Class Meetings: Tuesdays and Thursdays, 09:30 a.m. to 10:45 a.m., OCNR-258
Lab. Meeting: Tuesdays (Section 101) and Thursdays (Section 102), 12:00 to 01:50 p.m., CS-226
Office Hours: TR 11:00 a.m. to noon and MWF 10:00 to 11:00 a.m. or by appointment.

The teaching assistant for this class is Mr. Sajjad Abdullajintakam. You can contact him at sajjad.abdullajintakam@tamucc.edu

**Course Description**
This is a course in college-level Mineralogy primarily for students majoring in Geology or Environmental Science. Coursework will include the study of physical and chemical properties of minerals, introduction to the crystallography of minerals, optical mineralogy, and the use of the polarized light microscope. Laboratory study of mineral identification in hand specimens and thin sections. Prerequisites: GEOL 1403, CHEM 1411, and CHEM 1412 (may be taken concurrently).

**Learning Objectives**
Upon successful completion of this course, you should have obtained a good understanding of:
- the study of minerals, including symmetry, crystal chemistry and crystal structure,
- the basics of optical mineralogy,
- the physical and optical properties of minerals,
- and should be able to identify the most common minerals based on these properties.

**Major Course Requirements:**

**Evaluation and Grade Assignment**
Your final grade will be based on a % curve from the following point distribution:
A) Mid-Term Exam: 100 points
B) Final Exam: 100 points
C) Laboratory Exams: 2 @ 100 points each 200 points
D) Chapter Quizzes 5 or more @ 10 points each 50 points

Total: 450 points

A perfect score in this course would be to earn all 450 points available. At the end of the semester, I will take the highest point total in the class and will use that high score to calculate the percentage bonus required to bring this individual’s total points up to 450. That percentage bonus is then applied to everyone’s individual total.

Final grading will be as follows:
A = 450-403 points  B = 402-358 points  C = 357-313 points  D = 312-268 points  F < 268 points

**Exams and Chapter Quizzes**
Exams can only be taken during the scheduled time, except in cases of emergencies. Documented proof is required of such emergencies. There will be NO make up exams or
quizzes for unscheduled and unexcused absence! If you know you are going to miss a class or an exam and have a valid excuse, let me know BEFORE the fact, NOT after (by that time I already know...)! Make-up exams cannot be taken after the graded test has been given back to the class. There will be no exceptions!

**Chapter Quizzes** happen randomly and are used to encourage regular attendance in class. The odds of a Chapter Quiz occurring on a given day are inversely proportional to the number of students present in class that day. Quizzes will consist of a short series of multiple-choice questions to be answered in approximately 5-10 minutes at the end of the class period. Chapter Quizzes may include material covered in previous lectures or in the reading assignment for that day. So please be prepared!

**Reading Assignments**
It is extremely important that you read the textbook and stay current with the reading. The concepts presented here are challenging so you may need to read this material multiple times. All reading assignments are to be read prior to the class in which the material will be discussed.

**Class and Lab Policies**
While attendance of the lectures will not be recorded by the instructor on a regular basis, regular attendance is essential to the successful completion of this course. The use of cell phones, pagers, MP3 players, headphones and similar electronic devices is not allowed in class. If your cell phone/pager rings during lecture, you may be asked to leave the classroom. Text messaging is not permitted in this class.

You are expected to attend all labs and remain in lab for the entire two-hour period. There are no make-up labs. Mineral identification is part of the lab, but most of your hand sample study may occur after lab hours. You are expected to bring your textbook to the laboratory as a reference for lab activities. Most laboratory instruction cannot be conveniently repeated outside of the scheduled laboratory time. Therefore, regular attendance of the lab sessions is required.

**Classroom/professional behavior**
Texas A&M University-Corpus Christi, as an academic community, requires that each individual respect the needs of others to study and learn in a peaceful atmosphere. Under Article III of the Student Code of Conduct, classroom behavior that interferes with either (a) the instructor’s ability to conduct the class or (b) the ability of other students to profit from the instructional program may be considered a breach of the peace and is subject to disciplinary sanction outlined in article VII of the Student Code of Conduct. Students engaging in unacceptable behavior may be instructed to leave the classroom. This prohibition applies to all instructional forums, including classrooms, electronic classrooms, labs, discussion groups, field trips, etc.

**Academic Integrity/Plagiarism**
University students are expected to conduct themselves in accordance with the highest standards of academic honesty. Academic misconduct for which a student is subject to penalty includes all forms of cheating, such as illicit possession of examinations or examination materials, falsification, forgery, complicity or plagiarism. (Plagiarism is the presentation of the work of another as one’s own work.) In this class, academic misconduct or complicity in an act of academic misconduct on an assignment or test will result in a failing grade and possible further disciplinary action by the university.

**Dropping a Class**
I hope that you never find it necessary to drop this or any other class. However, events can sometimes occur that make dropping a course necessary or wise. Please consult with me before
you decide to drop to be sure it is the best thing to do. Should dropping the course be the best course of action, you must initiate the process to drop the course by going to the Student Services Center and filling out a course drop form. Just stopping attendance and participation WILL NOT automatically result in your being dropped from the class. November 07, 2014 is the last day to drop a class with an automatic grade of “W” this term.

