

## TESD 1500 - Database Development (4 Credits)

### Course Description

Database Development provides students a fundamental introduction to database concepts and query languages used in database management systems. Students will design and implement simple databases, and utilize queries to retrieve, store, and update data in these databases.

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### Course Objectives

- Recognize core database concepts.
  - Describe database objects: data types, views and stored procedures.
  - Utilize basic SQL to interact with databases.
  - Explain data storage concepts: normalization; primary, foreign, and composite keys; and indexes.
  - Use basic information assurance and database security concepts.
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### Course Outline

- Introduction to PHP
  - Data and Arrays
  - Strings and Functions
  - PHP Objects and Exceptions
  - Designing a Database
  - Creating a Database
  - Working with MYSQL
  - MYSQL and PHP
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### Textbook & Reading Materials

PHP and MySQL Web Development, 5th Edition (Lifetime access), Luke Welling & Laura Thomson, ISBN: 9780133038637

## Assignments and Assessments

Course Introduction and Standards  
Meet Your Instruction Team  
Rules of the Lab  
CS Code of Conduct Policy  
Remind App  
Submitting Assignments in Canvas  
Taking a Screenshot  
Writing Standards  
Orientation  
Syllabus Agreement  
UsingMAMP  
Chapter 1 Reading and Example  
Starting your own Website  
Checkpoint Meeting Module 1  
Student Acknowledgement Statement Module 1  
Chapter 2 Reading and Example  
Working on your own Website  
Chapter 3 Reading and Example  
Checkpoint Meeting Module 2  
Student Acknowledgement Statement Module 2  
Chapter 4 Reading and Example  
Adding a Customer Feedback page  
Chapter 5 Reading and Example  
Using functions on your own Website  
Checkpoint Meeting Module 3  
Student Acknowledgement Statement Module 3  
Chapter 6 Reading and Example  
Using a class and objects for pages  
Chapter 7 Reading and Example  
Exception Handling on your own Website  
Checkpoint Meeting Module 4  
Student Acknowledgement Statement Module 4  
Chapter 8 Reading  
Planning out your database  
Checkpoint Meeting Module 5  
Student Acknowledgement Statement Module 5  
Using phpMyAdmin  
Chapter 9 Reading and Example  
Creating your own database  
Checkpoint Meeting Module 6  
Student Acknowledgement Statement Module 6  
Chapter 10 Reading and Example  
Editing your own database  
Checkpoint Meeting Module 7  
Student Acknowledgement Statement Module 7  
Chapter 11 Reading and Example  
Incorporating MYSQL with PHP  
End of Course Survey  
Course Completion Checkpoint Meeting  
End of Course Student Acknowledgement Statement

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*Subject to change. Please consult your Canvas course for the most current instructions and updates.*

## Classroom Hours

Mo, Tu, W, Th  
8:00 AM - 11:00 AM  
12:00 PM - 3:00 PM  
4:00 PM - 7:00 PM

Friday  
8:00 AM - 11:00 AM  
12:00 PM - 3:00 PM

For a full list of course hours visit: [Course Schedule](#)

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## Instructor Contact Information

Jason Adams — jadams@stech.edu  
Dallin Savage — dsavage@stech.edu  
Elie Wamana — ewamana@stech.edu

Office Hours: By appointment

Email is the preferred method of communication; you will receive a response within 24 hours during regular business hours.

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## Canvas Information

Canvas is the where course content, grades, and communication will reside for this course.

- [stech.instructure.com](http://stech.instructure.com)
- For Canvas passwords or any other computer-related technical support contact Student Services.
- For regular Hours and Weekdays call (435) 586 - 2899.
- For after Hours & Weekends call (435) 865 - 3929 (Leave a message if no response).

## Course Policies

**Course Grading:** All assignments in this course require 100% score with unlimited submissions. All quizzes require a minimum score of 80%.

**High School Power School Grades:** Quarter student grades will be determined by student progress percentage. Faculty will use the higher percentage of either 1) quarter progress, or 2) cumulative progress for the current training plan year.

