



INFO-365 Database Administration I

Instructor

Instructor:

Dr. Hegler Tissot

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<http://hextrato.com/MyBio>

Office hours: TBD and by appointment - Office Hours available by appointment require you to send me your questions beforehand, and meetings might be open to other students.

(Email) Students are encouraged to contact me via email (hegler.tissot@drexel.com) with any questions or problems. **Please start your message's subject with "INFO-365-xxx" (001 or 900).**

Whenever communicating with CA/TA, keep instructor cc'd.

Course Description

INFO 365 is a continuation of Database Management Systems (INFO 210), and includes the following: advanced ERD techniques, database management system internals and advanced elements of the SQL language, as well as stored procedures and triggers, specifically as demonstrated in the Oracle implementation.

Rationale

INFO 365 provides an advanced perspective to database management systems and relational databases, specifically as demonstrated in the Oracle implementation. It is offered to students who want to understand the database management systems and be able to define, manipulate, and query relational databases using SQL. Upon successful completion of this course, a student will be able to:

- Recognize advanced ERD techniques.
- Use advanced elements of the SQL language when manipulating data.
- Apply advanced normalization techniques to support application requirements.
- Develop database routines (procedures, functions, and triggers).

Academic Policies

Attendance

All f2f students are expected to participate in class on a regular basis.

For online enrollment virtual office hours will be made available (TBD).



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Textbooks (*recommend only, none required – internet is full of materials regarding PL/SQL*)

Oracle® 11g: PL/SQL Programming. Joan Casteel. Cengage. 2nd edition (2013)

* or any other book that covers Oracle database programming with basic PL/SQL

Oracle 12c: SQL. Joan Casteel. Cengage. 3rd edition (2016)

* or any other book that covers Oracle SQL advanced topics

Advanced Database Technology and Design. Mario Piattini. Artech House (2000).

Grading Breakdown

A+	Professional level work of the highest caliber.
A	Outstanding achievement. Student performance demonstrates full command of the course materials and evinces a high level of originality and/or creativity that far surpasses project and course expectations.
A-	Excellent achievement. Student performance demonstrates thorough knowledge of the course materials and exceeds project and course expectations by completing all requirements in a superior manner.
B+	Very good work. Student performance demonstrates above-average comprehension of the course materials and exceeds project and course expectations on all tasks as defined in the course syllabus.
B	Student performance meets designated project and course expectations and demonstrates understanding of the course materials at an acceptable level.
B-	Marginal work. Student performance demonstrates incomplete understanding of course materials.
C+	Unsatisfactory work. Student performance demonstrates incomplete and inadequate understanding of course materials.
C	
C-	Unacceptable work at varying levels of unacceptability.
D+	
D	
D-	
F	Failing



Grade Distribution

Item	% Grade
Individual Assignments	50%
Group Project and PEF	50%
TOTAL	100%
* There will be extra credit embedded in some assignments	

Individual Assignments

Assignments will be graded by correctness + completeness. Hands-on tasks will be graded by participation only. **You MUST complete proposed tasks according to instructions provided in the template (Word document). Submission MUST be in Word format (not PDF), unless stated differently. NO late submissions allowed after the deadline.**

Group Project

The group project will be the highlight of the course. Students will work in groups of 4 or 5 to implement a small-sized database system in Oracle Database. Check the “Group Project Specification” in BBL for further details. **NO late submissions allowed after the deadline.**

Peer Evaluation Form (PEF) for Group Term Projects

In each project milestone (biweekly), a confidential Peer Evaluation Form (PEF) must be filled out and submitted. Every team member evaluates himself/herself and each fellow team member regarding participation in the project.

Extra Credit (optional)

Extra credit tasks will be added in some assignments, but students can also request a final extra credit task until Week 7 with the deadline in Week 10. The latter is an **individual assignment**, in which you must complete a small database project.



Weekly Plan

Week	Topics Covered
1	Course Introduction Database concepts – review
2	DB Modeling and SQL (DDL/DML) SQLLDR tool
3	Oracle PL/SQL Programing - Procedures & Functions Advanced SQL Topics
4	Oracle PL/SQL Programing - Triggers & Views Advanced SQL Topics
5	Oracle PL/SQL Programing - Packages Database Transaction Management
6	Database Security - Users & Grants Advanced SQL Topics
7	Database Tuning and Optimizations – Indexes & Explain Advanced SQL Topics
8	Backup / Recovery - Database Replication Advanced SQL Topics
9	Advanced Data Modeling Topics
10	Discussion about Term Project & Extra Credit Task

* Instructor reserves the right to make changes to this syllabus if circumstances warrant such change.



Additional Information

University Policies

Important University Deadlines for Add/Dropping Classes, Withdrawing from Classes, and More:

<https://drexel.edu/provost/calendars/academic-calendars/quarters-2020-2023/>

Academic Integrity, Plagiarism, Dishonesty and Cheating Policy:

http://www.drexel.edu/provost/policies/academic_dishonesty.asp

Disability Statement:

<http://drexel.edu/oed/disabilityResources/students/>

Course Add/Drop Policy:

<http://www.drexel.edu/provost/policies/course-add-drop>

Course Withdrawal Policy:

<http://drexel.edu/provost/policies/course-withdrawal>

Course Evaluation

Your feedback about the course and instructor is the only way instructors and academic units can improve the quality of a course and its content. Courses administered by the College of Computing and Informatics are evaluated electronically via AEFIS. Students will receive all necessary information via email by the 8th week of classes (or by the 4th week of classes in case of accelerated courses). The evaluations are entirely confidential and will preserve your anonymity. You can sign in via: <https://coe.drexel.goafis.net/>.

