Course Summary

The course provides an overview of the scientific, legal, environmental, and economic issues surrounding California’s water resources. The first half of the course provides the technical and scientific background required to understand water issues. The second half examines representative historical and present-day case studies regarding the use of surface and ground water in California.

The course is intended primarily for non-science majors. It meets the General Education upper division Theme I requirement. By special arrangement with the Liberal Studies program, it will also meet the Liberal Studies upper division Integrated Science requirement (usually met by Sci 325A or B) on a one-time basis. Lastly, it also fulfills the hydrological systems requirement for the Environmental Resource Management program.

The course will be offered entirely online (with a possible exception for the Final Exam) through Blackboard Learn 9 with a section for CSUB students and another for Antelope Valley students.

The regular “face-to-face” lecture class consists of five hours of lecture per week. In order to do well in the class, you should plan on at least this much time to study online class materials and read the respective sections in the textbooks, plus additional time for assignments and studying for the exam. Each week will have two content modules, equivalent to two 2.5-hour lectures.

It is important that you pace yourself throughout the class. Many students will find the first half a lot more difficult with fairly technical materials (in fact the first two modules are probably the most difficulty) and assignments that require downloading, plotting and interpretation data. On the upside, the reading from the textbooks are only minimal in the first part. The material in the second part should be easier but there is a lot more reading required. New materials will generally be posted by Monday morning each week. Check frequently for updates.

Goals and Objectives for Theme I classes

The goals and objectives of Theme I of CSUB’s general education program can be found at http://www.csub.edu/assessmentcenter/reports/GE/Theme_I/outcomes.shtml

Prerequisites

This course is open to students who have completed all lower-division physical-science general education requirements.

Required Textbooks

Marc Reisner - Cadillac Desert: The American West and Its Disappearing Water
Norris Hundley, Jr. – The Great Thirst: Californians and Water: A History


Optional Textbook The new April 2010 National Geographic Magazine special issue on “Water – Our Thirsty World” which has a more international perspective on water resources challenges but also an article specifically on the issues we face in California.

Enrolling in the class on the Blackboard Learn 9 Online Learning System

Instructions to self enroll in the class can be found here:
http://www.csub.edu/els/Blackboard%209/Student_Resources/Course_Access/item1236.pdf
The Enrollment Password is H2O (case sensitive and the last letter an upper case “O”, not zero).

Here is the link to the portal for Blackboard Learn 9:
http://www.csub.edu/els/Blackboard%209/item1187.html

More general information about Blackboard Learn 9 can be found here
http://www.csub.edu/els/Blackboard%209/Student_Resources/item1242.html

Exams

The Midterm Exam will be on Wednesday, May 5 sometime between 4:00 – 8:00 pm. This will be an online exam. You will have to arrange for access to the internet and Blackboard 9 for about 1 hour during that time slot. You can use on-campus or off-campus computers. I am reserving a 4-hour slot for the exam to make sure everybody has at least one hour free somewhere during this time to complete the exam.

The Final Exam will be on Tuesday June 8, also sometime between 4:00 – 8:00 pm. Based on how the online midterm exam goes, this will either be also online or at CSUB and at the AV campus. Make sure that you have internet access during that time and also arrange your schedule so that you can come to one of the campuses for the exam if I decide to hold it on campus. The midterm exam will cover the first 5 weeks of the class, the final the second half only.

Blackboard Learn 9 Discussion Boards and Online Etiquette

The class will have a discussion board for each week. The purpose of the boards is to foster communication between the students. You will be asked to briefly introduce yourself to your classmates. If you have a question, first post it to the board, maybe another student can answer it. The instructor will monitor the boards and answer questions within a day if it is not answered by other students already. This will cut down email traffic and the need to answer the same question repeatedly in this very large class. There will be some credit for participation in the bulletin boards, especially for helping out other students with questions. One type of assignment will be to submit a possible exam question based on each content module to the bulletin board. Some of these questions will be used for the actual exams. The questions will also give other students a chance to check whether they have mastered the material. This is a very large class with over 200 students and it will be important to be respectful of each other and mindful of everybody’s time. Please keep all your communications on the discussion boards courteous, short,
and to the point. Use the email tool in Blackboard Learn 9 to contact the instructor and other students. **DO NOT email the instructor directly to his regular email account.**