**Grade Scale:** The following grading scale will be used to determine a letter grade.

• A : 94 - 100%	• B : 83 - 86%	• C : 73 - 76%	• D : 63 - 66%
• A- : 90 - 93%	• B- : 80 - 82%	• C- : 70 - 72%	• D- : 60 - 62%
• B+ : 87 - 89%	• C+ : 77 - 79%	• D+ : 67 - 69%	• F : 0 - 59%

**Course Policies:** You are required to keep your progress and attendance at 67% minimum. You must complete this program within 150% estimated program length. You are permitted one 15 minute break every 90 minutes. If you take more than one break in a 90 minute period or your break lasts longer than 15 minutes, your attendance will be penalized. 10 consecutive absences will lead to being withdrawn from the program. Please notify your instructors about absences as soon as possible. If absence is due to illness, please email your instructors prior to end of day.

**Cell Phone/Electronics:** Cell phones cannot be used during class time. You may bring your personal computers to class. You must be on topic in the lab while clocked-in.

**Industry Environment:** Computer science typically is very sedentary. This means you may sit at a desk for long hours. Be sure to move and get what exercise you can.

**Iron County High School Students:** Your progress grade will be submitted every Friday to PowerSchool. You must maintain a progress percentage of 67% or over per quarter to stay in the course.

## Additional Information

InformaCast Statement: Southwest Tech uses InformaCast to ensure the safety and well-being of our students. In times of emergency, such as weather closures and delays, this app allows us to promptly deliver notifications directly to your mobile devices. To stay informed and receive real-time updates, we encourage all students to sign up for notifications. Your safety is our priority, and staying connected ensures a swift response to any unforeseen circumstances. More information and directions for signing up are available at: <https://stech.edu/emergency-notifications/>

Internet Acceptable Use Policy: The student is expected to review and follow the Southwest Technical College Internet Safety Policy at: <https://stech.edu/students/policies/>

Student Code of Conduct Policy: The student is expected to review and follow the Southwest Technical College Student Code of Conduct Policy at: <https://stech.edu/students/policies/>

Accommodations: Students with medical, psychological, learning, or other disabilities desiring accommodations or services under ADA, must contact the Student Services Office. Student Services determines eligibility for and authorizes the provision of these accommodations and services. Students must voluntarily disclose that they have a disability, request an accommodation, and provide documentation of their disability. Students with disabilities may apply for accommodations, based on an eligible disability, through the Student Services office located at 757 W. 800 S., Cedar City, UT 84720, and by phone at (435) 586-2899. No diagnostic services are currently available through Southwest Technical College.

Safety and Building Maintenance: The College has developed and follows a variety of plans to ensure the safe and effective operation of its facilities and programs. The following plans are available online:

1) Facilities Operations and Maintenance Plan; 2) Technical Infrastructure Plan; and 3) Health and Safety Plan.

Withdrawals and Refunds: Please refer to the Southwest Technical College Refund Policy at: <https://stech.edu/students/policies/>

Any high school or adult student, who declares a technical training objective is eligible for admission at Southwest Technical College (Southwest Tech). Program-specific admissions requirements may exist and will be listed on the Southwest Tech website. A high school diploma or equivalent is not required for admission but is mandatory for students seeking Title IV Federal Financial Aid.

Non-Discriminatory Policy: Southwest Technical College affirms its commitment to promote the goals of fairness and equity in all aspects of the educational enterprise, and bases its policies on the idea of global human dignity.

Southwest Tech is committed to a policy of nondiscrimination. No otherwise qualified person may be excluded from participation in or be subjected to discrimination in any course, program or activity because of race, age, color, religion, sex, pregnancy, national origin or disability. Southwest Technical College does not discriminate on the basis of sex in the education programs or activities that it operates, as required by Title IX and 34 CFR part 106. The requirement not to discriminate in education programs or activities extends to admission and employment. Inquiries about Title IX and its regulations to STECH may be referred to the Title IX Coordinator, to the Department of Education, and/or to the Office for Civil rights.

If you believe you have experienced discrimination or harassment on our campus, please contact the Title IX Coordinator, Cory Estes: [cestes@stech.edu](mailto:cestes@stech.edu), (435) 865-3938.

For special accommodations, please contact the ADA Coordinator, Cyndie Tracy: [ctracy@stech.edu](mailto:ctracy@stech.edu), (435) 865-3944.

Southwest Technical College

757 West 800 South

Cedar City, UT 84720

[info@stech.edu](mailto:info@stech.edu)

(435) 586-2899