I. General Information:

College:	Engineer	ring	Departm	ent (Full name):	Chemical	and Materials Engineering
Major Nam (full name		Materials Engineering	Degree T	itle:	BS	
Formal Option(s), i	f any:		Specialty Options,	Field w/in Formal if any:		
Requested Effective Date: FALL 2014, IF RECEIVED BY SENATE COUNCIL BY MONDAY, APRIL 7.						
Contact Pe	rson:	Dr. John Balk	Phone:	257-4582	Email:	john.balk@uky.edu

II. Parameters of the Graduation Composition and Communication Requirement (GCCR):

The new GCCR replaces the old Graduation Writing Requirement. It is fulfilled by a course or courses specified within a B.A./B.S. degree program. As outlined in draft Senate Rule 5.4.3.1, the GCCR stipulates that students must successfully complete this requirement after achieving sophomore status and prior to graduation. To satisfy the GCCR, students must earn an average grade of C or better on the designated Composition and Communication (C&C) intensive assignments produced in any given course designated as fulfilling some or all of the GCCR. The requirements for GCCR courses include:

- at least 4500 words of English composition (approximately 15 pages total);
- a formal oral assignment or a visual assignment;
- an assignment demonstrating information literacy in the discipline;
- a draft/feedback/revision process on GCCR assignments.

The program requirements for the GCCR include:

- at least one specific Program Student Learning Outcome for C&C outcomes;
- a plan for assessing both the writing and oral or visual components of the GCCR;
- clear goals, rubrics, and revision plans for GCCR implementation.

Upon GCCR approval, each program will have a version of the following specification listed with its Program Description in the University Bulletin:

"Graduation Composition and Communication Requirement. Students must complete the Graduation Composition and Communication Requirement as designated for this program. Please consult a college advisor or program advisor for details. See also 'Graduation Composition and Communication Requirement' on p. XX of this Bulletin."

III. GCCR Information for this Program (by requirement):

A. List the courses currently used to fulfill the old Graduation writing Requirement:
ENG 2XX - writing intensive course
B. GCCR Program Outcomes and brief description:
1. Please specify the Major/Program Student Learning Outcomes (SLOs) pertaining to Composition & Communication and the
GCCR requirement. These are program outcomes, not course outcomes. Please specify the program-level SLOs for C&C in your
program:
(1) description of theoretical and experimental aspects of materials phenomena;
(2) analysis, discussion and presentation of experimental results in written laboratory report;
(3) oral presentation and discussion of experimental results, using slides as basis for presentation.
2. Please provide a short GCCR description for your majors (limit 1000 characters): Please explain the GCCR requirement in
language appropriate for undergraduate majors to understand the specific parameters and justification of your program's GCCR
implementation plan:
Materials engineers must be able to effectively communicate their work and knowledge to other people. In order to improve
composition and communication skills, the MSE program requires students to develop their technical writing and reporting
skills. This is done in the context of the junior-level laboratory course MSE 407 (Materials Laboratory I). The composition and

communication goals of the MSE program comprise three primary areas: (1) the ability to understand and convey understanding of materials phenomena, based on theoretical and experimental knowledge; (2) the ability to write technical reports that properly analyze, discuss and present experimental data obtained in the laboratory; (3) the ability to prepare and deliver oral presentations that demonstrate understanding of materials phenomena and experimental results. These skills are developed and demonstrated through written and oral reports on experimental laboratory work.

