Example:

Required Student Assessment Materials

for

Initial Renewal Application

of

Texas Skill Standards Based

Program Recognition

Example of Required Student Assessments
Texas Skill Standards Based Program Recognition Renewal

In this packet, you will find an example of approved student assessment samples submitted by Brookhaven College for its initial renewal application. The attached assessments address the relevant key activities and adhere to the labeling requirements. The following documents are included:

- Key activities to courses matrix – with the three courses for which the assessments were submitted (noted in red by TWIC staff)

- Completed Student Assessment Samples Cover Sheet

- Sample student assessments from three courses – labeled with the college's name, course rubric and number, assessment title, and the key activities that are addressed by the assessment

TWIC wishes to acknowledge and thank Brookhaven College of the Dallas County Community College District and the following individuals who have agreed to share their assessments:

- Patti Burks, Computer Technology Professor
- Ngoc Truong, Instructional Designer

TEXAS SKILL STANDARDS BASED PROGRAM RECOGNITION KEY ACTIVITIES TO COURSES MATRIX

Institution: Brookhaven College   **Award Title:** AAS.CITWPD

Program: Computer Information Technology-Web Production and Design   **Award CIP Code:** 11.0201

Key Activity #/Statement	IMED 2313 Project Analysis and Design	IMED 2315 Web Design II *Some assessments submitted*	ITSE 1303 Introduction to MySQL *Some assessments submitted*	ITSE 1411 Beginning Web Programming	IMED 2449 Internet Server Management	INEW 2430 Comprehensive Software Project: Planning and Design *All assessments submitted*	
A1 Gather data to identify customer requirements and capacity	X		X	X		X	
A2 Define scope of work	X			X		X	
A3 Prepare and present functional and technical specifications	X		X	X		X	
A4 Prepare preliminary application	X			X		X	
A5 Create and refine preliminary design or mockup	X	X		X		X	
A6 Review technical considerations and constraints	X	X		X		X	
A7 Develop project plan	X					X	
B1 Develop site map application models and user interface specifications	X					X	
B2 Choose a site plan	X					X	
B3 Select programming languages, design tools and applications				X		X	

TEXAS SKILL STANDARDS BASED PROGRAM RECOGNITION KEY ACTIVITIES TO COURSES MATRIX

Key Activity #/Statement	IMED 2313 Project Analysis and Design	IMED 2315 Web Design II Some assessments submitted	ITSE 1303 Introduction to MySQL Some assessments submitted	ITSE 1411 Beginning Web Programming	IMED 2449 Internet Server Management	INEW 2430 Comprehensive Software Project: Planning and Design All assessments submitted	
B4 Write supporting code		X		X		X	
B5 Identify major subsystems and interfaces		X				X	
B6 Develop models		X				X	
B7 Develop design and interface specifications		X		X		X	
B8 Identify system platform, components and dependencies		X		X		X	
B9 Develop appropriate data model			X				
C1 Research content and information architecture	X		X			X	
C2 Coordinate content development from multiple contributors						X	
C3 Develop and present concept alternatives	X	X				X	
C4 Create or adapt content	X	X				X	
C5 Produce graphics, layout elements and applicable code	X	X		X		X	
C6 Update content	X	X				X	

TEXAS SKILL STANDARDS BASED PROGRAM RECOGNITION KEY ACTIVITIES TO COURSES MATRIX

Key Activity #/Statement	IMED 2313 Project Analysis and Design	IMED 2315 Web Design II Some assessments submitted	ITSE 1303 Introduction to MySQL Some assessments submitted	ITSE 1411 Beginning Web Programming	IMED 2449 Internet Server Management	INEW 2430 Comprehensive Software Project: Planning and Design All assessments submitted	
D1 Plan rollout	X					X	
D2 Facilitate move to production system	X	X		X		X	
D3 Hand off to customer or user	X			X		X	
D4 Integrate customer feedback				X		X	
D5 Perform application maintenance				X		X	
D6 Recommend optimization and facilitate upgrades and improvements			X	X		X	
D7 Document application and site changes						X	
D8 Develop and implement contingency plans			X			X	
E1 Evaluate and recommend web hardware, software and third-party solutions					X	X	
E2 Set up server software and hardware					X		
E3 Manage server					X		
E4 Support systems recovery			X		X	X	
F1 Define and manage development standards			X		X	X	

