

**IT-603-OL Summer-II 2018
Information Management**

Dates: 7/2/18 – 8/10/18 **Time:** Online **Location:** <https://blackboard.valpo.edu>

Instructor: Gina Rue **Office Hours:** By Appointment
Via confirmed email request **Contact:** gina.rue@valpo.edu

Description

This course examines data structures, file organizations, concepts and principles of database management systems (DBMS), as well as data analysis, database design, data modeling, database management and database implementation. More specifically, it introduces hierarchical, network and relational data models; entity relationship modeling, the Structured Query Language (SQL), data normalization, and database design. Using MS Access & MySQL as implementation vehicles, this course provides hands-on experience in database design and implementation through assignments and exercises. Advanced database concepts such as transaction management, distributed databases, multi-tier client/server architectures and web-based database applications are also introduced.

Course Learning Objectives

Students learn about database design and programming, with a major focus on the relational model and SQL (Structured Query Language). With that in mind, the outcomes of this course are to:

1. Describe fundamental data and database concepts
2. Compare and contrast the relational database model with other database models
3. Explain and use the database development lifecycle
4. Design databases using data modeling and data normalization techniques
5. Create databases using popular database management system products
6. Solve problems by constructing database queries using the Structured Query Language
7. Develop insights into future data management tool and technique trends
8. Recommend and justify strategies for managing data security, privacy, audit/control, fraud detection, backup and recovery
9. Critique the effectiveness of Database Management Systems in computer information systems

Student Learning Objectives—Graduate School

1. Students will understand and practice methods of inquiry and strategies of interpretation within the student's field of study.
2. Students will master the knowledge and skills pertinent to the student's field of study.
3. Students will effectively articulate the ideas, concepts, and methods through written and oral presentation.
4. Students will understand the connection between their knowledge and skills on the one hand and their professional identity, responsibilities, and demands on the other.
5. Students will integrate knowledge and methods of their study with cognates and other disciplines.
6. Students will study, reflect upon, and practice ethical behavior and cultural sensitivity as they relate to professional and personal responsibility.

Student Learning Objectives—Information Technology Program

1. To understand and practice methods of inquiry and strategies of interpretation within the student's field of study.
 - 1A. Students will master several programming environments.
 - 1B. Students will learn to identify and isolate problems.
2. To master the knowledge and skills pertinent to the student's field of study.
 - 2A. Students will acquire an extensive technology related vocabulary.
 - 2B. Students will become comfortable using a wide range of technology environments.
3. To effectively articulate the ideas, concepts, and methods through written and oral presentation.
 - 3A. Students will be taught how to make formal, oral presentations and be required to give 6 such presentations during their program.
 - 3B. Students will write numerous, thorough papers requiring extensive research. They will be required to use the services on the writing center.
4. To understand the connection between their knowledge and skills on one hand and their professional identity, responsibilities, and demands on the other.
 - 4A. Students will understand the implications of legal and professional regulations as they relate to information technology.
 - 4B. Students will study how technology can be made available to people that are traditionally less advantaged.
5. To integrate knowledge and methods of their study with cognates and other disciplines.
 - 5A. Students will learn techniques of modeling data from other disciplines.
 - 5B. Students will study human factors in IT.
6. To practice ethical and cultural sensitivity as it relates to professional and personal responsibility.
 - 6A. Students will examine a wide range of ethical issues related to technology and the potential effects on people and the environment.
 - 6B. Students will explore the relationship between IT and ethnic and cultural diversity.

Required Textbook & Materials

Cengage. Pratt, Phil (2015). *Concepts of Database Management*. 8th edition. ISBN 978-1-285-42710-2.

Laptop or personal computer (Windows, Mac, or Linux). You must have administrator permissions.

Reliable Internet access.

Microsoft Access 2013 or 2016.

MySQL Community Server 5.7 or 6.3 (at <http://dev.mysql.com/downloads/mysql/>). Install the Developer option include Workbench when prompted. Help is at <http://www.mysqltutorial.org/>.

Microsoft Imagine – Downloadable Free Software

All new students and faculty are granted access into the Microsoft Imagine (formerly known as Dreamspark) subscription for the CIS department at the university. You can use this subscription to access many free software titles from Microsoft. This subscription does not entitle you to free access to Microsoft office, but IT does provide that here (Office.com/Teachers). You will need to use your Valpo account to access this resource.