and demonstrated through written and oral reports on experime	ntal laboratory work.	
C. Delivery and Content:		
	☐ a. Single required course within program	
1. <u>Delivery specification</u> : for your major/program, how will the	b. multiple required or optional courses within program	
GCCR be delivered? Please put an X next to the appropriate	c. course or courses outside program (i.e., in another	
option. (Note: it is strongly recommended that GCCR courses be	program)	
housed within the degree program.)	d. combination of courses inside and outside program	
	e. other (please specify): _	
Basic Course Information: Please provide the following information: part:	ion for course(s) used to satisfy the GCCR, either in whole or in	
Course #1: Dept. prefix, number, and course title: MSE 407 - Mater	ials Lahoratory I	
new or existing course? existing (new courses should be acco	<u> </u>	
o ☐ if a new course, check here that a New Course Pro		
	pposul has been submitted for review via eCA13	
required or optional? required		
• shared or cross-listed course? <u>no</u>		
• projected enrollment per semester: <u>20</u>		
Course #2 (if applicable): Dept. prefix, number, and course title:		
	npanied by a New Course Proposal)	
○ ☐ if a new course, check here that a New Course Pro	oposal has been submitted for review via eCATS	
 required or optional? 		
 shared or cross-listed course? 		
 projected enrollment per semester: 		
Course #3 (if applicable): Dept. prefix, number, and course title:		
 new or existing course? (new courses should be accommand) 	npanied by a New Course Proposal)	
○ ☐ if a new course, check here that a New Course Pro	oposal has been submitted for review via eCATS	
required or optional?		
shared or cross-listed course?		
projected enrollment per semester:		
3. Shared courses: If the GCCR course(s) is/are shared from outside		
program that will be delivering the course(s). Please provide the	following:	
Contact information of providing program:		
· · · · · · · · · · · · · · · · · · ·	sed GCCR course(s), including any projected budget or staffing the GCCR course(s), please specify the resource contribution of	
each participating program.	the occir course(s), please specify the resource contribution of	
each participating program.		
Memorandum of Understanding/Letter of Agreement: Attach	ch formal documentation of agreement between the providing	
and receiving programs, specifying the delivery mechanisms and resources allocated for the specified GCCR course(s) in the		
respective programs (include with attachments).		
Date of agreement:		
<u> </u>		
4. Syllabi: Please provide a sample syllabus for each course that w	ill be designated to fulfill the GCCR. Make sure the following	
things are clearly indicated on the syllabi for ease of review and a		
 the GCCR assignments are highlighted in the syllabus and countries. 		
	ments as specified by the Senate Rules for GCCR courses (see	

the draft Senate GCCR rule linked here);

- the elements are specified in the syllabus that fulfill the GCCR requirement for a clear draft/feedback/revision process;
- the grade level requirements for the GCCR are specified on the syllabus (i.e., an average of C or better is required on GCCR assignments for credit);
- the course or sequence of courses are specified to be completed after the first year (i.e. to be completed after completing 30 credit hours) for GCCR credit;
- the course syllabus specifies "This course provides full/partial GCCR credit for the XXX major/program"
 - o if the course provides partial GCCR credit, the fulfilled portion of the GCCR must be specified and the other components of the GCCR for the program must be specified: e.g. "This course provides partial credit for the written component of the GCCR for the XXX major/program in conjunction with Course 2"
- **5.** <u>Instructional plan</u>: Summarize the instructional plan for teaching the C&C skills specified in the program SLOs and delivered in the course(s). Include the following information in <u>brief</u> statements (1000 characters or less). Information can be cut-and-pasted from the relevant sample syllabus with indications **where** on the syllabus it is found:
 - <u>overview of delivery model</u>: summarize how the GCCR will be delivered for **all** program majors: explain how the delivery model is appropriate for the major/program and how it is offered at an appropriate level (e.g. required course(s), capstone course, skills practicum sequence of courses, etc.):
 - All MSE students are required to take MSE 407, which is supposed to be taken in the junior year. This course involves several laboratory experiments, for which students prepare written and oral reports. Students must demonstrate understanding of the materials theory upon which the labs are based. They must acquire data, interpret their observations, analyze and arrange their findings, and finally report their work in the context of existing knowledge and models. The reporting requirements in MSE 407 develop students' skills in technical writing and oral presentation. This course involves relevant materials engineering equipment in the study of relevant engineering materials, and students develop their technical reporting skills in preparation for future work in industry or graduate school.
 - <u>assignments</u>: overview or list of the assignments to be required for the GCCR (e.g. papers, reports, presentations, videos, etc.), with a summary of how these GCCR assignments appropriately meet the disciplinary and professional expectations of the major/program:
 - Students prepare multiple written reports, including 2-3 shorter reports (approx. 2000 words) and 2 longer reports (approx. 5000+ words), as well as standalone short assignments involving the writeup of one particular section of a report (particular experimental method, theoretical background, etc.). Students must also prepare and deliver oral presentations (two presentations, each at least 10 minutes) on a portion of their lab work. This body of work satisfies the GCCR requirements and partially addresses the MSE program's requirements for composition and communication. Note that the follow-on course (MSE 408, Materials Laboratory II) involves the same amount of written and oral reporting, refelcting a commitment by the MSE program to prepare students for technical compositional and communication.
 - revision: description of the draft/feedback/revision plan for the GCCR assignments (e.g. peer review with instructor grading & feedback; essay drafting with mandatory revision; peer presentations; etc.):
 Individual sections of reports are submitted by students, after which they are graded/assessed by the course instructor and returned for revision and inclusion in the appropriate full report. These same sections are graded again, as part of the entire report. Students will also be required to visit the UK Writing Center and obtain feedback on their written reports. This consultation with the Writing Center will be part of the basis for report grading, and students must incorporate changes suggested by the Writing Center in their revised and resubmitted reports. For oral reports, students will be given feedback on their preparation and presentation, and recommendations for improvement must be incorporated into the next oral presentation (which will be graded with specific attention to the feedback on the first oral presentation).
 - other information helpful for reviewing the proposal:
 Grading and assessment of written and oral reports are conducted using a rubric-based system that specifically addresses individual aspects of technical communication. Students receive the rubric grades, with breakdown by sub-category, so they know exactly which areas need improvement and how to improve them.

