

# Agenda



**TEXAS A&M**  
UNIVERSITY

*Graduate Council Meeting Agenda*

*204A Evans Library*

**April 3, 2014**

1. **Approval of March 2014 Minutes**
2. **Discussion Items**
  - a. Graduate Faculty Appointments
3. **Course Change Requests:**
  - a. SCSC 624 Physical Chemistry of Soils
4. **Special Consideration Items:**
  - a. TAMUQ Changes in Graduate Faculty By-laws (*tabled at March 2014 meeting*)

# Course Changes

**Texas A&M University**  
**Departmental Request for a Change in Course**  
**Undergraduate ♦ Graduate ♦ Professional**

• Submit original form and attachments •

1. Request submitted by (Department or Program Name): Department of Soil and Crop Sciences
2. Course prefix, number and complete title of course: SCSC 624 Physical Chemistry of Soils

3. Change requested
- a. Prerequisite(s): From: AGRO 626; CHEM 324 or approval of instructor To: SCSC 301 or approval of instructor
- b. Withdrawal (reason): \_\_\_\_\_
- c. Cross-list with: \_\_\_\_\_

Attach a brief supporting statement for changes made to items 3a thru 3d, and 6 below.

Cross-listed courses require the signature of both department heads.

- d. Change in course title and description. Enter complete current course title and current course description in item 5; enter proposed course title and proposed course description in item 6. Complete item 7 for change in title.
- e. Change in course number, contact hours (lab & lecture), and semester credit hours. Complete item 7. Attach a course syllabus.
4. For informational purposes only, please indicate course number if this course will be stacked: \_\_\_\_\_
5. Complete current course title and current catalog course description:  
SCSC 624. Physical Chemistry of Soils. (3-3). Credit 4.  
Physical chemistry of clay minerals and inorganic and organic soil colloids; specific and non-specific absorption; kinetic processes and chemical equilibria in soils.

6. Complete proposed course title and proposed catalog course description (not to exceed 50 words):  
SCSC 624. Soil Chemistry. (3-0). Credit 3.  
Chemistry of clay minerals, inorganic solid phases, and organic colloids in soil. Mass transfer reactions in soils; adsorption/desorption, precipitation/dissolution, gas/liquid phase exchange. Principles of soil acidity and salinity. Introduction to application of equilibrium concepts in soils.

7. a. As currently in course inventory:

Prefix		Course #		Title (excluding punctuation)																							
S	C	S	C	6	2	4	P	h	y	s	i	c	a	l	C	h	e	m	i	s	t	r	y	o	f	S	o
Lect.	Lab	SCH	CP and Fund Code	Admin. Unit					ECE Code					Level													
0	3	0	3	0	1	1	2	0	1	0	0	0	5	0	0	0	0	0	0	3	6	3	2	6			

- b. Change to:

Prefix		Course #		Title (excluding punctuation)																									
S	C	S	C	6	2	4	S	o	i	l	C	h	e	m	i	s	t	r	y										
Lect.	Lab	SCH	CP and Fund Code	Admin. Unit					Acad. Year					ECE Code	Level														
0	3	0	0	0	1	1	2	0	1	0	0	0	5	0	0	0	0	1	3	-	1	4	0	0	3	6	3	2	6

Approval recommended by:  
Wayne Smith 4-3-13  
 Department Head or Program Chair (Type Name & Sign) Date

Ward W. Wood  
 Department Head or Program Chair (Type Name & Sign) Date  
 (if cross-listed course)

Ward W. Wood 4/17/13  
 Chair, College Review Committee Date

Ward W. Wood 4/17/13  
 Dean of College Date

\_\_\_\_\_  
 Chair, GC or UCC Date

Associate Director, Curricular Services \_\_\_\_\_ Date \_\_\_\_\_ Effective Date \_\_\_\_\_

## SOIL CHEMISTRY

SCSC 624

FALL 2013

MWF 10:20-11:10; HPCT 124

**Instructor:** Paul Schwab (Heep Center 618A, 845-3663, pschwab@tamu.edu)  
**Office Hours:** By appointment  
**Textbook:** Garrison Sposito. *The Chemistry of Soils*. Second Edition. 2008. Oxford Press, New York.  
**Prerequisites:** SCSC 301 or approval of instructor  
**Class Schedule:**

Lecture	Topic	Chapter Assignment
1-3	The Chemical Composition of Soils	1
4-9	Soil Minerals	2
10-11	Soil Humus	3
12-15	The Soil Solution	4
16	Exam1	
17-20	Mineral Stability and Weathering	5
21-24	Oxidation/Reduction Reactions	6
25-27	Geochemical Modeling	
28	Exam 2	
29-32	Surface Charge	7
33-36	Adsorption Phenomena	8
37-40	Salinity	12
41-44	Soil Acidity	
45	Review	
46	Final Exam	

### Learning Objectives

After completing the course, you should be able to:

- 1) The important mineral soils.
- 2) Be able to describe the chemical reactions of the important species in soil solutions  
Know the critical oxidation/reduction reactions in soils and when they are important  
Understand adsorption/desorption of chemical species in soils, including the difference between inner sphere and outer sphere complexes

### SCSC 624 EVALUATION CRITERIA:

- I. Exams (300 points, 2 @ 150 pts each)
- II. Quizzes (100 points, 10 @ 15 pts each)
- III. Homework (200 points)

**TOTAL = 600 points**

#### GRADING SCALE:

≥720 points	(≥90%)	A
640-719 points	(80 - 89%)	B
560-639 points	(70 - 79%)	C
480-559 points	(60 - 69%)	D
<479 points	(<60%)	F

## MAKE-UP POLICY

Completion of assignments and participation in all activities of the class are the responsibility of the student. Therefore, it is the responsibility of the student to present a valid reason, such as a signed medical excuse from a doctor, to be given consideration in the assessment of timeliness and submission of assignments. Assignments not returned will be given a grade of zero. Consideration in the assessment of timeliness and submission of assignments is subject to University Rules for Excused Absences."

## AMERICANS WITH DISABILITIES ACT (ADA) POLICY STATEMENT

The following ADA Policy Statement (part of the Policy on Individual Disabling Conditions) was submitted to the University Curriculum Committee by the Department of Student Life. The policy statement was forwarded to the Faculty Senate for information. The Americans with Disabilities Act (ADA) is a federal antidiscrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities in Cain Hall, Room B118, call 845-1637 or visit: <http://disability.tamu.edu>

## AGGIE HONOR CODE

"An Aggie does not lie, cheat, or steal or tolerate those who do."

Upon accepting admission to Texas A&M University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning and to follow the philosophy and rules of the Honor System. Students will be required to state their commitment on examinations, research papers, and other academic work. Ignorance of the rules does not exclude any member of the Texas A&M University community from the requirements or the processes of the Honor System. For additional information please visit: <http://www.tamu.edu/aggiehonor/>.

On all course work, assignments, and examinations at Texas A&M University, the following Honor Pledge shall be preprinted and signed by the student: "On my honor, as an Aggie, I have neither given nor received unauthorized aid on this academic work."

## EXCUSED ABSENCES

7.1 The student is responsible for providing satisfactory evidence to the instructor to substantiate the reason for absence. Among the reasons absences are considered excused by the university are the following:

7.1.6 Injury or illness that is too severe or contagious for the student to attend class.

7.1.6.1 Injury or illness of three or more days. For injury or illness that requires a student to be absent from classes for three or more university business days (to include classes on Saturday), the student should obtain a medical confirmation note from his or her medical provider. The Student Health Center or an off-campus medical professional can provide a medical confirmation note only if medical professionals are involved in the medical care of the student. The medical confirmation note must contain the date and nature of the illness and medical professional's confirmation of needed absence.

7.1.6.2 Injury or illness less than three days. Faculty members may require confirmation of student injury or illness that is serious enough for a student to be absent from class for a period less than three university business days (to include classes on Saturday). At the discretion of the faculty member and/or academic department standard, as outlined in the course syllabus, illness confirmation may be obtained by one or both of the following methods:

- Texas A&M University Explanatory Statement for Absence from Class form available at <http://attendance.tamu.edu>
- Confirmation of visit to a health care professional affirming date and time of visit.

7.1.6.3 An absence for a non acute medical service does not constitute an excused absence.

To view all Student Rules, please go to: <http://student-rules.tamu.edu/>

To view Rule 7 of the Student Rules please go to: <http://student-rules.tamu.edu/rule7.htm>

# **Special Consideration Items**

*Texas A&M University at Qatar*

**Kenneth R. Hall**  
**Associate Dean for Research & Graduate Studies, TAMUQ**  
**TEES Division Director-TAMUQ**  
**Jack E. & Frances Brown Chair**  
**Professor of Chemical Engineering**  
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**krhall@tamu.edu**

**MEMORANDUM**

**TO:** Mark Zoran

**FROM:** Kenneth R. Hall



**SUBJECT:** Proposal to alter the section of the Graduate Faculty by-laws dealing with TAMUQ

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TAMUQ requests removal of the words "in engineering" from the Graduate Faculty by-laws in the section dealing with TAMUQ. The reason is that we feel several members of our science and liberal arts faculty members could benefit from having Graduate Faculty status, especially in light of the program we intend to initiate to bring more Ph.D. students to TAMUQ. We have a committee of Graduate Faculty members at TAMUQ that reviews applications for acceptability before submitting the names to TAMU.



**MEMORANDUM**

**TO:** Karen Butler-Purry, Associate Provost for Graduate Studies

**FROM:** H. Joseph Newton, Dean, College of Science



**SUBJECT:** Graduate Faculty by-laws dealing with TAMUQ

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The College of Science supports the proposed changes in the wording of the Graduate Faculty by-laws in the section dealing with TAMUQ, as long as all local (TAMU) requirements and processes pertaining to appointments to the Graduate Faculty remain unchanged.