Microsoft Imagine also allows you to download Microsoft desktop and server operating system licenses (such as Windows 10, Windows 8, Windows Server 2012), and other Microsoft titles (such as Microsoft Visio, Microsoft Access, Microsoft Project, Visual Studio etc.). Our webstore address is here (<http://e5.onthehub.com/d.ashx?s=k5pczeklp1>). Faculty and students will receive perpetual licenses to most of the titles available in the library as well.



COURSE POLICIES & PROCEDURES

Course Format / Instructional Method



This is an online class will be delivered in a distance learning environment via the Blackboard learning management system. Each week's assignments and readings are summarized on the Course Calendar, accessed from the Blackboard blackboard.valpo.edu . Session folders will be available each week in the Content Area of the Blackboard where you submit the course work as assigned. It takes a great deal of discipline, self-motivation, and effective time management skills to successfully complete this course. Many students find it helpful to set aside specific times each week to work on course assignments. See the Blackboard student guide and other resources at <http://www.valpo.edu/vital/insttech/blackboard/student/documentation.php>

Technology Needs & Resources

It is expected that all students who enroll in this course have reliable Internet access. It is recommended that students log into their course and also check email at least every 48 hours. VU email is the PRIMARY method that the instructor will utilize to contact students. Our Blackboard Learn system is used primarily to supplement the classes that meet on campus with materials and activities available on the web.

Visit VITAL (Valparaiso Institute for Teaching & Learning) for more information related to technology requirements for Blackboard courses.

<http://www.valpo.edu/instructionaldesign/blackboard/student/index.php>

For additional help with Blackboard Learn students can visit the IT Help Desk: <http://www.valpo.edu/it/help/>

COURSE COMMUNICATION

Instructor Commitment

Valparaiso University instructors are committed to responding to students' written inquiries, sent via the email, within 36 hours, including weekends. If a student sends communication, but does not receive a response, they should double-check that they used the correct communication method. If problems or special issues occur, students should notify their instructor as soon as possible so they can be resolved quickly. Students can also contact the university's IT Helpdesk for support <http://www.valpo.edu/instructionaldesign/blackboard/student/>

Email

All students must use the university email service and or Blackboard for all course-related communications. Students can send email from within the course in Blackboard, but will not receive responses inside the course. All emails are received in the Valparaiso University gmail@valpo.edu system.

Online Communication Etiquette

Students are expected to uphold their responsibilities in terms of appropriate and professional communication with faculty and peers. Please review the 'Students Rights and Responsibilities' section of the student handbook at http://www.valpo.edu/generalcounsel/assets/docs/graduate_safp.pdf

ASSIGNMENTS & GRADING

Grades

All grades will be maintained in Blackboard's online grade book – My Grades area. Students are responsible for tracking their progress by referring to the online grade book. Students can generally expect to receive grades and feedback within seven days of the assignment due date. If exceptions occur, the instructor may notify students of changes to this expectation.

Due Dates & Deadlines

The Syllabus and Course Calendar are two important tools to help students understand the course, student and instructor expectations, and deadlines. Both documents can be found in the course Blackboard.

Students are required to submit work on time to receive credit. Deadlines for each week/assignment are summarized on the course calendar. Students should check the calendar frequently for deadlines and to be aware of what to expect and plan their schedules accordingly. Deadlines are listed in United States Central Time and are subject to change.

Students are responsible for timely assignment submission. Should a computer system or network go down, students must still submit course work by the due dates and times indicated. Don't wait until the last minute. Plan ahead by seeking alternative means for submitting work before it is due. The campus Local library can serve as alternative resource. Not having access to the required software on a home or work computer is **not** a legitimate excuse for submitting homework late.

Make-Up Policy

Late assignments will be assigned a grade of "0" unless a student has received prior approval from the professor. If a student has a problem or scheduling conflict that prevents the student from submitting an assignment on time, the student should contact the professor immediately. The professor will determine if the seriousness of the problem warrants an extension on the assignment. Unless absolutely unavoidable, students need to contact their instructor **before** missing the deadline – not after. Instructors have the right to decline accepting work for any credit after a deadline passes with a few specific exceptions, including but not limited to:

- If there is an outage of the Blackboard system that is verified by the instructor and or university administrators, instructors will provide an extension for students to submit work at no penalty.
- If the student has documentation of serious illness or death of a family member, instructors will work with the student to determine an alternate deadline.