TEXAS SKILL STANDARDS BASED PROGRAM RECOGNITION KEY ACTIVITIES TO COURSES MATRIX

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F2 Train designers and developers						X	
F3 Evaluate web technologies and standards				X		X	
F4 Provide quality customer service				X		X	
F5 Perform ROI (Return on Investment) analysis to ensure business goals are met						X	
F6 Design and document security plan						X	
F7 Implement and enforce security requirements			X		X	X	
F8 Maintain and improve security in response to industry developments and user experience			X			X	
F9 Develop enterprise-wide legal and international privacy guidelines						X	
G1 Develop test and acceptance plan				X		X	
G2 Develop test procedures				X		X	
G3 Develop and perform usability and integration testing				X		X	
G4 Perform tests				X		X	
G5 Document test results and take corrective actions				X		X	
G6 Recommend and implement performance improvements			X			X	
H1 Develop physical database characteristics and create database			X				

TEXAS SKILL STANDARDS BASED PROGRAM RECOGNITION KEY ACTIVITIES TO COURSES MATRIX

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objects							
H2 Select unique identifiers and normalize the data model			X				
H3 Support population of database			X				
H4 Integrate high-level business rules			X				
H5 Plan implementation and deploy database			X				
H6 Define and implement user interface			X	X			

Student Assessment Required Samples – Cover Sheet
Texas Skill Standards Based Program Recognition

College: Brookhaven College	Program: CIT – Web Production and Design AAS

Course* for which **all major assessments** are submitted (addressing **all key activities** checked on the matrix):

Course 1 (Rubric, Number, and Title):	Name of Assessments:	Key Activities Addressed:
INEW 2430 - Comprehensive Software Project	Project 1 - Project Definition and Site Structure	A1-A3; B1-B3; C1; F5
	Project 2 - Website Prototype	A4, A5, B6, B7, C3, D4
	Project 3 - Project Plan and Hosting	A6, A7, B5, B8, D8, E1, F1-F3, F6, F9, G1-G3
	Project 4 - Site Development and Testing	B4, C2, C4-C6, E4, F4, F7, F8, G4-G6
	Project 5 - Implementation	D1-D3, D5-D7

*This course must have a substantial number of key activities integrated into it.

Two courses for which **at least one assessment** is submitted (addressing **some key activities** checked on the matrix):

Course 2 (Rubric, Number, and Title):	Name of Assessment(s):	Key Activities Addressed:
IMED 2315 - Web Design II	Project 1: 5 Page Website	B4, B7, C4-C6, D2

Course 3 (Rubric, Number, and Title):	Name of Assessment(s):	Key Activities Addressed:
ITSE 1303 - Introduction to MySQL	Final Project Part A: Identify Required Entities	A1, C1
	Final Project Part B: Data Normalization	A3, B9, D6, H2
	Final Project Part C: Create MySQL Database	H1, H3, H5
	Final Project Part D: Users and Views	F7, F8
	Final Project Part E: Queries	H6

Brookhaven College

Computer Information Technology – Web Production and Design
Associate of Applied Science

ALL Student Assessments

INEW 2430

INEW 2430 – Comprehensive Software Project

TSSB key activities are identified under the objectives of each assignment in italics and dark orange

Project 1 - Project Definition and Site Structure

Objective: Create a project definition and site structure document for a web project.

Requirements:

- Conduct a client survey interview with your client using the client survey from the UT website as a guide
  A1 Gather data to identify customer requirements and capacity
- Complete a project brief
  A2 Define scope of work
  A3 Prepare and present functional and technical specifications
- Develop a user persona using the persona template
- Develop a content outline for your project.
  C1 Research content and information architecture
- Develop a site diagram for your project. (You may use any software that you choose for this - including Microsoft Word or PowerPoint.)
  B1 Develop site map application models and user interface specifications
  B2 Choose a site plan
- Review all of the above documents with your client and make corrections as needed.
  B3 Select programming languages, design tools and applications
- Work with the client to perform ROI analysis.
  F5 Perform ROI (Return on Investment) analysis to ensure business goals are met
- Submit all of the above files for grading. You should have the client survey, project brief, user persona, content outline and site diagram.

