



BMET 2308 Introduction to Clinical Asset Management Systems



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 Introduction to Clinical Asset Management Systems course is designed as an Interactive Distance Learning (IDL) course including asynchronous and synchronous live virtual instruction. The participant experience includes an introduction to the framework behind data management, functions of Structured Query Language (SQL), and use of the Nuvolo and TruAsset Computerized Maintenance Management Systems.

- Data Management
- Functions of Structured Query Language (SQL)
- Nuvolo CMMS
- TruAsset CMMS

COURSE DESCRIPTION

The course is designed to teach students about databases and how to use them in Access. Students will walk through the creation of an equipment tracking system and learn how it is integrated into the Computerized Maintenance Management System. Students will learn how to create forms, make queries, use fields, and navigate Access.

LEARNING OBJECTIVES

- LO1. Intro to CMMS Databases.
- LO2. Working with Nuvolo and TruAsset.
- LO3. Work Orders and SQL Fundamentals.
- LO4. Completing Work Orders.
- LO5. Generating Reports.

Instructional Team

The Introduction to Clinical Asset Management Systems program is led by a talented instructor via webinar and interactive distance learning formats. In addition to the weekly live sessions, the instructor accessible via the Learning Management System (LMS) daily, and by appointment via Zoom on Mondays and Wednesday through Friday between the hours of 1800-1900 (CST).



Melissa Mocarski is a proud wife, mom, engineer and instructor working here at CBET. she began her career as a BMET with GE Healthcare working in the hospital setting and since then has held various roles in both Engineering and Management. Mrs. Mocarski considers herself a lifelong student, as she has obtained Bachelor's Degree's in both Biomedical Engineering and Technical Management. Later, Melissa went on to receive a Master's in Business Administration with a Concentration in Supply Chain Management in addition to a Master's Degree in Public Health Administration. Very simply put, Melissa has a driving force to entering education for love for knowledge and being able to share that with others. she is also passionate, enthusiastic, and caring as is evident in her teaching as she strives to be the role model for others coming up in this field. Melissa is looking forward to the future of this amazing field and meeting new students each term. Mrs. Mocarski can be contacted directly through CANVAS messaging or via e-mail at Mmocarski@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: 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 (Intro to Nuvolo and TruAsset)

Learning Objective 1: Understanding the beginning concepts and use of the CMMS.

TLO 1	Attendance Policy review.
TLO 2	Explain the construction and workings of all diodes.
TLO 3	Introduction to CMMS databases.
TLO 4	TruAsset.

Module 1 Overview:

The first course module covers databases and an introduction to Nuvolo and TruAsset. Students will learn Microsoft Access concepts, the basics of working with a Computerized Maintenance Management System (CMMS), and how to navigate each interface.

Week 1 Discussion Questions

Discussion Question (DQ) 1: Introduce yourself to the class by describing your (1) What influenced you to become a member of the BMET world, (2) What industry you are currently in, and (3) Would you consider yourself a problem-solving 'Solution Architect'.

Discussion Question (DQ) 2: In your own words, how would you explain a database of information and why they are used to a 5-year-old or your parents/grandparents? Do you directly work with or utilize a 'traditional' database in your work or personal life? What is an area of your life that a database could be helpful and how would you put one to use?

[Submit your Initial Post by Wednesday at 11:59 PM CST or it will be counted late.

(target is >250 words/60 pts total)]

[Reply to 2x (of your classmates before Sunday at 11:59 PM CST. (20 pts each/40 pts total)]

Webinar Session (60 Minutes): The Module 1 webinar will include course overview, attendance policy and an introduction to Microsoft Access. Students will be asked to introduce themselves and will be expected to actively participate throughout the session.

Week 1 Assignments

Assignment 1: Watch the assigned video and complete the worksheet.

Assignment 2: Quiz - This quiz covers all the information, videos, and articles from week 1.

WEEK 2/MODULE 2 (Working with Nuvolo and TruAsset)

Learning Objective 2: Viewing, Defining, and Editing CMMS Sections

TLO 1	Nuvolo - Defining Assets and Life Cycle
TLO 2	Nuvolo - Viewing, Opening, & Creating an Asset Record
TLO 3	Nuvolo - Defining Parts
TLO 4	Nuvolo - Viewing, Opening, & Creating a Part Record
TLO 5	TruAsset - Adding, viewing, editing, & disabling Assets
TLO 6	TruAsset - Adding, viewing, & editing Parts

Module 2 Overview:

During module 2 students will learn work with Assets and Part in both Nuvolo and TruAsset. Topics covered will be include defining assets and parts, viewing, opening and creating an asset and part record.