**Grade Appeals**
As stated in University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures, a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, see University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules website at [http://www.tamucc.edu/provost/university_rules/index.html](http://www.tamucc.edu/provost/university_rules/index.html), and the College of Science and Engineering Grade Appeals webpage ([http://sci.tamucc.edu/students/GradeAppeal.html](http://sci.tamucc.edu/students/GradeAppeal.html)). For assistance and/or guidance in the grade appeal process, students may contact the chair or director of the appropriate department or school, the Office of the College of Science and Engineering Dean, or the Office of the Provost.

**Disabilities Accommodations**
The Americans with Disabilities Act (ADA) is a federal anti-discrimination 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 call or visit Disability Services at (361) 825-5816 in Corpus Christi Hall, Room 116. If you are a returning veteran and are experiencing cognitive and/or physical access issues in the classroom or on campus, please contact the Disability Services office for assistance at (361) 825-5816.

**Statement of Academic Continuity**
In the event of an unforeseen adverse event, such as a major hurricane and classes could not be held on the campus of Texas A&M University–Corpus Christi; this course would continue through the use of Blackboard and/or email. In addition, the syllabus and class activities may be modified to allow continuation of the course. Ideally, University facilities (i.e., emails, web sites, and Blackboard) will be operational within two days of the closing of the physical campus. However, students need to make certain that the course instructor has a primary and a secondary means of contacting each student.
Important Dates

August 27  Classes begin
September 01  Labor Day (campus closed)
October 09  Mid-term exam
October 14/16  Lab Mid-term exam
November 07  Last day to drop a class
November 25  Lab Final Exam, Section .101
November 27/28  Thanksgiving holidays (campus closed)
December 02  Lab Final Exam, Section .102
December 02  Last day of classes
December 09  Final exam 08:00 a.m. - 10:30 a.m.

Lecture and Lab Schedule

August
Thu  08/27  Introduction/Definitions, Chapter 1

September
Tue  09/02  Crystallography I –Symmetry, Chapter 2
Thu  09/04  Crystallography II – The Crystal Systems, Chapter 2
Tue  09/09  Crystallography III – Miller Indices, Chapter 2
Thu  09/11  Crystal Chemistry I, Chapter 3
Tue  09/16  Crystal Chemistry II, Chapter 3
Lab  Native Elements, Sulfides, and Related Minerals, Chapters 6, 19, 20
Thu  09/18  Crystal Structure I, Chapter 4
Tue  09/23  Crystal Structure II, Chapter 4
Lab  Oxides, Hydroxides, and Halides, Chapter 18
Thu  09/25  Mineral Growth I, Chapter 5
Tue  09/30  Mineral Growth II, Chapter 5
Lab  Carbonates, Sulfates, Phosphates, Tungstates…, Chapter 17

October
Thu  10/02  Native Elements, Chapter 20
Tue  10/07  Sulfides and Related Minerals, Chapter 19
Lab  Ortho-, Di-, and Ring Silicates, Chapters 15, 16
Thu  10/09  Mid-Term Exam
Tue  10/14  Oxides, Hydroxides, and Halides, Chapter 18
Lab  Mid-Term Exam
Thu  10/16  Carbonates, Sulfates, Phosphates…, Chapter 17
Tue  10/21  Silicates, Chapter 11
Lab  Chain- and Sheet Silicates, Chapters 13, 14
Thu  10/23  Orthosilicates, Chapter 16
Tue  10/28  Disilicates and Ringsilicates, Chapter 15
Lab  Framework Silicates, Chapter 12
Thu  10/30  Chain Silicates, Chapter 14
November
Tue 11/04 Sheet Silicates, Chapter 13
Thu 11/06 Framework Silicates, Chapter 12
Tue 11/11 Framework Silicates, Chapter 12
Lab Optical Properties of Rock-Forming Minerals I
Thu 11/13 Optical Mineralogy I, Chapter 7
Tue 11/18 Optical Mineralogy II, Chapter 7
Lab Optical Properties of Rock-Forming Minerals II
Thu 11/20 Optical Mineralogy III, Chapter 7
Tue 11/25 Optical Mineralogy IV, Chapter 7
Tue 11/25 Lab Lab Final Exam, Section .101
Thu 11/27 Thanksgiving Holiday

December
Tue 12/02 X-Ray Crystallography and Chemical Analysis of Minerals, Ch. 8 and 9
Tue 12/02 Lab Final Exam, Section .102
Tue 12/09 Final Exam 08:00 a.m. - 10:30 a.m.

Drafting Supplies
The lab exercises (and partially the lectures) will require the use of some basic drafting supplies. The following is a list of what's needed. Please bring these items with you to each session.

- Mechanical pencil, lead size of 0.5 mm or finer (required)
- Eraser (required)
- Colored pencils (at least six colors, required)
- Triangle (optional)