NOTE: the attached syllabus is for the current (Spring 2014) semester and addresses most of the GCCR requirements, as indicated by the highlighted sections. The course and syllabus will be revised next year to completely address the GCCR requirements, specifically the feedback/revision process students must follow, the expectation of a C grade (or better) on the GCCR-related work, and the other GCCR-related comments specified in section 4.

D. Assessment:

In addition to providing the relevant program-level SLOs under III.B, please specify the assessment plan at the program level for the

•	specify the assessment schedule (e.g., every 3 semesters; biennially):
	Program-level assessment will occur at least on a biennial basis; when appropriate and/or necessary, annual assessment
	will be performed.
•	identify the internal assessment authority (e.g. curriculum committee, Undergraduate Studies Committee):
	Undergraduate Studies Committee; additional MSE faculty are welcome to participate as well
•	if the GCCR course(s) is/are shared, specify the assessment relationship between the providing and receiving program explain how the assessment standards of the receiving program will be implemented for the provided course(s):
	n/a

Signature Routing Log

General Information:

GCCR Proposal Name (course prefix & number, program major & degree):	MSE 407; Materials Engineering; BS
Contact Person Name:	Dr. John Balk
Phone:	257-4582
Email:	john.balk@uky.edu

Instructions:

Identify the groups or individuals reviewing the proposal; record the date of review; provide a contact person for each entry. On the approval process, please note:

- Proposals approved by Programs and Colleges will proceed to the GCCR Advisory Committee for expedited review and approval, and then they will be sent directly to the Senate Council Office. Program Changes will then be posted on a web transmittal for final Senate approval in time for inclusion in the Fall 2014 Course Bulletin.
- New Course Proposals for the GCCR will still require review and approval by the Undergraduate Council. This review will run parallel to GCCR Program Change review.
- In cases where new GCCR courses will be under review for implementation after Fall 2014, related GCCR Program Changes can still be approved for Fall 2014 as noted "pending approval of appropriate GCCR courses."

Internal College Reviews and Course Sharing and Cross-listing Reviews:

Reviewing Group	Date Reviewed	Contact Person (name/phone/email)
Home Program review by Chair or DUS, etc.	3/24/2014	John Balk (DUS) / 257-4582 / john.balk@uky.edu
Providing Program (if different from Home Program)		/ /
Cross-listing Program (if applicable)		/ /
College Dean	3/24/2014	Kimberly Anderson, Assoc Dean / 7-1864 / kimberly.anderson@uky.edu
		/ /

Administrative Reviews:

Reviewing Group

4/2/2014	
	4/2/2014

Date Approved

Approval of Revision/ Pending Approval¹

¹ Use this space to indicate approval of revisions made subsequent to that group's review, if deemed necessary by the revising group; and/or any Program Change approvals with GCCR course approvals pending.