**Assignments**

Three will be three main types of assignments, (1) problems sets in the first half of the class (not more than three problem sets), (2) summaries of news reports throughout the class, and (3) submission of possible exam questions for each content module of the class. All assignments (unless specified otherwise) have to be submitted to [www.Turnitin.com](http://www.Turnitin.com). If you have not done so for other classes, you will need to create an account in Turnitin.com. Once you have an account you can access the class and submit completed assignments. **The class name in Turnitin.com is Sci 352B Water and the West Spring 2010, ID is 3192981, and the enrollment password is Water (case sensitive).**

The news report summaries will fulfill the writing requirement that is part of all upper division general education classes. Therefore, a separate term paper will not be required. Assignments are due at midnight on the date indicated on the assignment and on turnitin. This is a very large class and late assignments will not be accepted.

Possible exam questions will be submitted to special Blackboard 9 Discussion boards where other students can see them. The purpose of these assignments is to get you to think about what may be on the exams and to give other students a chance to practice for the exam. I will use a number of the student-submitted questions in the actual exams so there is a real incentive to proactive with them.

**Grading**

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midterm Exam</td>
<td>25%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>30%</td>
</tr>
<tr>
<td>Assignments</td>
<td>40%</td>
</tr>
<tr>
<td>Bulletin Board Participation</td>
<td>5%</td>
</tr>
</tbody>
</table>

The final grade will be assigned as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90-100%</td>
</tr>
<tr>
<td>B</td>
<td>80-89%</td>
</tr>
<tr>
<td>C</td>
<td>70-79%</td>
</tr>
<tr>
<td>D</td>
<td>60-69%</td>
</tr>
<tr>
<td>F</td>
<td>&lt; 60%</td>
</tr>
</tbody>
</table>

**Academic Honesty**

CSUB’s policy on Academic Honesty will be strictly enforced. Any cheating will be reported to the CSUB Judicial Affairs office and automatically result in an F for the whole course. For additional information see the CSUB policy on Academic Honesty in the CSUB Catalog. [http://www.csub.edu/catalog/2009-2011_regularlyUpdated/pages/013.pdf](http://www.csub.edu/catalog/2009-2011_regularlyUpdated/pages/013.pdf) and [http://www.csub.edu/catalog/2009-2011_regularlyUpdated/pages/011.pdf](http://www.csub.edu/catalog/2009-2011_regularlyUpdated/pages/011.pdf)
# Sci 3520 B Online, Spring 2010

## Tentative Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Readings*</th>
</tr>
</thead>
</table>
| 1    | Introduction; Unique properties of water; Units of measurement. First day of class, Monday March 29; Cesar Chavez Holiday Wednesday March 31. | *TGT:* Ch. 1  
*CD:* Intro, Ch.1, 3  
*IWC:* Intro, Ch 1 |
| 2    | California weather and precipitation patterns; Water use The Hydrologic Cycle and the Hydrologic Equation | *IWC:* Ch 2 |
| 3    | Surface Water Hydrology and Hydrographs Groundwater Part 1 | |
| 4    | Groundwater Part 2 Groundwater Part 3, water quality | |
| 5    | Pristine California water conditions; early Spanish, Mexican and American water use Overview of water law | *TGT:* Ch. 2,3,4,6  
*IWC:* Ch 2,3,4  
*CD:* Ch. 2 |
| 6    | Review for midterm exam  
**Online Midterm Exam:** Wednesday May 5, 1 hour between 4 and 8 pm | |
| 7    | Local Water Projects Mono Lake | *TGT:* Ch. 5,7  
*IWC:* Ch 3 |
| 8    | Central Valley and the big State and Federal water projects Agricultural drainage and salinity | *CD:* Ch. 6,10  
*IWC:* Ch 4,5 |
| 9    | Sacramento – San Joaquin Delta Water in Bakersfield and Kern County | *CD:* Ch. 4,8  
*IWC:* Ch 3 |
| 10   | **Memorial Day Holiday March 31**  
The Colorado River; The Salton Sea | *CD:* Ch. 12  
*IWC:* Ch 4 |
| 11   | **Last day of classes, Monday June 7**  
**Final Exam:** Tuesday June 8, 1 hour between 4 and 8 pm. **Final Exam may be on CSUB and AV campus** | |

* *TGT* – The Great Thirst; *CD* – Cadillac Desert; *IWC* – Introduction to Water in California  
Readings from the textbooks will be supplemented with handouts provided by the instructor and materials from the internet.*