Course Workload

This 3-credit course requires significant amount of work. The Summer-II semester is a 6-week term. You will be completing the following:

Quizzes (20 points each): Each week students will complete a blackboard quiz from the covering the reading

materials. Chapter quizzes will consist of 10 or more multiple choice & true/false questions worth 2pts each. They will be timed for 60 minutes and must be completed in one setting. Students should have read the chapter materials before taking the assessment.

Exercises (15 points each): Each week will include exercise assignments so that students can apply their knowledge gained from the reading materials and chapter examples.

Cases (30 points each): Case assignments will be given so that students can apply their knowledge gained from the reading materials and chapter examples. They may include writing and research that will require word count minimums (150) and proper citation using APA style. Grammar, spelling, and word usage will also be assessed.

Group Cases (30 points each): Teams will be formed and additional cases will be assigned so that students can work together as a group to apply their knowledge gained from the reading materials and chapter examples.

Group Work Journal (20 points each): Students will document their group work and provide evidence of their participation. The journal feature in Blackboard will be used as a self-evaluation tool to assess individual student participation contributions to the group case assignments. Journals entries will be requested around midterm and before the semester ends.

Tutorials/Labs (25 points each): Several sessions will include software installation, tutorial or lab assignments where students will gain hands-on-skill-training and have opportunities to earn professional development certificates.

Discussion Boards (25 points each): There will be nine graded discussion board assignments in the course. Each discussion board requires an original posting and two replies to your classmates. All postings should be substantive and contribute to the topic being discussed. Minimum word count is required: 150 for original response to the topic question; 75 word for each response to 2 other student threads. Grammar, spelling and word usage will also be assessed.

Group Final Project (120 points): Teams will work together to apply what they have learned in the form of a final project. The project will require advanced research and provide an opportunity for students to be creative and to gain and demonstrate knowledge in database development and administration.

Final Exam (225 points): The end of term final exam will be a randomized 75-question multiple-choice and True/False exam in Blackboard covering the material throughout the course. Each question will be worth 3 pts. You will have 120 minutes to complete the exam. It will be scheduled during finals week.

Late Assignments: Assignments are considered late if they are not posted to Blackboard by the due day and time of the week in which the assignment or post is due (consult the schedule below) and will result in a zero score.

Performance Evaluation (Grading Policy)

I have retained the assignments from Polly Wainwright but have changed their point values and have added the new assignments & grading scale. Students will receive feedback on individual assignments in the form of grading rubrics. Performance will be evaluated as shown below:

Assignments	Frequency	Points Each	Total Points	Percentage
Polly Wainwright				
Personal Introduction	1	15	15	1%
Database Check	1	15	15	1%
Lab 1 Chapter 1 Questions	1	15	15	1%
Gina Rue				
Quizzes	10	20	200	13%
Exercises	10	15	150	9%
Cases	9	30	270	17%
Group Cases	5	30	150	9%
Discussion Boards	9	25	225	14%
Tutorials/Labs	7	25	175	11%
Group Final Project	1	120	120	8%
Group Evaluation Journal	2	20	40	3%
Final Exam	1	225	225	14%
TOTAL POINTS POSSIBLE			1600	100%

Grading Scale & Letter Conversion

90% - 100%	A
80% - 89%	B
70% - 79%	C
60% - 69%	D
Below 60%	F

UNIVERSITY POLICIES

Valparaiso University Honor Code

All work you submit for any course at Valparaiso University must be your own & not from someone else. You may NOT use anyone else's words (from books, blogs, webpages, magazine articles, etc.) without giving a clear source citation. If you are unsure, consult <http://www.plagiarism.org/> or the Writing Center.

In addition, you must type out your full name with the following statement on all course deliverables:

I have neither given or received, or have I tolerated others' use of unauthorized aid.

For more information about Valparaiso University's Academic Honor Code, case review cycles, and potential penalties, please refer to <http://www.valpo.edu/student/honorcouncil/index.php>

ADDITIONAL SUPPORT

Diversity and Inclusion

Valparaiso University aspires to maintain a welcoming environment built on participation, mutual respect, freedom, faith, competency, positive regard, and inclusion. This course will not tolerate language or behavior that demeans members of our learning community based on age, ethnicity, race, color, religion, sexual orientation, gender identity, biological sex, disabilities (visible and invisible), socio-economic status, or national origin. The success of this class relies on all students' contribution to an environment where everyone feels safe, welcome, and encouraged to engage, challenge, explore, and ultimately, "embark on a rewarding personal and professional journey" (President Heckler).

