Course Syllabus

METL 2305 Atmospheric Corrosion Control

Semester CRN Fall 2017 33913

Instructor contact information

Professor Jerry Ratliff 713-718-6078

jerry.ratliff@hccs.edu

Office Location and Hours

Southeast Campus, Workforce Bldg. Room 202

Tuesday & Thursday by appointment

Course Location/Times Southeast Campus, Parking Garage. Rm. SEPKG 114

Tuesday & Thursday 12:30 pm - 2:00 pm

Course Semester Credit Hours Credit Hours: 3 Lecture Hours: 3

Total Course Contact Hours 42

Course Length

14 weeks

Type of Instruction

Lecture

Course Description:

A basic study of atmospheric corrosion phenomena and its control. A study of atmospheric corrosion is essential because atmospheric corrosion is the most prevalent among the different types of corrosion damage. Deterioration of metallic materials is widespread, as it affects outdoor as well as indoor installations. The entire infrastructure, such as utilities, highways, transportation, industry, national defense, automobiles, and residential structures. This study helps determine the root causes of chemical and electrochemical reactions of various metals with atmospheric substances such as oxygen, moisture, sulfur dioxide and salt crystals.

Course

Prerequisite(s)

METL 1313 Introduction to Corrosion

Course Student Learning Outcomes Upon completion of this course students will be able to:

- Define atmospheric corrosion
- Predict general rates of atmospheric corrosion based on "time of wetness, temperature, relative humidity, atmospheric purity and so on
- Explain and apply Relative Humidity as it relates to atmospheric corrosion
- Compare the three main measurements of humidity
- Define and classify the major types of atmospheres
- Distinguish and categorize the most prevalent atmospheric contaminants
- Explain and give examples of the most common methodologies use to combat atmospheric corrosion

Instructional Methods Face to Face

Student Assessment(s) Attendance, class participation, homework assignments, quizzes, and examinations.

Grading Criteria

Student grades are calculate on and overall point system (Instructor to explain)

Instructor's Requirements

As your Instructor, it is my responsibility to:

- Provide the grading scale and detailed grading formula explaining how student grades are to be derived
- Facilitate an effective learning environment through class activities, discussions, and lectures
- Description of any special projects or assignments
- Inform students of attendance, withdrawal, tardiness and make up policies
- Provide the course outline and class calendar which will include a description of any special projects or assignments
- Arrange to meet with individual students before and after class as required

To be successful in this class, it is the student's responsibility to:

- Attend class and participate in class discussions and activities
- Read and comprehend the textbook
- Complete required assignments, quizzes, and exams
- Ask for help when there is a question or problem
- Keep copies of all paperwork in your notebook, including the syllabus, handouts, exams, and all assignments

Course Requirements:

Students are required to maintain a 1.5" to 2" notebook dedicated to atmospheric corrosion.

HCC Grading Scale:

A = 100 - 904 points per semester hour B = 89 - 80: 3 points per semester hour C = 79 - 70: 2 points per semester hour D = 69 - 60: 1 point per semester hour 59 and below = F 0 points per semester hour FX (Failure due to non-attendance) 0 points per semester hour IP (In Progress) 0 points per semester hour W (Withdrawn) 0 points per semester hour I (Incomplete) 0 points per semester hour AUD (Audit) 0 points per semester hour

IP (In Progress) is given only in certain developmental courses. The student must re-enroll to receive credit. COM (Completed) is given in non-credit and continuing education courses.

FINAL GRADE OF FX: Students who stop attending class and do not withdraw themselves prior to the withdrawa deadline may either be dropped by their professor for excessive absences or be assigned the final grade of "FX" at the end of the semester. Students who stop attending classes will receive a grade of "FX", compared to an earned grade of "F" which is due to poor performance. Logging into a DE course without active participation is seen as non-attending. Please note that HCC will not disperse financial aid funding for students who have never attended class.

Students who receive financial aid but fail to attend class will be reported to the Department of Education and may have to pay back their aid. A grade of "FX" is treated exactly the same as a grade of "F" in terms of GPA, probation, suspension, and satisfactory academic progress.

To compute grade point average (GPA), divide the total grade points by the total number of semester hours attempted. The grades "IP," "COM" and "I" do not affect GPA.

Health Sciences Programs Grading Scales may differ from the approved HCC Grading Scale. For Health Sciences Programs Grading Scales, see the "Program Discipline Requirements" section of the Program's syllabi.

Instructor Grading Criteria

Students are graded on a point system based on the cumulative total of points given for attendance, class participation, assignments, homework, quizzes, and examinations.

Instructional Materials TBD

HCC Policy Statement: Any student with a documented disability (e.g. physical, learning, psychiatric, vision, hearing, etc.) who needs to arrange reasonable accommodations must contact the Disability Services Office at the respective college at the beginning of each semester. Faculty is authorized to provide only the accommodations requested by the Disability Support Services Office. For questions, please contact (713) 718-8397 or the Disability Counselor at your college. To visit the ADA Web site, please visit www.hccs.edu then click on Information for... Students, scroll down the page and click on the words Disability Services.

Southeast ADA Counselor:

Mr. John Reno, MA, CRC - Tel. (713) 718-8397 or (713) 718-7144

Access Student Services Policies http://hccs.edu/student-rights

Services Policies on their Web site:

http://www.hccs.edu/district/about-us/procedures/student-rights-policies-proredures/.

EGLS3 --Evaluation for Greater Learning Student Survey System At Houston Community College, professors believe that thoughtful student feedback is necessary to improve teaching and learning. During a designated time near the end of the term, you will be asked to answer a short online survey of research-based questions related to instruction. The anonymous results of the survey will be made available to your professors and department chairs for continual improvement of instruction. Look for the survey as part of the Houston Community College Student System online near the end of the term.

Distance Education and/or Continuing Education Policies

Access DE Policies on their Web site: http://de.hccs.edu/Distance_Ed/DE_Home/faculty_resources/PDFs/DE_Syllabus.pdf http://de.hccs.edu/media/houston-community-college/distance-education/studentservices/2015 HCC-DE-Student-Handbook (Revised-1 7 15).pdf

Important Information

Any student who faces challenges securing their food or housing and believes this may affect their performance in the course is urged to contact the Dean of Students for support. Furthermore, please notify the professor if you are comfortable in doing so."

At HCC the safety of our students, staff, and faculty is our first priority. As of August 1, 2017, Houston Community College is subject to the Campus Carry Law (SB11 2015). For more information, visit the HCC Campus Carry web page at http://www.hccs.edu/district/departments/police/campus-carry/."

Access CE Policies on their Web site: http://hccs.edu/CE-student-guidelines

http://www.hccs.edu/continuing-education/students/financialaid/continuing-education/