# **CS151A Oracle SQL Databases**

### **Contact Info**

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Office Hours: TBD See the Insight page for details.

Main website http://fog.ccsf.edu/~rendres/

# **Course Description**

The goal of this course is to teach you how to work with an Oracle database using the Oracle SQL language. We will discuss the use of simple and advanced SQL statements. The course focuses on statements to retrieve data from database tables; we will also cover statements to create databases and tables and to manipulate the date in the tables. This class deals with some basic database design concepts (see also CS 159A); it does not cover Oracle programming in any detail (see CS 151P) nor administrative concerns (see CS 151B.).

Learning any computer system effectively requires many hours of work. A student needs to plan on time for reading the book and notes and working on the assignments and individual experimentation. As is common in many classes in this area, this class becomes progressively harder during the semester. Concepts introduced in the first few weeks may seem easy but they become the foundation for the rest of the semester. You need to put in the effort needed to build a firm foundation.

#### Software

This course uses Oracle 12c for the assignments and the tests. CCSF provides an Oracle 12c system that you can access to do your work for this class. This system is generally available 24/7 and this is usually the simplest way to do the work for this class. You need to have the software needed to access the CCSF Unix system and it will be helpful to have an FTP client for transferring files. You can also access the Oracle system in the ACRC on the Phelan/Ocean campus. Consult the ACRC web page for their hours of operation.

You may use either SQL\*Plus or Oracle's SQL Developer as the client to access the CCSF Oracle system. Most people use both clients. Creating and testing code is easier with SQL Developer. Creating spool files for assignments. requires SQL\*Plus. These clients will be discussed in class notes.

#### **Textbook**

Jason Price; Oracle Database 12c SQL; Osborne Press/McGraw-Hill; ISBN: 978-0-07-179935-5 (list price \$60.00, available for about \$35 online). This is a professional developer's book, not a regular textbook. I post extensive notes for this class and most students rely on the notes first and the book second. I do give reading assignments from the book.

### Web Page

There is a CCSF web site for this class at http://insight.ccsf.edu. This site is used for obtaining course materials, turning in assignments, and participating in the forums. To use this web page you have to login using your ccsf student id and you must be enrolled in this class; if you are adding the class, complete the add process ASAP.

# **NoShow Policy**

I will consider you a NoShow and remove you from the class if you do not turn in assignment 01 or 02 on time.

#### Grades

This course allows Pass/No Pass grading. Consult the official calendar for the deadline for making this choice. Your final grade is determined by points you earn in the following areas:

Assignments 500 (max)
Midterm Exam 200
Final Exam 300

The cutoff points for the final letter grade are no higher than:

A 920 B 820 C (Pass) 650 D 550

#### **Exams**

Midterm exam: This is an **in-person mandatory exam** scheduled on Saturday October 10, 2015 on the Phelan/Ocean campus in Science Hall room 5

Final exam: This is an **in-person mandatory exam** scheduled on Saturday Dec 12, 2015 on the Phelan/Ocean campus in Science Hall room 5

If you request an alternate date for either the midterm or final, you will need to provide evidence that you could not attend the scheduled exam. (For example- a copy of your airline e-ticket and itinerary if you are out of the area; a copy of a doctor's note if you are ill.) A statement that you have "other plans" is **not** sufficient.

The Midterm Exam and the Final Exam are open book and open notes. The use of computers or other electronic devices is not allowed during these exams; if you keep your notes on your laptop, you will need to print them out if you want to refer to them during the exam. The use of a reader for an eBook is not allowed.

The exams are based on techniques you should have used on the lab assignments, the textbook, the forum discussions, and posted class notes.

Because I have several online classes, when you come to the exam, it is your responsibility to know which class you are enrolled in and take the exam for your class.

### Assignments

See also the Assignment Rules document posted on the class web site.

There are weekly assignments over the semester. The assignment due dates are generally on Tuesday evenings at 11:00 pm but check the due date on each assignment.

Assignments will be submitted to the Insight site. I will return assignment grading reports to the Insight site. Lab assignments are to be done individually. Some assignments will build on earlier assignments- so it is important to do all of the assignments. Some assignments may require posting to an Insight forum.

I assume that you will read your work before you turn it in. Assignment files that have multiple error messages generally will receive a very low score.

You can generally expect that the assignment will be graded and your grade report posted within one week of the late due date. If some unusual circumstance means that grading will be delayed, I will inform you.

**Forums and Assignments:** Sometimes part of an assignment may need clarification and this may be provided via the forums posts. Clarifications posted by 48 hours before the due date are part of the assignment.

**Late Assignments:** Assignments are turned in via the Insight system. Note that the due time is 11:00 pm and Insight is set to accept assignments up 11:10 pm as being on time. There is a second date in Insight for each assignment called the cutoff date. The cutoff date is set to 24 hours after the due date. Insight will reject any attempt to submit an assignment after the cutoff time. Note that the time is based on the Insight time. Do not wait until the last minute to do or turn in assignments. The penalty for a late assignment is 10 points.