Disability Support Services

As part of its mission for its students, Valparaiso University has developed a nondiscrimination policy which identifies its intention to provide a safe and tolerant environment for all, including those with disabilities. Please contact Zebadiah Hall, Director of Disability Support Services, at 6496, if you believe you have a disability that might require a reasonable accommodation in order for you to perform as expected in this class. More information is on the Disability Support Services website at <http://www.valpo.edu/disabilityss/>

Academic Support

To get help in this course, the best place to start is to work with your instructor during office hours and ask your professor if there are any Help Sessions or department-level tutoring offered for this course. The next step is to use the [Academic Success Center \(ASC\) online directory](http://valpo.edu/academicsuccess) (valpo.edu/academicsuccess) or contact the ASC (academic.success@valpo.edu) to help point you in the right direction for academic support resources for this course. Valpo's learning centers offer a variety of programs and services that provide group and individual learning assistance for many subject areas. These learning centers include:

- [Graduate Tutoring Lab](#): Serves the academic needs of Graduate students – tutors offer suggestions on organization of papers, assist in research and citations, and help in understanding difficult assignments. Additional one on one tutoring is also available.
- [Writing Center](#): Primarily for undergraduate students, but also for Graduate students. Writing Consultants provide proofreading and editing assistance for papers and assignments.
- [Language Resource Center](#): Provides tutoring and other resources for language study as well as opportunities for authentic language use through conversation programs, enrichment activities and other exchanges.
- [Academic Success Center](#): Provides referral service to help connect students with appropriate resources on campus to support their academic achievement

Library Support Services

The librarian best able to help you navigate information resources for independent research or additional reading is listed on the library research guide for our department. Click the link to Library Guides within the Blackboard table of contents for this course for contact information and resources.

Title IX

Valparaiso University strives to provide an environment free of discrimination, harassment, and sexual misconduct (sexual harassment, sexual violence, dating violence, domestic violence, and stalking). If you have been the victim of sexual misconduct, we encourage you to report the incident. If you report the incident to a University faculty member or instructor, she or he **must notify** the University's Title IX Coordinator about the basic facts of the incident. Disclosures to University faculty or instructors of sexual misconduct incidents are **not confidential** under Title IX. **Confidential** support services available on campus include: Sexual Assault

Awareness & Facilitative Education Office “SAAFE” (219-464-6789), Counseling Center (219-464-5002), University Pastors (219-464-5093), and Student Health Center (219-464-5060). For more information, visit <http://www.valpo.edu/titleix/>.

Right of Revision

Your instructor and the university reserves the right to change any statements, policies or scheduling as necessary. Students will be informed promptly of any and all changes.

Schedule of Coursework:

Session folders will become available at the Blackboard on Monday of each week at 12:30am.

Course work is assigned each week on Monday and is due no later than the following Sunday by 11:59pm unless otherwise indicated.

No late work will be permitted, so plan your schedule accordingly.

This schedule is subject to change. Please check Blackboard frequently for any updates to this syllabus.

Assigned Date	Reading Materials/Practice	Assignments	Quiz/Tests/Labs	Due Date
Sessions 1-2:	<p>Welcome</p> <p>Course Orientation</p>  <ul style="list-style-type: none"> ✓ Syllabus& Quiz ✓ Discussion Board Introductions ✓ Textbook ✓ Student Data Files ✓ Software Videos ✓ Sign up for Lynda & Microsoft Imagine VU Student Accounts ✓ Download/Install Software-Labs ✓ Join a Student Group 	<p>Software Labs to install on personal computer devices-Laptop or Notebooks:</p> <p>MS Access 2013 or 2016, & MySQL 5.7 or 6.3 with Workbench</p>    <p>Lynda.com</p> <p>Blackboard: DB-Discussion Board – “Let’s Get To Know Each Other”</p>	<p>Syllabus-Quiz (20pts)</p> <p>MSAccess-Install-Lab (25pts)</p> <p>MySQL-Install-Lab (25pts)</p> <p>Lynda-Lab-MS-Access (25pts)</p>	

