UF UNIVERSITY of FLORIDA

Application Form for General Education and Writing/Math Requirement Classification

Current Information:

I. A.) DEPARTMENT NAME: Chemistry

B.) COURSE NUMBER, and TITLE: CHM 1083 Consumer Chemistry

C.) CREDIT HOURS: 3 **D.) PREREQUISITES:** none

E.) CURRENT CLASSIFICATION

1. General Education Code: ☐B ☐C ☐D ☐H ☐M ☐N ■P ☐S ☐None
2. Writing Requirement: ☐E2 ☐E4 ☐E6 ■None
3. Math Requirement: ☐M ■None

Requests:

II. GENERAL EDUCATION

A.) Requested Classification: ☐B ☐C ☐D ☐H ☐M ☐N ■P ☐S

B.) Effective Date: ■Fall ☐Spring ☐Summer 2013 (year)

Or

☐1-time Approval ☐Fall ☐Spring ☐Summer _____(year)

III. WRITING REQUIREMENT ☐ **MATH REQUIREMENT** ☐

A.) Requested Classification ☐E2 ☐E4 ☐E6

B.) Effective Date: ☐Fall ☐Spring ☐Summer _____(year)

Or

☐1-time Approval ☐Fall ☐Spring ☐Summer _____(year)

C.) Assessment:

1.) What type of feedback will be provided to the student (in reference to writing skill)?

_____Grade _____Corrections _____Drafts _____Other

2.) Will a published rubric be used?

IV. ATTACH A DETAILED SYLLABUS

V. SYLLABUS CHECKLIST

Courses that offer students General Education and/or Writing Requirement credit must provide clear and explicit information for the students about the classification and requirements.

A.) For courses with a **General Education** classification, the syllabus should include:

- ■ Statement of the General Education Purpose of the Course with attention to the General Education Classification requested
- ■ List of assigned General Education Student Learning Outcomes
- ■ List of any other relevant Student Learning Outcomes
- ■ List of required and optional texts
- ■ Weekly course schedule with sufficient detail (e.g. topics, assigned readings, other assignments, due dates)

B.) For courses with **Writing Requirement (WR)** classification, the syllabus should include:

- □ "The Writing Requirement ensures students both maintain their fluency in writing and use writing as a tool to facilitate learning."
- □ "Course grades now have two components: To receive writing credit, a student must receive a grade of "C" or higher and a satisfactory completion of the writing component of the course."
- □ A statement or statements indicating that the instructor will evaluate and provide feedback on the student's written assignments with respect to grammar, punctuation, usage of standard written English, clarity, coherence, and organization
- □ Assignment word counts, page lengths, submission deadlines and feedback dates

Additionally, the syllabus must clearly show that the course meets the WR to

- □ Evaluate [2,000/4,000/6,000] written words in assignments during the semester
- □ Provide all feedback on assignments prior to the last class meeting

Important note: The following types of writing assignments **CANNOT** be used to meet the WR: teamwork, exam essay questions, take-home exams, and informal, ungraded writing assignments.

VI. SUBMISSION AND APPROVALS

Department Contact:

Contact Name: Melanie Veige

Phone 352-392-0518 Email melveige@chem.ufl.edu

College Contact:

College Name: _____

College Contact Name: _____

Phone _____ Email _____

CONSUMER CHEMISTRY

CHM 1083

3 CREDITS

SUMMER B, 2013

"In the fields of observation, chance favors only the prepared mind." (Louis Pasteur)

ONLINE CLASS

INSTRUCTOR: Melanie Veige

CLB C130B
melveige@chem.ufl.edu or "Instructor Role" in e-Learning
(352) 392-0518

OFFICE HOURS: TBA

COURSE TA: TBA

COURSE WEBSITE: http://lss.at.ufl.edu

COURSE DESCRIPTION: CHM 1083 is a terminal general education course (Classification P) for non-science students that presents the basic concepts of chemistry and examines the role of chemistry in both consumer products and the environment. This course meets pre-professional requirements in certain areas of the College of Agricultural and Life Sciences. (P)

PREREQUISITE KNOWLEDGE AND SKILLS: High school algebra is necessary.

COURSE COMMUNICATIONS: General course questions should be posted to the discussion board in e-Learning. The course TA or instructor will respond to Discussion posts within 24 h during the work week (allow 48 h over the weekend). Private or grade-related questions should be sent to "Instructor Role" via the Mail function in e-Learning.

REQUIRED TEXT: Chemistry in Context, 7th ed., by American Chemical Society.

ADDITIONAL REQUIREMENTS: A computer with webcam, microphone, and speakers is required. You will also need a nonprogrammable calculator.

PURPOSE OF COURSE: By the end of this course it is expected that students will have a fundamental understanding of the chemistry of the major environmental threats to air and water, including ozone depletion, smog, global climate change, and others.

GENERAL EDUCATION: CHM 1083, Consumer Chemistry, is a General Education physical science (P) course. The topics covered include not only classification of matter and nomenclature, but also broader chemical concepts germane to current issues facing society and the environment. We will discuss such varied topics as carbon footprint, personal radiation dose, and nutrition, and relate them to a discussion of classification of matter (carbon is an element and is a nonmetal), of electromagnetic radiation (radio waves, ultraviolet waves and the UV index), and of biologically important molecules (what is a functional group).