# **SLO- Student Learning Outcomes**

SLO is a list of objectives for a course. Upon successful completion of this class you should be able to:

- A. Describe the basic concepts of databases, tables, relationships, and normalization.
- B. Analyze a multi-table database and its components and relationships through the third normal form.
- C. Analyze business requirements and create queries that satisfy those requirements using all of the major SQL commands.
- D. Manipulate an Oracle database both interactively and with scripts using client software to create, retrieve, and modify database objects.
- E. Construct a database by creating tables, constraints, relationships, and views following a database design.
- F. Design queries that use all of the major components of the SQL language for accessing data, including inner and outer joins, aggregate queries and subqueries and a variety of the intrinsic functions supplied by Oracle.
- G. Create gueries that will manipulate- add, delete, and update- data in the database.
- H. Design and implement simple PL/SQL functions that use the programming extensions of SQL Server to perform business tasks.
- I. Describe the use of complex data in a database system.

#### **Forums**

In my online classes, the forums are used to provide instructor-student and student-student interaction. I use two types of forums. These forums are a required part of the class material- just as a discussion in a F2F (face to face) class is part of the course. An online class is more than reading notes and books and doing assignments.

1: **Weekly forums**: The weekly forums are the equivalent of questions asked in class- if you would listen to those questions and answers in a F2F class, then you should read the weekly posts.

These are forums for you to post questions regarding assignments and notes. You can post questions about the assignments; often another student has already figured out an answer to the question. I encourage students to help each other with these types of questions. It is not appropriate to post answers to assignments in the forums- but it is highly appropriate to post comments such as which of the Notes documents addresses the question or a reference to a page in the book that you found helpful. It is also inappropriate to post your code and ask other people in class to fix it.

Often people see the answer to their problem 15 minutes after posting a question; in that case a "never mind" post is appreciated.

Weekly forums are also the place where a student might ask for clarification of an assignment. When I respond to that type of question, the response is part of the assignment. (This does not mean that I will change an assignment at the last minute, but occasionally a question from a student shows that they did not understand part of the assignment and my response is a clarification.)

Therefore you need to read the weekly forums at least every other day. Not reading the weekly forums is equivalent to not showing up in class- that is not generally a good idea.

If another student has correctly responded to your post, then I will not always post another reply. If your post needs an answer from me, then I will reply within 48 hours during the work week; I usually reply to posts in the evenings.

2- Code review forums: I will post feedback after the assignments have been graded. I do not post "the answers" to the assignments. I may provide additional explanation, more details as how to solve the problem, perhaps sample code.

Code review is the equivalent of an instructor going over an assignment when it is returned to the class. Not reading code review is the equivalent of walking out of class when the instructor goes over an assignment after it is graded.

I have had a few (very few) students who could do all of the work in a class without ever attending class-but generally this is not the case. The weekly and code review forums are part of "attending class."

You should email me, as the instructor of the class, primarily for matters that are personal in nature. Emails for help with assignments will generally be answered more slowly than questions posted in the forums and I will often post the answer in the forum.

### Forum Threads and Posts:

Each post that is started in a forum has a subject line that should be relevant. A relevant subject line identifies the part of the assignment or notes where you have a question or problem and something about the problem ( "task 03 should this be sorted?"). A subject line such as: "task 03", "quick question", "Need help", does not provide any information. Please keep your posts relevant to the subject line; do not start off on a new topic in a thread. If you have three different questions about the assignment, you might need three different posts.

It is possible to search forums to see if a question on your topic has already been asked- and hopefully answered.

Civility and relevance to the course is expected in all posts. I reserve the right to edit forum posts (but I seldom do that) and I might move a post to a more appropriate forum.

### Work Week

Since this is an online class, the common idea of a Mon-Fri 9 am-5 pm work week does not apply. But it also is not reasonable to expect me to be available 24/7. I plan to use a work week of Saturday to Wednesday (excepting school holidays) and use Thursday and Fridays as my off days. I normally check into Insight in the late afternoon and/or evening hours. During the first two weeks of the semester I may check in more frequently to help you get started.

Of course you may log into Insight 24/7 and post questions and turn in assignments on any day including school holidays. Other students might reply to your posts at any time.

# **Download Page**

The documents for this class- notes, demos, scripts, assignment files - are posted on a download page currently stored on the CCSF fog server. You are strongly advised to download those documents as soon as they are posted. If you wait until the last minute to download the documents and the server is not available, there is nothing I can do to help you. I do not control or manage the CCSF servers.

#### **Email/Office Hours**

Use the email system within Insight whenever possible. I usually reply to email within 48 hours and I usually reply in the evenings.

If you are sending me email, your email should have a subject line that includes the class number. We all get a lot of email and the subject line helps prioritize our responses; email with no subject line or a subject such as a Help, Question does not generally get a response. Do not reuse a previous email message with an irrelevant subject line when sending me a question.

I have found that very few online students come to in-person office hours. I will have a mixture of in-person and online office hours this semester in order to provide more effective contact with more students. The details of this will be posted in Insight.

# Withdrawals and Drops

Consult the official time schedule for the last day to drop or withdraw from classes. You do not need a code from me to drop a course. I would appreciate hearing from you before you make the decision to drop a course. Sometimes we can work out a solution to help you stay in the course.

