

INSTRUCTIONAL PACKAGE

CPT 242

DATABASE

Effective Term FALL 2018

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Part I: Course Information

Effective Term: FALL 2018

COURSE PREFIX: CPT 242 COURSE TITLE: Database

CONTACT HOURS: 5 CREDIT HOURS: 3

RATIONALE FOR THE COURSE:

This course prepares students for entry level positions in planning, designing, creating, updating, maintaining and managing databases.

COURSE DESCRIPTION:

This course introduces database models and the fundamentals of database design. Topics include database structure, database processing, and application programs which access a database.

PREREQUISITES/CO-REQUISITES:

CPT 187 – Object Oriented Logic & Design DLi Orientation

REQUIRED MATERIALS:

Please visit the Bookstore online site for most current textbook information. Use the direct link below to find textbooks.

BOOKSTORE.

Enter the semester, course prefix, number and section when prompted and you will be linked to the correct textbook.

ADDITIONAL REQUIREMENTS:

This class will require considerable time and effort outside of the regular class hours in order to successfully complete the project, labs, and exams.

USB Jump Drive

All assignments are due by the due date and time, no exceptions. Student must schedule time on campus in a computer lab to complete assignments until the student home computer is working properly.

TECHNICAL REQUIREMENTS:

Access to Desire2Learn (D2L), HGTC's student portal for course materials. WaveNet and D2L email access.

Web browser, Comodo Ice Dragon, Mozilla Firefox or Google Chrome are preferred

CLASSROOM ETIQUETTE:

As a matter of courtesy to other students and your professor, please turn off cell phones and other communication/entertainment devices before class begins. If you are monitoring for an emergency, please notify your professor prior to class and switch cell phone ringers to vibrate.

NETIQUETTE: is the term commonly used to refer to conventions adopted by Internet users on the web, mailing lists, public forums, and in live chat focused on online communications etiquette. For more information regarding Netiquette expectations for distance learning courses, please visit Online Netiquette.

Part II: Student Learning Outcomes

COURSE LEARNING OUTCOMES and ASSESSMENTS*:

- The student will explain the history, and characteristics of relational databases.
- The student will identify relevant entities and attributes for a database, Prepare interview questions and questionnaires. Analyze workflow for processes and exceptions.
- The student will identify the issues with the current database, define and list requirements, define business rules, identify entities and attributes, and identify candidate keys for entities.
- The student will use the database modeling template in Microsoft Visio, create entities and add attributes, determine the appropriate relationship between entities, resolve many- to- many relationships with a linking table.
- The student will evaluate an entity against the first three normal forms. Remove all repeating lists or arrays (first normal form), remove functional dependencies (second normal form), remove all transitive dependencies (third normal form), and explain the importance of design review.
- The student will compare database management systems and determine which best suits current needs, implement a physical design of the database based on the logical ERDS, choose appropriate data types for columns, and enter sample data into tables.
- The student will run SELECT queries with a variety of criteria, use the Aggregate functions COUNT, AVG, SUM, MIN, and MAX, date, time, and other built- in functions, join two or more tables in a query INSERT, UPDATE, and DELETE records, and use SQL to test business rules.
- The student will analyze security needs and restrictions for users of the database, analyze threats to database integrity, explain the concepts of authentication and authorization, create logins and users, and create roles upon complete of this unit.

*Students – please refer to the Instructor's Course Information sheet for specific information on assessments and due dates.

Part III: Grading and Assessment

EVALUATION OF REQUIRED COURSE MEASURES/ARTIFACTS*

Students' performance will be assessed and the weight associated with the various measures/artifacts are listed below.

EVALUATION*

Quizzes	15%
Practice Assignments	20%
Projects	20%
Exams	
Total Points 100%	

NOTE: The final exam cannot be exempted. If you do not take the final exam, you will receive a zero (0). You must also take the final at the pre-set time for your course as outlined by the HGTC Administration. There are no make-up exams for the final.

*Students, for the specific number and type of evaluations, please refer to the Instructor's Course Information Sheet.

GRADING SYSTEM:

Grades earned in courses impact academic progression and financial aid status. Before withdrawing from a course, be sure to talk with your instructor and financial aid counselor about the implications of that course of action. Ds, Fs, Ws, WFs and Is also negatively impact academic progression and financial aid status.

The Add/Drop Period is the first 5 days of the semester for **full term** classes. Add/Drop periods are shorter for accelerated format courses. Please refer to the academic calendar for deadlines for add/drop (<u>ACADEMIC CALENDAR</u>). You must attend at least one meeting of all of your classes during that period. If you do not, you will be dropped from the course(s) and your Financial Aid will be reduced accordingly.