				
<p>Session 3:</p>	<p>Ch. 1 Introduction to Database Management</p> 	<p>P. 26-27</p> <p>CH1-EX: TAL Distributors Exercises (15pts)</p> <p>CH1-CASE: Colonial Adventure Tours Case (30pts)</p> <p>CH1-GROUP: Solmaris Condominium Group Case (30pts)</p> <p>Discussion Board#1 (25pts)</p>	<p>Quiz1 (20pts)</p>	
<p>Session 4:</p>	<p>Ch. 2 The Relational Model 1: Introduction, QBE, and the Relational Algebra</p> 	<p>P. 65-67</p> <p>CH2-EX-QBE: TAL Distributors Exercises-(QBE) Query By Example (15pts)</p> <p>CH2-EX-RA: TAL Distributors Exercises-(RA)Relational Algebra (15pts)</p> <p>CH2-CASE: Colonial Adventure Tours Case (30pts)</p> <p>CH2-GROUP: Solmaris Condominium Group Case (30pts)</p> <p>Discussion Board#2 (25pts)</p>	<p>Quiz2 (20pts)</p>	

<p>Sessions 5-6:</p>	<p>Ch.3 The Relational Model 2: SQL</p>  <p>W3-Schools-SQL</p>  <p>MySQL Workbench Tutorial</p> 	<p>P. 112-113</p> <p>CH3-EX: TAL Distributors Exercises (15pts)</p> <p>CH3-CASE: Colonial Adventure Tours Case (30pts)</p> <p>CH3-GROUP: Solmaris Condominium Group Case (30pts)</p> <p>Discussion Board#3 (25pts)</p> <p>W3-Schools-SQL Tutorial/Quiz (25pts)</p> <p>GROUP:Sakila-MySQL-Workbench-Lab (25pts)</p>	<p>Quiz3 (20pts)</p>	
<p>Sessions7-8:</p>	<p>Ch.4 The Relational Model 3: Advanced Topics</p>  <p>Lynda.com</p> 	<p>P. 14-145</p> <p>CH4-EX: TAL Distributors Exercises-Relational Algebra (15pts)</p> <p>CH4-CASE: Colonial Adventure Tours Case (30pts)</p> <p>CH4-GROUP: Solmaris Condominium Group Case (30pts)</p> <p>Discussion Board#4 (25pts)</p> <p>Lynda-Lab-MySQL (25pts)</p>	<p>Quiz4 (20pts)</p>	

Session 9:	<p>Ch.5 Database Design 1: Normalization</p> 	<p>P. 174-176</p> <p>CH5-EX: TAL Distributors Exercises (15pts)</p> <p>CH5-CASE: Colonial Adventure Tours Case (30pts)</p> <p>CH3-GROUP: Solmaris Condominium Group Case (30pts)</p> <p>Journal: Group Participation (20ts)</p> <p>Discussion Board#5 (25pts)</p>	<p>Quiz5 (20pts)</p>	
Session 10:	<p>Ch.6 Database Design 2: Design Methodology</p>  <ul style="list-style-type: none"> Assign Group Final Project (120pts) Due Prior to Finals Week 	<p>P. 220-221</p> <p>CH6-EX: TAL Distributors Exercises (15pts)</p> <p>CH6-CASE: Colonial Adventure Tours Case (30pts)</p> <p>Discussion Board#6 (25pts)</p> <p>Tutorial Project – Online Classes Workbench & Schema (25pts)</p>	<p>Quiz6 (20pts)</p>	
Session 11:	<p>Ch.7 DBMS Functions</p> 	<p>P. 249-250</p> <p>CH7-EX: TAL Distributors Exercises (15pts)</p> <p>CH7-CASE: Colonial Adventure Tours Case (30pts)</p>	<p>Quiz7 (20pts)</p>	

		Discussion Board#7 (25pts)		
Session 12:	Ch.8 Database Administration 	P. 271-272 CH8-EX: TAL Distributors Exercise (15pts) CH8-CASE: Colonial Adventure Tours Case (30pts) Discussion Board#8 (25pts)	Quiz8 (20pts)	
Session 13:	Ch.9 Database Management Approaches 	P. 311-312 CH9-EX: TAL Distributors Exercises (15pts) CH9-CASE: Colonial Adventure Tours Case (30pts) Discussion Board#9 (25pts)	Quiz9 (20pts)	
Sessions 14-15	Review Course Materials 	Study for Final Exam Journal: Group Participation (20pts) Complete & Submit Group Final Project (120pts)		
Session 16:	Finals Week: THURSDAY 5/10/18 - TUESDAY 5/15/18	 	Final Exam CH1-9 (225pts)	