GCCR Implementation Preparation Document #1

Submi	itted by: John Balk
Date:	November 22, 2013
Colleg	ge: Engineering
Major	e: Engineering : Materials Engineering
	Program Student Learning Outcome (SLO) <u>Ability to communicate effectively.</u> LO involves:
	scription of theoretical and experimental aspects of materials phenomena;
	alysis, discussion and presentation of experimental results in written laboratory report;
(3) ora	al presentation and discussion of experimental results, using slides as basis for presentation.
1)	Is this SLO (check the most appropriate item):
	An existing program SLO
X	_A modified program SLO
	_ An entirely new program SLO for this major
2)	How will you plan to meet the GCCR and SLO?
X	_ An existing course or series of courses in the department.
	A new course or series of courses in the department.
	An existing course or series of courses in another department (e.g., Communication and Information (CIS), English, Writing/Rhetoric/Digital Media (WRD))
	Other. Please explain:
3)	Will the GCCR be met via curriculum at the: 300-level
	X 400-level
	500-level
	other
4)	Concerns about which you would like the GCCR Committee to be aware:

Department of Chemical and Materials Engineering

MSE 407 Materials Engineering Laboratory I Spring 2015 COURSE SYLLABUS

Faculty Instructor:

Dr. Thom Cochell, Lecturer 151 Paul Anderson Tower (FPAT) (859) 257-5076 thomcochell@ukv.edu

Office Hours: Tuesday 2:00 – 3:00 pm Thursday 11:00 am – 12:00 pm (& drop in as needed)

Laboratory Manger:

Nancy Miller 162 Paul Anderson Tower (FPAT) (859) 257-5127 nancy.miller@uky.edu

Teaching Assistants:

Michael Detisch Qunfei Zhou mjdeti2@gmail.com f.z@uky.edu

Scheduled Times and Locations:

Lecture Friday 253 FPAT

9:00 - 9:50 am

Laboratory Monday Wednesday 67, 69, 73 FPAT

Investigations 8:00 – 11:00 am 8:00 – 11:00 am

Lab Experiments:

- 1. Strengthening of Glass by Ion Exchange
- 2. High Temperature Superconductor
- 3. Ceramic Processing
- 4. Processing of 4140 Steel

Course Objectives and Prerequisites

Course Description:

The Materials Engineering Laboratory I course will provide experience with a variety of topics, experimental techniques, characterization methods, and analysis of materials. Principles and experiments in materials processing for metals, glass, and ceramics will be covered. The laboratory includes instruction and practice in use of numerous instruments and equipment typical of the materials engineering discipline. In addition to data reduction, analysis and interpretation are covered, as well as technical writing and presenting. This course provides full Graduation Composition and Communication Requirement (GCCR) credit for the MSE

^{*}See the attached tentative calendar for your group's specific schedule. Specifics are subject to change during the course of the semester.

program. An average grade of "C" or better is required for GCCR credit on GCCR assignments.

MSE Program Outcomes:

- For students to become familiar with materials processing and analysis techniques, and to gain a more fundamental understanding of materials engineering.
- To use the techniques, skills and modern engineering tools necessary for engineering practice.
- To apply fundamental materials engineering concepts and knowledge.
- To gain experience in writing technical lab reports.
- To communicate engineering knowledge in the form of oral and poster presentations.
- The composition and communication requirements for the MSE program are:
 - describe theoretical and experimental aspects of materials phenomena;
 - analyze, discuss and present experimental results in written laboratory report;
 - present (orally) and discuss experimental results, using slides as the basis for presentation.

Lab Objectives/Outcomes:

- To design and conduct experimental investigations in the areas of:
 - o Ceramic, glass, and metal material processing
 - Metallography and hardness testing
 - Mechanical and elastic testing of brittle materials
 - High temperature superconductor materials
 - Rheology of aqueous suspensions
 - Optical microscopy and density measurements
- To analyze and interpret data, and assess the validity of experimental data.
- To function in a multidisciplinary team in order to carry out the required tasks.