Part IV: Attendance

Horry-Georgetown Technical College maintains a general attendance policy requiring students to be present for a minimum of eighty percent (80%) of his or her classes in order to be eligible to receive credit for any course. However, due to the varied nature of courses taught at the College, a more rigid attendance policy may be required by individual instructors. At a minimum, a student may be withdrawn from a course(s) after he or she has been absent in excess of ten percent (10%) of the total contact hours for a course. Instructors define absentee limits for their class at the beginning of each term; please refer to the Instructor Course Information Sheet.

For online and hybrid courses, check your Instructor's Course Information Sheet for any required on-site meeting times. Please note, instructors may require tests to be taken at approved testing sites, if you use a testing center other than those provided by HGTC, the center may charge a fee for its services.

Part V: Student Resources



The Student Success and Tutoring Center (SSTC)

The SSTC offers to all students the following **free** resources:

- 1. Academic coaches for most subject areas, Writing Center Support, and college success skills
- 2. On-line student success and academic support resources.

Visit the SSTC website: <u>Student Success & Tutoring Center</u> and visit the student services tab in your WaveNet account to schedule appointments using TutorTrac. For more information, call: SSTC Conway, 349-7872; SSTC Grand Strand, 477-2113; and SSTC Georgetown, 520-1455. Room locations and Live Chat is available on the SSTC website.



Student Information Center: WaveNet Central (WNC)

WNC offers to all students the following **free** resources:

- 1. **Getting around HGTC**: General information and guidance for enrollment!
- 2. Use the Online Resource Center (ORC) for COMPASS support, technology education, and online tools.
- 3. **Drop-in technology support or scheduled training** in the Center or in class.
- 4. **In-person workshops, online tutorials and more services** are available.

Visit the WNC website: <u>Wavenet Central</u>. Live Chat and Center locations are posted on the website. Or please call one of the following locations: WNC Conway, 349-5182; WNC Grand Strand, 477-2076; and WNC Georgetown, 520-1473.

Disability Services:

HGTC is committed to providing an accessible environment for students with disabilities. Inquiries may be directed to Jocelyn Williams, Director of Student Development on the Conway Campus Jaime Davis, Counselor/Advisor on the Georgetown Campus or Kristin Griffin, Counselor on the Grand Strand Campus. These individuals will review documentation of the student's disability and, in a confidential setting with the student, develop an educational accommodation plan.

Note: It is the student's responsibility to self-identify as needing accommodations and to provide acceptable documentation. After a student has self-identified and submitted documentation of a disability, accommodations may be determined, accepted, and provided.

Statement of Equal Opportunity/Non-Discrimination Statement

Horry Georgetown Technical College prohibits discrimination and harassment, including sexual harassment and abuse, on the basis of race, color, gender, national or ethnic origin, age, religion, disability, marital status, veteran status, sexual orientation, gender identity, or pregnancy in educational programs and/or activities.

Title IX Requirements

Horry Georgetown Technical College prohibits the offenses of domestic violence, dating violence, sexual assault, and stalking. Any student who believe he or she has experienced or witnessed discrimination including sexual harassment, domestic violence, dating violence, sexual assault or stalking is encouraged to report such incidents to one of the College's Title IX Coordinators.

*Faculty and Staff are required to report incidents to the Title IX Coordinators when involving students. The only HGTC employees exempt from mandatory reporting are licensed mental health professionals (only as part of their job description such as counseling services).

Inquiries regarding the non-discrimination policies:		
Student and prospective student inquiries	Employee and applicant inquiries concerning	
concerning Section 504, Title II, and Title IX and	Section 504, Title II, and Title IX and their	
their application to the College or any student	application to the College may be directed to the	
decision may be directed to the Associate Vice	Associate Vice President for Human Resources.	
President for Student Affairs.		
Dr. Melissa Batten, AVP Student Affairs	Jacquelyne Snyder, AVP Human Resources	
Title IX Coordinator	Section 504, Title II, and Title IX Coordinator	
Building 1100, Room 107A, Conway Campus	Building 200, Room 212A, Conway Campus	
PO Box 261966, Conway, SC 29528-6066	PO Box 261966, Conway, SC 29528-6066	
843-349-5228	843-349-5212	
Melissa.Batten@hgtc.edu_	Jacquelyne.Snyder@hgtc.edu	