Grading Rubric:

Requirement	Points
Conduct (and document) client survey interview	20 points
Prepare a project brief	20 points
Develop a user persona	20 points
Create a content outline	20 points
Construct a site diagram	15 points
Total	100 points

Project 2 – Website Prototype

Objective: Create 3 prototypes for the website and work with the user to select one for the final site.

Requirements:

- Develop 3 design prototypes for the client website. You may create actual working web pages or lay them out in PhotoShop or Illustrator. Include actual content from the client and navigation based on the site diagram. Consider the user personas and website objectives in your designs.
  A4 Prepare preliminary application
  A5 Create and refine preliminary design or mockup
  B6 Develop models
  B7 Develop design and interface specifications
- Present the design alternatives to the client and work with them to select the final design. (Note: this may be one of the 3 designs presented or may include elements from more than one. Be prepared to make modifications based on client preferences.) Invite your instructor to the presentation meeting.
  C3 Develop and present concept alternatives
  D4 Integrate customer feedback
- Submit the preliminary and final design prototypes for grading.

Grading Rubric:

Requirement	Points
Create 3 website design prototypes	60 points (20 points each)
Presention to client	20 points
Final design selection	20 points
Total	100 points

Project 3 – Project Plan and Hosting

Objective: Work with the client to identify a web hosting service and develop a project plan for the remainder of the project.

Requirements:

- Based on the selected design, identify website hosting considerations and technical requirements (i.e. Wordpress or other CMS, need for database, programming and scripting languages, etc.) If the user has a web hosting service already, make sure that it supports the requirements. If not, help them select an appropriate service. Document the technical requirements and web hosting decision.
  A6 Review technical considerations and constraints
  B8 Identify system platform, components and dependencies
  E1 Evaluate and recommend web hardware, software and third-party solutions
- Develop a project plan for your project. Identify all tasks that need to be completed, assign personnel and deadlines to each task. Be sure to include testing, documentation and implementation in the plan as well as the site development tasks. Clarify with the user what will be completed in the scope of the project (given the project timeline).
  A7 Develop project plan
  B5 Identify major subsystems and interfaces
- Create a standards document that identifies the tools, templates, design standards, etc. that the project team will use during the development process. All team members should agree and sign off on the standards. Identify any training needs for the team. Work with your instructor to find resources to fulfill training needs.
  F1 Define and manage development standards
  F2 Train designers and developers
  F3 Evaluate web technologies and standards
- Work with the client to develop security and contingency plans for the site. Identify risks and evaluate alternatives. Assist the user in developing a privacy policy to be included on the website. Discuss contingency plans with the client if the system fails or some functions are not available.
  F6 Design and document security plan
  F9 Develop enterprise-wide legal and international privacy guidelines
  D8 Develop and implement contingency plans
- Create a test plan for the site, including function testing, usability, user acceptance and integration (if appropriate). Identify who will be doing the testing and timelines.
  G1 Develop test and acceptance plan
  G2 Develop test procedures
  G3 Develop and perform usability and integration testing
- Submit the project plan, technical specifications, web hosting decision, design standards, security/contingency plan, and test plan for grading.

Grading Rubric:

Requirement	Points
Technical requirements	20 points
Web hosting selection	10 points
Project Plan • All tasks identified • Personnel assigned to each task • Realistic deadlines for each task	40 points
Design standards document • Defines standards for the site • Identifies training needs • Training resources identified	25 points
Security / Contingency Plan	20 points
Privacy Policy	10 points
Test plan • Covers functional testing, usability and integration testing • Identifies responsible personnel • Includes dates	25 points
Total	150 points

Project 4 – Site Development and Testing

Objective: Create the website for the client.