Disability Statement

Students requesting accommodations due to a disability at Drexel University need to request a current Accommodations Verification Letter (AVL) in the ClockWork database before accommodations can be made. These requests are received by Disability Resources (DR), who then issues the AVL to the appropriate contacts. For additional information, visit the DR website at <http://drexel.edu/oed/disabilityResources/overview/>, or contact DR for more information by phone at 215.895.1401, or by email at disability@drexel.edu.

Syllabus Changes

The instructor reserves the right to make changes to this syllabus if circumstances warrant such change. All changes will be provided to students in writing.

Appropriate Use of Course Content

It is important to recognize that some or all of the course materials provided to you may be the intellectual property of Drexel University, the course instructor, or others. Use of this



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intellectual property is governed by Drexel University policies, including the policy found here: <https://drexel.edu/it/about/policies/policies/01-Acceptable-Use/>

Briefly, this policy states that course materials, including recordings, provided by the course instructor may not be copied, reproduced, distributed or re-posted. Doing so may be considered a breach of this policy and will be investigated and addressed as possible academic dishonesty, among other potential violations. Improper use of such materials may also constitute a violation of the University's Code of Conduct found here: <https://drexel.edu/cpo/policies/cpo-1/> and will be investigated as such.

Academic Integrity, Plagiarism & Cheating

http://www.drexel.edu/provost/policies/academic_dishonesty.asp

This link will take you to the Academic Integrity policy prepared by the Office of the Provost. All Drexel syllabi must include a statement about Academic Integrity.

Plagiarism is the representation of another's words, ideas or work as your own. For this course, remember that all assignments and final exams are individual efforts and only the project is a joint effort venture. **Individual completion of assignments (except group assignments) and tests is mandatory.** Note that copying sentences directly from the textbook, lecture notes, classmates', and other's work is plagiarism and will not be accepted. Write with your own words. You can cite one or a few sentences with clear citation of sources. **Do not give/show a soft/hard copy of assignment/exam answers or send your assignment/exam answer files to your classmates via email.** Once caught, both parties will suffer. **You can discuss lecture materials and term projects, but you cannot discuss or share assignments and the exams content with your classmates.** You cannot co-develop a part or the whole solution of any assignments (except group assignments). Both parties will suffer for doing this. Ask me in advance if you have any questions on what is allowed and what is not allowed.

The standards for academic honesty are described in Student Handbook and on Drexel website. All students are responsible for reading and understanding these rules. All submissions should be original work, any exchange, reuse, or direct submission of other's work (documents, code etc.) as your own or as your team's is Plagiarism. For this course, students found guilty of plagiarism can expect one or more or all of: (a) incident being reported to the University Judicial Office, where a permanent record is maintained, and (b) fail the course.

For group project's, all the team members are equally responsible to observe this policy. If a team member does not faithfully collaborate, I recommend you talk to me about the nature of collaboration. Different members of a group may receive a different grade, if such an instance is noticed or suspected.

Code of conduct

http://www.drexel.edu/provost/policy_reminders_fall_2006.asp#conduct



Academic Honesty Policy

http://www.drexel.edu/provost/policies/academic_dishonesty.asp

Course Add Policy

http://www.drexel.edu/provost/policies/course_add.asp

This link will take you to the Course Add policy developed by the Office of the Provost. All Drexel syllabi are required to include a statement referring to this policy.

Course Drop Policy

http://www.drexel.edu/provost/policies/course_drop.asp

This link will take you to the Course Drop policy provided by the Office of the Provost. All Drexel syllabi are required to include a statement referring to this policy.

Course Withdrawal Policy

<http://drexel.edu/drexelcentral/courses/adjustments/course-withdraw/>

This link will take you to the Course Withdrawal Policy provided by the Office of the Provost. All Drexel syllabi are required to include a statement referring to this policy.

Student Conduct

http://drexel.edu/studentaffairs/community_standards/studentHandbook/

This link will take you to the Student Handbook provided by the Student Life Office at Drexel University. Student conduct and Community Standards policy information is available in this Handbook. It is recommended that all Drexel syllabi include a statement referring to these policies.

Class Cancellation Policy

http://www.drexel.edu/provost/policyweb/cancellation_instructor_absence.html

This link will take you to the Class Cancellation Policy provided by the Office of the Provost. It is recommended that all Drexel syllabi include a statement referring to this policy.

Support for Equality & Diversity

<http://www.drexel.edu/oed/>

This link will take you to the website for the Drexel University Office of Equality and Diversity. It is recommended that all Drexel syllabi include a statement on Support for Equality and Diversity.

Withdrawal of the Course

For dropping or withdrawing from the course, please refer to the university policies at:

http://www.drexel.edu/provost/policies/course_drop.asp

http://www.drexel.edu/provost/policies/course_withdrawal_policy.asp