Week 2 Discussion Questions

Discussion Question (DQ) 1: How you organize the data you currently keep track of on a day-to-day basis.

Discussion Question (DQ) 2: Which of the discussed data types and various field properties you might use in your database discussed in Week 1 and why.

Webinar Session (60 Minutes): The week 2 webinar will include a brief review of Week 1/Module 1. Additionally, we will focus on the learning objectives for Module 2 and provide practical examples. Student are highly encourage to ask questions.

[Submit your Initial Post by Wednesday at 11:59 PM CST or it will be counted late.

(target is >250 words/60 pts total)]

[Reply to 2x (of your classmates before Sunday at 11:59 PM CST. (20 pts each/40 pts total)]

Week 2 Assignments

Assignment 1: Watch the assigned video and complete the worksheet.

Assignment 2: Submit a Word document with a summary of the webinar (recorded or live), letting me know how much you learned, what worked, and what could use improvement. [Live webinar summary: minimum 250 words] [Recorded: webinar summary: minimum 500 words]

Assignment 3: Quiz - This quiz covers all the information, videos, and articles from week 2.

WEEK 3/MODULE 3 (Work Orders and SQL Fundamentals)

Learning Objective 2: Create Work Orders and Basic SQL Queries

TLO 1	Nuvolo - Viewing, choosing, assigning, and creating a Work Order
TLO 2	TruAsset - Creating a new Ticket and Repair (RP) Work Order
TLO 3	MS Access - SQL Syntax & Functions
TLO 4	MS Access - Creating simple SQL statements
TLO 5	MS Access - Describing the SELECT, UPDATE, and DELETE commands
TLO 6	MS Access - Applying SQL queries, Boolean logic, and the WHERE command

Module 3 Overview:

During module 3 students will learn how to work with work orders in Nuvolo and TruAsset. They will also learn about SQL Syntax and Functions, the meaning of the SELECT, UPDATE, DELETE, and various other SQL statements, and how to create a simple SQL statement. We will also learn how to apply SQL queries, Boolean logic, and the WHERE Clause to our database.

Week 3 Discussion Questions

Discussion Question (DQ) 1: Watch the video linked in, "Assignment - Week 3: Watch Structured Query Language video".

Discussion Question (DQ) 2: Provide three SQL query statements that you might use for your database. Explain specifically why you would use them and some of the resulting table data we might see.

Webinar Session (60 Minutes): The week 3 webinar is centered on working with work orders in both Nuvolo and TruAsset. Additional topics will be SQL Fundamentals and the learning objectives for Module 3. We will also take a look at the W3Schools' Website using the following link <https://www.w3schools.com/sql/default.asp>. Student are highly encourage to ask questions.

[Submit your Initial Post by Wednesday at 11:59 PM CST or it will be counted late.

(target is >250 words/60 pts total)]

[Reply to 2x (of your classmates before Sunday at 11:59 PM CST. (20 pts each/40 pts total)]

Week 3 Assignments

Assignment 1: Watch the assigned video and complete the worksheet.

Assignment 2: Submit a Word document with a summary of the webinar (recorded or live), letting me know how much you learned, what worked, and what could use improvement. [Live webinar summary: minimum 250 words] [Recorded: webinar summary: minimum 500 words] Quiz. This quiz covers all the information, videos, and articles from week 3.

WEEK 4/MODULE 4 (Optoelectrical / Power Supplies)

Learning Objective 4: Completing and Adjusting Work Orders

TLO 1	Nuvolo - Completing a Corrective or Planned Maintenance work order.
TLO 2	Nuvolo - Adding time or costs to a Work Order.
TLO 3	TruAsset - Completing and closing a Repair work order.
TLO 4	TruAsset - Completing a Scheduled PM work order.

Module 4 Overview:

During module 4 students will learn the components of a Form in MS Access, identify the common properties of the properties sheet, apply the Form components, create simple macros and design their first user friendly form.

Week 4 Discussion Questions

Discussion Question (DQ) 1: When was the last time you had a really negative user interface experience?

Discussion Question (DQ) 2: Is there a user interface you use every day you wish were better?

Discussion Question (DQ) 3: Have you ever had an idea that was great on 'on paper' but when it was 'brought to life' was less than amazing?

Webinar Session (60 Minutes): The week 4 webinar will focus on the learning objectives for module 4. Additionally, we will practice building our first user friendly form and use simple macros and SQL syntax to populate the tables which we built in module 2. Student are highly encourage to ask questions.

[Submit your Initial Post by Wednesday at 11:59 PM CST or it will be counted late.

