributes 2 Discussion Question (DQ) responses but one or both fail to meet minimum word-count requirements for the DQ.	Contributes by providing 2 Discussion Question (DQ) responses and meets the minimum word count requirements for the DQ.	Exceeds required DQ word count requirements and/or provides an exemplary response to a DQ.
Weekly Engagement with peers (Minimum of two 200-word responses to peers each week).	Contributes fewer than the required peer-to-peer responses in the discussion forum.	Contributes 2 peer-to-peer responses in the discussion forum but fails to meet minimum word-count requirements and lacks substance.	Contributes by providing 2 peer-to-peer responses and meets the minimum word count requirement for the peer-to-peer response	Exceeds required peer-to-peer response requirements by meeting the minimum word count requirement and providing substantive responses to peers.
Quality and Content of DQ responses and peer-to-peer responses in the Discussion Forum.	Postings in the discussion forum are not relevant to the assigned topic, are inaccurate, or misrepresented.	Postings in the discussion forum address peripheral topics, are generally accurate, but may contain factual omissions and/or errors.	Postings are generally substantive; however, responses rely too heavily on opinion than fact. Postings meet word count requirements but lack scholarly tone or appropriate references.	Discussion Question and Peer-to-Peer postings consistently contribute to the discussion, contain substantive comments backed by relevant references and encourage open dialogue and additional discussion in the class.

Weekly Live Webinars

Mandatory instructor led webinars will be conducted at least once per week (60 Minutes). Webinars are not optional; however, we understand that from time-to-time students may not be able to attend in person. If you cannot attend a live session, the webinars will be posted in CANVAS for review. Instructors will assign weekly assignments associated with the live webinars.

Weekly Summary

There is a summary assignment each week over the topics discussed during the webinar lecture, as well as weekly reading and video assignments. The assessment consists of replying to prompts or questions provided by the instructor. Responses must be a minimum of 250 words.

Final Exam

Each course will contain a capstone project or final exam. Capstone and final exams are worth no more than 30% of the student's overall grade in the course.

Grading System for the College of Biomedical Equipment Technology

A	90-100	4.0	F	59 & Below	0.0
B	80-89	3.0	W	Withdrawal	N/A
C	70-79	2.0	I	Incomplete	N/A
D	60-69	1.0	T	Transfer	N/A

To receive an incomplete "I", the student must petition the instructor for an extension to complete the required coursework. The student must be able to pass the course with the completed work and garner a grade of 70 or better. Incomplete grades that are not completed within 7 business days after the beginning of the next session will be converted to the existing grade earned in the course and will affect the student's GPA accordingly. CBET reserves the right to extend the time needed to fulfill the incomplete.

An "I" does not count towards the Grade Point Average (GPA) until a grade is assigned. A "W" is given when a student is dropped from the roster during the course and does not replace the previous grade(s). Grades of "W" and "F" are recorded in the academic transcript and reflected in the GPA. When a course is repeated after failure or withdrawal, the later grade will replace the first grade in calculating the CGPA. The clock hours of the course repetition are counted toward the maximum timeframe. CBET shall record a grade of "incomplete" for a student who withdraws but is not entitled to a refund if the student requests the grade at the time the student withdraws, and the student withdraws for an appropriate reason unrelated to the student's academic status.

A student must repeat a course in which a grade of "F" was received. A student can repeat each course once, however, once they reach 1.5 times the length of time required for graduation, they will be dropped from the program. If a student fails any course a second time, he/she will be dropped from the program. A failed course will be rescheduled for the earliest possible module at the discretion of the Director of Education. Students will be charged to retake the course.

Additional Resources and Points of Contact

Students requiring additional administrative support are encouraged to contact the Colleges Student Advocate, Mrs. Terri Gomez, at 210.233.1102 or via e-mail at tgomez@cbet.edu

For a complete list of administrative policies and regulations refer to the CBET Catalog at https://cbet.edu/course-catalog

NOTE: THE INSTRUCTOR RESERVES THE RIGHT TO MODIFY THIS SYLLABUS and COURSE OUTLINE