Requirements:

- Gather the content from the client for the site.
  C2 Coordinate content development from multiple contributors
  C4 Create or adapt content
- Create or obtain graphic elements for the site
  C5 Produce graphics, layout elements and applicable code
- Create the web pages for the site including HTML and CSS
  B4 Write supporting code
- Develop any programs or scripts as required for the site (JavaScript, PHP, database, etc.)
  B4 Write supporting code
  F7 Implement and enforce security requirements
- Perform functional tests
  G4 Perform tests
- Arrange for user testing
- Make changes as required to correct errors found in testing
  C6 Update content
  F4 Provide quality customer service
  F8 Maintain and improve security in response to industry developments and user experience
  G5 Document test results and take corrective actions
- Perform integration testing if interfacing with an existing site or system.
  G6 Recommend and implement performance improvements
  E4 Support systems recovery
- Obtain user signoff

Grading Rubric:

Requirement	Points
Create web pages and supporting code	100 points
Perform functional tests	30 points
User testing, implementation testing and error correction	50 points
User signoff	20 points
Total	**200 points**

Project 5 – Implementation

Objective: Implement the website

Requirements:

- Transfer all pages, code, graphics, etc. to the server.
  D1 Plan rollout
  D2 Facilitate move to production system
- Document the code, maintenance procedures, security procedures, etc. and review with the client
  D3 Hand off to customer or user
  D6 Recommend optimization and facilitate upgrades and improvements
- Document any outstanding changes or enhancements that were not completed as part of the project.
  D7 Document application and site changes
- Test and make corrections as necessary for the application to function properly on the web hosting service
  D5 Perform application maintenance

Grading Rubric:

Requirement	Points
Transfer to the server	25 points
Test and make corrections as needed	25 points
Site documentation	25 points
Document outstanding changes and enhancements	25 points
Total	100 points

Brookhaven College

Computer Information Technology – Web Production and Design

Associate of Applied Science

IMED 2315

IMED 2315 – Web Design II

TSSB key activities are identified under the objectives of each assignment in italics and dark orange

Project 1: 5 Page Website

Objectives:

- Expand your website to include 5 pages total
- Use multiple backgrounds
- Optimize your site for SEO
- Adhere to recommended design and content principles

Requirements:

- Based on the site organization you created in Lab 1, add 3 more pages to your site (for a total of 5 pages) adhering to the good practices for design and content organization.
  B4 Write supporting code
  C4 Create or adapt content
  C5 Produce graphics, layout elements and applicable code
- Identify at least 2 keywords or key phrases that you will optimize for each of the 5 pages
- Review each page for SEO making adjustments as needed to optimize for the identified keywords
  C6 Update content
- Update the navigation so the user can move easily between all 5 pages.
  B7 Develop design and interface specifications
- Select at least one page or element to apply multiple backgrounds
- All pages must be HTML5 compliant (you can test your page at http://validator.w3.org)
- Test the page and make sure it works properly in several browsers / devices
- Upload all pages and any associated files (images, stylesheets, etc.) to the patti-bee2 server and test it to make sure it displays everything properly.
  D2 Facilitate move to production system (simulated)
- To submit your assignment:
  - Click on the Project 2 title link at the top of this assignment.
  - In the Comments section, let me know the keywords that you selected for your pages.
  - Click the Submit button. (You do not need to attach any files. I will grade your assignment on the patti-bee2 server.)
- This will let me know that you have submitted the assignment. If you look at your grade at this point, it will display an ! instead of a grade. After I have graded your assignment, I will replace the ! with your numeric grade.
  -
  - Click on Student Tools.
  - Click on Grades

- o Click on the numeric grade for this assignment.
- o You will then be able to see my comments on the assignment.
-

Grading Rubric	
Requirement	**Points**
Include 5 pages that comply with design and content principles	30 points
Identify keywords or key phrases for each page	10 points
Update all pages for SEO	40 points
Include multiple backgrounds	10 points
All pages are HTML5 compliant	15 points
Navigation is complete and operational	10 points
Pages uploaded to server and displays properly	10 points
Total	**125 points**

Brookhaven College

Computer Information Technology – Web Production and Design
Associate of Applied Science

Student Assessments

ITSE 1303

ITSE 1303 – Introduction to MySQL

TSSB key activities are identified under the objectives of each assignment in italics and dark orange

Final Project

For the final project, we will be taking a real world application and going through all the steps to create a MySQL database and queries for that application. The steps required for this project will be:

- Identify required entities
- Normalize the data
- Create MySQL databases
- Grant user access and create views
- Identify and generate queries for data retrieval and update

The project is worth 100 points, but each section will be graded separately:

Task	Points
A. Identify required entities	10
B. Normalize the data	40
C. Create MySQL databases	15
D. Identify user access and create views	15
E. Identify and generate queries for data retrieval and update	20
Total	**100**

Details for each step are outlined in the individual assignments below.