Prerequisites:

The prerequisites for MSE 407 are: MA 114, PHY 231, PHY 232, CHE 107, CHE 115, EM 221, MSE 201, MSE 301, and MSE 351

Course Content

Structure of Investigations

MSE 407 Materials Laboratory experiments begin with a required lecture or discussion on Friday mornings from 9-9:50 am. The class will be divided into two main groups (M & W); these two groups will be the same throughout the semester. Each group will then be further divided into two subgroups (MA & MB and WA & WB), which may change over the course of the semester. Please see the tentative course calendar for specific dates, tasks and assignments. Groups will be named the first day of class (Wednesday, January 15th).

The laboratory sessions on Mondays and Wednesdays will begin with a review of laboratory equipment and safety in 67 FPAT. Students will then carry out the experiment in small groups, writing the actual procedures followed, supplementing

the directions in the lab instructions. The students will also record the data collected, along with sample calculations and observations in their notebook.

Students in the lab section will work as a cooperative group in gathering all the required data. Some time will be set aside for data analysis, but should also be carried out on your own time. Students may work as a group to compete the analysis. However, report writing is to be carried out individually by each student.

Grading Policies

The grades for MSE 407 will be as follows:

Graded Component / 100 points	Number	Weight %
Lab Reports Lab Assignments Group Presentation	4 ~10 1	55 15 10
Poster Presentation Attendance & Teamwork	1 	<mark>5</mark> <mark>15</mark>

Lab Reports

Students will write 4 total laboratory reports, one for each of the four investigations, including one long-form lab report and three shorter-form lab reports. Specific details with regard to preparation of the lab reports are provided in the *MSE Lab Report Guidelines*. A copy will be distributed to each student. Full Laboratory Reports are due in Dr. Cochell's mailbox by 4 pm on the due date. Late reports will lose 10% of the possible points for each day they are late, up to a maximum of 3 days (30% deduction). Reports submitted more than 72 hours after the due date/time will not be accepted, and this will result in a failing grade for the both the report and the course.

The long-form lab report will serve as a GCCR assignment (minimum of 4500 words total). To meet the GCCR, the lab report will be submitted to the instructor for initial review. The instructor will review the lab report, provide comments, and assign a numerical score. The assignment will then be returned to the student for revision, based on the comments provided. The revised document will be resubmited to the TA for final scoring. In addition to instructor review, it is **strongly** recommended that the student obtain feedback from student peers and/or the UK Writing Center (located in the W. T. Young Library, Room B108B). Documentation from students peers and/or Writing Center staff will be required to fulfill the revision requirement.

Lab Assignment

Various assignments will be assigned throughout the semester. Topics may include (but are not limited to): researching a particular subject, preparing an abstract, introduction section, experimental section, figure, or table in advance of lab report, submission of lab notebook pages, and problem sets related to lab subjects.

Group Presentation

Small groups will present on one of the lab experiments (groups assigned later in the semester) during the last two weeks of the semester. The presentations will be 20 minutes each (15 minutes + 5 question and answer) and will feature guest faculty members to critique performance. This oral communication assignment will also be used as a GCCR assignment (minimum of 20 minute presentation). This presentation will be submitted to the instructor for review, prior to the date of the presentation. After review, the groups will revise the presentation based on the instructor feedback and then present on the final date. Performance will be based on knowledge of content, ability to communicate content to others and presentation style assessed by the instructor, course coordinator, guest faculty and TA. More details regarding the format and requirements of the group presentation will be handed out later in the semester.

Poster Presentation

The same presentation groups will prepare a poster over their assigned lab experiment. A poster session will follow the group presentations during the week of April 28th and will be open to the department. Groups will present their posters to the attendees and a grade will be assigned based on feedback from attendees and lab personnel.