I will allow a grade of incomplete or a late withdrawal from class only under verifiable circumstances. I will not normally approve either of these if your class performance (tests and assignments) is below a C average (65%) at the time of the request. If you are requesting a Late Withdrawal, please contact me as well as the Dean of Students to explain your reason. Late withdrawals require the instructor's approval- it is not automatic.

I reserve the right to drop students who have missed two assignments. However, you should not rely on me to drop you from the class rolls. It is the student's responsibility to drop/withdraw from this class. If you simply stop participating in class, you might receive a failing grade for this class. Phone or email messages requesting that I drop you will NOT be honored.

On the other hand, you should not expect me to keep you on the rolls if you are doing no work in class and are enrolled in the class to maintain a certain number of units or maintain standing in a program.

Knowing the deadlines for dropping or withdrawing from a class is the student's responsibility. Instructors can also remove students who are not participating meaningfully in class. I will email students who are about to be dropped or withdrawn from class a few days before that deadline. I will use your official CCSF email address for this notification. You need to read your official CCSF email frequently during the semester.

### **Contingency Plans**

Students need to have a contingency plan for their means of connecting to Insight (and to hills for Oracle classes) and how they would handle a problem with their local computer.

The following discusses the contingency plans on our end.

If I am aware of connection problems to either Insight or hills/Oracle that are expected to last a length of time, then I will post a message on my main web page.

http://fog.ccsf.edu/~rendres/

Note that I might not be aware of such problems for several hours- perhaps a day or longer on my off days. I do not constantly monitor these sites.

#### **Insight problems:**

If at some point during the semester, you cannot connect to Insight, check that you can connect to other web sites. If the problem seems to be a general Insight problem, the CCSF staff will attempt to post a message to about the problem on the login page. I have found that most Insight problems are corrected with a few hours during the normal M-F 9-5 hours. Pay attention to any message about a scheduled Insight down time.

If you can connect to Insight but have troubles uploading your assignment file, then try a different browser. If that does not solve the problem then you can try emailing me the zip file via Insight Email. Be certain to indicate that this is an upload problem and email the file within 5 minutes of the cutoff time. You should also file a help Ticket with Insight (main page) to let the staff know that there is a problem.

You should not plan to turn in most assignments at the last possible minute; repeated problems with uploading files at the last minute will not be accepted as an excuse for a late assignment.

#### **Instructor Illness/Absence:**

If I will be unable to work with you at the usual times on Insight for a period of more than 3 days during the normal work week, then I will inform my department chair (Craig Persiko CS department) and we will work out a plan to handle this absence and you will receive a message via Insight News letting you know that I am absent and providing you with details about the absence will be handled.

### **Academic Accommodations**

Students who need academic accommodations should request them from the Disabled Students Programs and Services (DSPS) located in the Rosenberg Library, Room 323 on the Ocean Campus. Telephone: 415-452-5481 (V) 415-452-5451 (TDD). DSPS is the campus office responsible for verifying disability-related need for academic accommodations, assessing that need, and for planning accommodations in cooperation with students and instructors as needed and consistent with course requirements.

I am happy to work with you and with the DSPS staff as needed to provide appropriate accommodations. I do not have the expertise to evaluate your situation so I require that any student who requests an accommodation works with the DSPS office. If the accommodation affects your taking the midterm or final exam, please get the paper work completed early in the semester.. Please inform me of any accommodation you have so that we can work together to help you.

# **CCSF Computer Policy**

You can obtain a copy of the CCSF Computer Policy from the CCSF catalog, including the on-line version of the catalog. If you violate this policy, you risk having your computer account(s) suspended and your acre privileges revoked and possibly other disciplinary measures. This may result in your being unable to complete the assignments for this course. You may not use CCSF computer resources for any commercial business. The policy can be found at: http://www.ccsf.edu/Policy/policy.shtml

# Cheating

If a student is found to be cheating on any test or assignment, he shall receive a grade of zero for that work; that may be a grade of zero for the entire assignment or exam. It is acceptable to help other students with assignments by answering questions about how to do part of an assignment, but it is not acceptable to work together on all or many of the steps of the assignment.

The policy on cheating applies equally to students who give inappropriate assistance as well as to those who receive it. Do not "loan" your files to other students; do not send a copy of your solution to a student to "help" them - particularly if they ask you for a copy! If they submit that work as their own, you may also lose all points for that assignment.

If a situation arises where you are uncertain about the ethics involved, talk to me. A good rule for most people to follow is: if you feel uncomfortable posting your help or your request for help in the public forums then it is probably inappropriate.

### **Exceptions to Policies**

Exceptions to policies may be made on an individual basis under unusual verifiable circumstances. If you negotiate an exception, you must get the details of the exception from me in writing (email).

I reserve the right to change any of these policies as necessary during the semester and will inform you of any changes.

"The secret of getting ahead is getting started. The secret of getting started is breaking your complex overwhelming tasks into small manageable tasks, and then starting on the first one."

Mark Twain

So get started today.

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