Project Part A: Identify required Entities

Objective:

- Select a real world application that would require a database
- Identify the entities and data fields that would be required by the application
  *Gather data to identify customer requirements and capacity **(A1)***
  *Research content and information architecture **(C1)***

Requirements:

- Identify a real world application that would require a database. This could be a business, an organization or a specific area within a business or organization (i.e. human resources, payables and receivables, etc.)
- Identify 3 major entities involved in the application. For example, if you were doing a college scheduling application, the entities would be students, classes and instructors.
- For each entity, identify the information about the entities (data fields) that would be needed. You should have about 8-15 fields for each entity. Just list the fields needed. Do not worry about breaking the information into tables. We will normalize the data in part B of this project.
- Save your information in a text file.
- Click on the View/Complete link at the bottom of this assignment. Attach the text file to the assignment and Submit.

Project Part B: Data Normalization

Objective:

- Normalize your data fields into relational database tables
- Identify primary and foreign keys
  Prepare and present functional and technical specifications (A3)
  Select unique identifiers and normalize the data model (H2)
  Develop appropriate data model (B9)
  Recommend optimization and facilitate upgrades and improvements (D6)

Requirements:

- Using the entities and data fields from Part A, go through the data normalization process to identify the tables that would be needed for a relational database
- Assign valid SQL fieldnames to each field
- Identify a primary key for each table.
- Identify the foreign keys that would be needed
- Save your information in a text file.
- Click on the View/Complete link at the bottom of this assignment. Attach the text file to the assignment and Submit.

Project Part C: Create MySQL database

Objective:

- Create a new MySQL database using the normalized table structure from Part B
- Add data to the tables in the database
  Develop physical database characteristics and create database objects (H1)
  Support population of database (H3)
  Plan implementation and deploy database (H5)

Requirements:

- Create a new MySQL database for your data
- Identify the data types and lengths for each field in your normalized table structure from part B
- Create the table structures for each of your tables and save the commands in a text file.
- Add data to each of your tables. You should have 10 rows in each table. You may load the data directly or import it from a file.
- Export the data into a text file.
- Click on the View/Complete link at the bottom of this assignment. Attach the two text files (one with the structure and one with the data) to the assignment and Submit.

Project Part D: Users and Views

Objective:

- Identify the primary users of your database
- Determine what access each user would need
- Create views to help your users access the information they need and restrict access to sensitive information

  Implement and enforce security requirements (F7)

  Maintain and improve security in response to industry developments and user experience (F8)

  Note: *Users and views are one way to limit access to data. Some users may only be given read privileges while others can have insert, update, and delete. Users may be given access to only certain tables. Views are a way to create a temporary table that can join other tables together or can omit certain fields from a user's view. For example, the personnel director may be able to view all employee information, but a clerk may be given a view that excludes salary information.*

Requirements:

- Identify the types of users that would be using your database by job type. For example, you might have a sales clerk entering sales information and an hr rep entering personnel information. You should have at least 3 different categories of users for your system.
- For each user category determine which tables they would need access to and the type of access they would need (select, update, insert, delete, grant)
- Identify at least one view for each user category that would help them easily retrieve the data that they need access to.
- Create the views and save the commands in a text file.
- Describe to me the role of each user, the access needed, the views created and why. This may be in a text file or typed into the comments for the assignment.
- Click on the View/Complete link at the bottom of this assignment. Attach the script file to the assignment and Submit. I will use this file to create your database on the server.

Project Part E: Queries

Objective:

- Identify queries that will be needed by your users
- Create select, insert, update and delete queries for your tables
  Define and implement user interface (H6)

Requirements:

- For each category of users that you identified in Part D, identify and write 5 queries that they would need to use on a regular basis. You should have 15 queries, including the following:
  -
    - At least 2 queries that join tables
    - At least 1 insert query, 1 update query and 1 delete query
    - At least 1 queries that uses a view
    - At least 1 query that includes a calculation or an aggregate function.
- Save your queries in a text file.
- Click on the View/Complete link at the bottom of this assignment. Attach the text file to the assignment and Submit.