Schedule for GCC	CR written and oral technical reporting:
Jan. 14, 2015	Review of course syllabus with written & oral report guidelines
Feb. 6, 2015	Discussion of grading rubric for written lab reports
Feb. 11, 2015	First draft of laboratory report #1 due (4500 word minimum)
Feb. 20, 2015	Lab report #1 returned with written feedback & preliminary grade
Feb. 20-26, 2015	Opportunity to obtain additional feedback (Writing Center, peers)
Feb. 27, 2015	Final draft of laboratory report #1 due: instructor (and other)
	feedback must be incorporated; students can recover up to 75% of
	the points that were deducted from final grade of first draft
March 11, 2015	Laboratory report #2 due
April 3, 2015	Discussion of oral report requirements and guidelines, as well as
	poster preparation and presentation requirements/guidelines
April 8, 2015	Laboratory report #3 due
April 22, 2015	Laboratory report #4 due
April 29, 2015	Oral presentations (20 minutes for groups of 3-4 students)
May 1, 2015	Poster presentations by all groups, in a class meeting

Teamwork

For each lab, you will work as a team to design the experimental investigation, collect the required data, complete the necessary calculations and present the results at the class discussions. Teams will establish their own internal procedures on matters relative to all of this work. Each team member will evaluate all other team members at the end of the semester. Each team member will be graded based on his/her participation in the lab, in consideration of the following criteria: attendance and punctuality, overall contribution, technical knowledge, communication and safety. The final team performance grade for each individual will be based on input provided by the faculty, lab manager and the team evaluations.

Attendance in Lab and Lecture

Attendance in the laboratory session is **mandatory**. An unexcused absence will result in the lowering of the Lab Attendance grade for each lab missed, and will also result in a lower teamwork grade. Attendance at all laboratory lectures and discussions is **mandatory**. An unexcused absence will result in the lowering of the Lecture Attendance grade for each lecture missed.

Excused Absence: Any request for an excused absence must be submitted to Dr. Cochell by email (thomcochell@uky.edu). Your request will be reviewed and, if accepted, your lab session will be re-scheduled. Except for emergency situations, requests for excused absence must be submitted **before** the planned absence.

Excused absences **DO NOT** include the following:

- Oversleeping
- Travel not related to official University events
- Sorority/Fraternity events (and other social events)
- · Family visiting
- Work
- Parking problems

NOTE: Unexcused absences not included on this list will be reviewed on a caseby-case basis. Refer to section 5.2.4.2 of the Student Code of Conduct at http://www.uky.edu/StudentAffairs/Code

Plagiarism and Cheating

Plagiarism of individual work or falsification of data will not be tolerated in this course. Anyone found plagiarizing or cheating will automatically receive a failing grade in this course. That being said, this lab course does encourage teamwork. Therefore, data acquisition, data analysis, and calculations completed during the laboratory period as a team are considered common property of the team and may be included in any team member's lab report.

You are required to maintain your own lab notebook and the preparation of written reports and presentation of data is considered an *individual activity*. Refer to section 6.3.1 of the Student Code of Conduct < www.uky.edu/StudentAffairs/Code/part2 for more information on Plagiarism. If you have questions, consult your instructor before submitting any written reports.

Course Resources

Student Mailbox

Students will be assigned mailboxes located in the computer room area (FPAT room #160); these boxes should be checked for returned notebook pages, reports, grade forms, etc.

Computer Lab

The computer lab located on the first floor of Anderson Hall (FPAT 160) is available for the purposes of data analysis and report preparation for the MSE laboratories. The computers in this room are for the exclusive use of Chemical and Materials Engineering students and it is expected that students will limit their activities to materials engineering course-related work.

Writing and Oral Presentation Tutoring

Tutoring is available for written and oral presentations from EStudio Located at RGAN 108 in the Student Commons Area. The hours are Monday-Thursday 10am-6pm. Visit the EStudio website at http://www.engr.uky.edu/estudio/ for more information or to schedule an appointment.

The Writing Center is also available to assist you with the process of writing. The Writing Center is located in the W.T. Young Library, Thomas D. Clark Study, 5th Floor, West Wing. The center offers free consultation on writing. To schedule an appointment in advance, please call 257-1368 or schedule on-line at http://wrd.as.uky.edu/writing-center

Blackboard

Information regarding the course such as the syllabus, grade sheets, etc, can be found on Blackboard. Grades will also be tabulated in Blackboard. If you are not familiar with Blackboard, http://wiki.uky.edu/blackboard/Wiki%20Pages/Accessing%20Blackboard.aspx

Safety Responsibilities

Safety Training and Certificates

All students must complete safety training and receive a certificate of completion before attending their first laboratory period. You will not be allowed to work in the lab without completing the required safety training.