(target is >250 words/60 pts total)]

[Reply to 2x (of your classmates before Sunday at 11:59 PM CST. (20 pts each/40 pts total)]

Week 4 Assignments

Assignment 1: Watch the assigned video and submit an APA formatted Word document answering the following questions in (300 - 500 words): Which of these 10 rules do you think is the most important and why? Do you believe that forms are easier to complete when only text fields are used, and why?

Assignment 2: Watch the assigned video and use the information provided to make your first table and interactive form.

Assignment 3: Submit a Word document with a summary of the webinar (recorded or live), letting me know how much you learned, what worked, and what could use improvement. [Live webinar summary: minimum 250 words] [Recorded: webinar summary: minimum 500 words] Quiz. This quiz covers all the information, videos, and articles from week 3.

Assignment 4: Quiz - This quiz covers all the information, videos, and articles from week 4.

WEEK 5/MODULE 5 (Generating Reports)

Learning Objective 5: Learn, Identify, and Apply components of MS Access

TLO 1	Nuvolo - Generating Reports
TLO 2	TruAsset - Generating Reports

Module 5 Overview:

During module 4 students will learn the components of a Form in MS Access, identify the common properties of the properties sheet, apply the Form components, create simple macros and design their first user friendly form.

Week 5 Discussion Questions

Discussion Question (DQ) 1: Do some research, explain, and provide examples of how to use 2x of the different controls available in the Property Sheet menu.

Discussion Question (DQ) 2: Are there any features or tools available in Access that you have found to be interesting or more helpful than you thought?

Webinar Session (60 Minutes): The week webinar will focus on the learning objectives for module 5. Additionally, we will practice on building our first complex database which utilizes all the components that we have learned in the previous modules. Student are highly encourage to ask questions.

[Submit your Initial Post by Wednesday at 11:59 PM CST or it will be counted late.

(target is >250 words/60 pts total)]

[Reply to 2x (of your classmates before Sunday at 11:59 PM CST. (20 pts each/40 pts total)]

Week 5 Assignments

Assignment 1: Using the links provided, let's explore the various 'Functions' MS Access uses to harness the power of the SQL environment. After you are finished exploring the SQL Functions complete the questions in the worksheet.

Assignment 2: Watch the assigned video and complete the worksheet.

Assignment 3: Submit a Word document with a summary of the webinar (recorded or live), letting me know how much you learned, what worked, and what could use improvement. [Live webinar summary: minimum 250 words] [Recorded: webinar summary: minimum 500 words]

Assignment 4: Quiz - This quiz covers all the information, videos, and articles from week 5.

WEEK 6/MODULE 6 (Final Project)

Learning Objective 6: Apply Course Knowledge to Final Project

TLO 1	Apply knowledge learned throughout the course.
TLO 2	Create and Asset record in Nuvolo and TruAsset.
TLO 3	Complete an assigned Preventative and Repair Maintenance Work Order in Nuvolo and TruAsset.

Module 6 Overview:

The final module focuses on applying the knowledge learned throughout this course to create an asset record and complete various maintenance work orders to include adding parts and accounting for labor.

Week 6 Discussion Questions

Discussion Question (DQ) 1: Did you find this class to be interesting and useful?

Discussion Question (DQ) 2: Have you discovered that you have a new appreciation for databases in general now that you have an idea of what goes into them?

Discussion Question (DQ) 3: Do you appreciate the skills and knowledge needed to make the world's data work for the betterment of society?

Webinar Session (60 Minutes): The week 6 webinar is centered on questions and answers. No new information will be presented. Student are highly encourage to ask questions concerning everything we have covered over the past 5 weeks.

[Submit your Initial Post by Wednesday at 11:59 PM CST or it will be counted late.

(target is >250 words/60 pts total)]

[Reply to 2x (of your classmates before Sunday at 11:59 PM CST. (20 pts each/40 pts total)]

Week 6 Assignments

Assignment 1: A webinar summary will not be required this week.

Assignment 2: Final Project - Given the data provided by your instructor, complete the assigned task.

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

Course Grade Distribution

Discussion Board Requirements	25%
Weekly Webinars	25%
Weekly Assignments	25%
Final Project	25%

Discussion Board Grading Criteria (25% of overall grade)

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 must 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	Developing	Accomplished	Exemplary
	0-25 Points	25-50 Points	50-75 Points	75-100 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 wordcount requirements and lacks substance.	Contributes by providing 2 peerto-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 Peerto-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 (25% of overall grade)

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.

Assignments (25% of overall grade)

Students will be assigned homework on a weekly basis. Homework may consist of a wide variety of deliverables. Homework may include a wide array of requirements, ranging from written assignments, research projects, PowerPoint presentations, and a host of other activities. In all cases, instructors will endeavor to ensure that students possess a clear understanding of the requirements and expectations.

Final Project (25% of overall grade)

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