The following four courses will need to be taken on-line at http://ehs.uky.edu/classes.html

- Chemical Hygiene Plan/Laboratory Safety or Annual Refresher
- Emergency Eyewash and Shower Station
- Fire Extinguisher Training

If you have completed your safety training previously, you must ensure the lab manager has a copy of all four of your certificates on file. A yearly refresher course of Chemical Hygiene is now required to work in the lab.

General Safety Responsibilities

Lab safety is of the highest priority

Emergency Numbers (UK Police)
Dialing from a campus phone: 911
Using a cell phone: 257-8573 (#8573)

 If you dial 911 from a cell phone you will reach Lexington Police. Tell the dispatcher that you are calling from the UK Campus. Our address is Anderson Tower 67.

Environmental Health and Safety Website: http://ehs.uky.edu

MSDS sheets are located in the Laboratory Safety Manuals in the labs, FPAT Room # 67 & #73. The MSDS is a document that describes the physical and chemical properties of a product. The sheet also helps you understand the physical and potential health hazards of a chemical.

Each student must:

Follow all safety and health standards and rules.

- Report all hazardous conditions to the lab manager, instructor or TA's.
- Be familiar with the specific safety requirements of your experimental apparatus.
- Do not operate equipment outside of the procedures and limitations established by the TA, lab manager and instructor responsible for that equipment. Ask for assistance if you are unaware or unsure of how to operate the equipment or a particular controller/device.
- Report any broken/improperly functioning equipment to the lab manager, instructor or TA's.
- Let the lab manager, instructor or TA know if you have used the last of any material/lab supply.
- Wear or use the prescribed personal protective equipment.
- Be aware of the location of all exits, showers, eye wash stations, first aid kits, fire extinguishers, spill kits, and pull boxes.
- Be aware of the activity of those working around you at all times.
- Keep the lab area clean. Everyone who uses the lab needs to clean after they
 have finished working. Please properly dispose of waste, put away equipment
 that belongs in cabinets, and keep the floor, counter space and fume hoods
 clean and clear.
- Take the required safety training courses and present course completion certificates at the first lab period.

No experimental apparatus is to be operated without the presence of a TA, instructor, or lab coordinator. Equipment is only to be operated during designated laboratory periods. NEVER leave operating equipment unattended.

There will be NO SMOKING, DRINKING or EATING in the laboratory.

Safety glasses and lab coats are to be worn at all times.

Appropriate clothing is to be worn in the laboratory at all times, this includes

LEGS COVERED and CLOSED-TOED SHOES.

If you have long hair, it needs to be tied back, long sleeve shirts must be rolled up, and all watches, rings and necklaces must be removed. If you are not appropriately dressed, you will be asked to leave the laboratory.

Serious safety violations may result in suspension from the lab, grade reduction, and additional penalties.

Schedule for GCCR written and oral technical reporting:

1.4.2015	
January 14, 2015	Review of course syllabus with written & oral report guidelines
February 6, 2015	Discussion of grading rubric for written lab reports
February 11, 2015	First draft of laboratory report #1 due (4500 word minimum)
February 20, 2015	Lab report #1 returned with written feedback & preliminary grade
February 20-26, 2015	Opportunity to obtain additional feedback (Writing Center, peers)
February 27, 2015	Final draft of laboratory report #1 due: instructor (and other)
	feedback must be incorporated; students can recover up to 75% of
	the points that were deducted from final grade of first draft
March 11, 2015	Laboratory report #2 due
April 3, 2015	Discussion of oral report requirements and guidelines, as well as
	poster preparation and presentation requirements/guidelines
April 8, 2015	Laboratory report #3 due
April 22, 2015	Laboratory report #4 due
April 29, 2015	Oral presentations (20 minutes for groups of 3-4 students)
May 1, 2015	Poster presentations by all groups, in a class meeting