COURSE AND GENERAL EDUCATION STUDENT LEARNING OBJECTIVES: The student will:

- Demonstrate an understanding of basic chemical concepts, including classification of matter.
- Gain an understanding of the vocabulary of chemistry, which permeates society on food and product labels, in regards to pollution and climate change, and in the discussion of sustainable energy.
- Demonstrate the ability to apply chemistry-centered mathematical concepts effectively to real-world solutions; for example, calculating Calories in an item of food, and using half-life to assess potential dangers of radioactive isotopes.
- Communicate scientific findings clearly and effectively using oral, written or graphic forms. The student will prepare a report based on a laboratory exercise consisting of a graph and written analysis. In this task, the student will also formulate and test a hypothesis, and apply critical thinking in an experimental simulation and evaluate its outcome.
- Distill and analyze information from multiple perspectives, including that presented in tabular or graphic format. The student will apply logical reasoning skills in this task.
- Describe the chemistry of the major environmental threats to air and water, including ozone depletion, smog, global climate change, groundwater pollution, and energy production.

INSTRUCTIONAL METHODS: The course material is delivered via recorded lectures by your instructor, through other instructional videos (PBS, NASA, etc.), and by key readings in the text.

COURSE POLICIES:

QUIZ/EXAM POLICY: The midterm and cumulative final exam will be administered via e-Learning using Assessments. These exams are remotely proctored by ProctorU. It is your responsibility to register with ProctorU and reserve an exam time within the window specified in the Due Dates schedule at least 5 days prior to each exam date. To register go to http://go.proctoru.com. If you have used ProctorU previously, you should already be registered. If you fail to make a reservation in advance, you will incur a late fee, and may have difficulty obtaining a desirable exam time. Same-day appointments are not permitted. Failure to reserve a time slot in advance is not an acceptable reason for a make-up. If you have technical difficulties, call ProctorU at 205-870-8122.

MAKE-UP POLICY: A conflict exam will be offered to those students with valid conflicts (https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx). It is your responsibility to identify yourself as requiring such accommodation at least one week prior to the exam. If, during the exam, you experience technical difficulties with ProctorU, the correct course of action is to contact ProctorU at 205-870-8122. If you experience technical difficulties with e-Learning, contact the Help Desk immediately at 392-HELP. A ticket number will be created to log the time and nature of the problem. You must contact your instructor via e-mail within 24 h of the technical difficulty to be considered for a make-up. The ticket number will be required by your instructor should a make-up exam be requested.

ASSIGNMENT POLICY: There are both individual and group assignments in this course. It is expected that all members of the group will contribute to these exercises; all members of the group will receive the same grade on these assignments. Individual assignments include homework exercises, a current events photo blog, discussion board posts, and tests/quizzes.

COURSE TECHNOLOGY: The student may require Adobe Acrobat Reader, Adobe Flash Player, Microsoft Silverlight and other software; there are free tutorials on many software applications you may encounter on Lynda.com. All UF students are expected to have reliable access to a computer; suggested configurations may be found here:

https://training.helpdesk.ufl.edu/computing.shtml. ProctorU has specific hardware/software requirements: http://www.proctoru.com/tech.php.

UF POLICIES:

UNIVERSITY POLICY ON ACCOMMODATING STUDENTS WITH DISABILITIES: Students requesting accommodation for disabilities must first register with the Dean of Students Office (http://www.dso.ufl.edu/drc/). The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. You must submit this documentation prior to submitting assignments or taking the quizzes or exams. Accommodations are not retroactive, therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations.

UNIVERSITY POLICY ON ACADEMIC MISCONDUCT: Academic honesty and integrity are fundamental values of the University community. Students should be sure that they understand the UF Student Honor Code at http://www.dso.ufl.edu/students.php.

NETIQUETTE: COMMUNICATION COURTESY: All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats. http://teach.ufl.edu/wp-content/uploads/2012/08/NetiquetteGuideforOnlineCourses.pdf

GETTING HELP:

For issues with technical difficulties for E-learning in Sakai, please contact the UF Help Desk at:

- Learning-support@ufl.edu
- (352) 392-HELP - select option 2
- https://lss.at.ufl.edu/help.shtml

** Any requests for make-ups due to technical issues MUST be accompanied by the ticket number received from LSS when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail your instructor within 24 hours of the technical difficulty if you wish to request a make-up.

Other resources are available at http://www.distance.ufl.edu/getting-help for:

- Counseling and Wellness resources

- Disability resources
- Resources for handling student concerns and complaints
- Library Help Desk support

Should you have any complaints with your experience in this course please visit http://www.distance.ufl.edu/student-complaints to submit a complaint.

GRADING POLICIES:

Should a student wish to dispute any grade received in this class (other than simple addition errors), the dispute must be in writing and be submitted to the instructor within one week of receiving the grade.

GRADE DISTRIBUTION:

1. Homework (10%)
2. Online Quizzes (15%)
   Time-limited end-of-chapter quizzes will be delivered in a multiple-choice and fill-in-the-blank format through Assessments in e-Learning.
3. Proctored (online) Midterm (17.5%) and Final (35%) Exam
   The midterm and final exam (timed, multiple-choice and fill-in-the-blank format) will be delivered through Assessments in e-Learning and will be proctored remotely by ProctorU.
4. Current Events Analysis (2.5%)
   The student will maintain a photo blog board consisting of at least 30 pins of recent news or other articles on course topics (3 posts for each of 10 topics), accompanied by a comment as to the relevance of the item to the topic in question.
5. Class Participation (5%)
   The student will regularly (approximately 2x per week) post comments/insight on assigned topics to the Discussion Board in e-Learning. The posts will be visible to each student's group within e-Learning (approximately 10 students per group).
6. Group Work (15%)
   There will be one written assignment (6.25%) submitted, and one laboratory exercise report (6.25%) stemming from a laboratory exercise (simulation), each submitted by a group of students.

Each group will collaborate on a group mapping activity (2.5%) to map locations relevant to the course material, including sites of nuclear waste storage, sites of genetically modified crops, and locations with poor visibility, etc.

GRADING SCALE:

A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E
87%	84	80	77	74	70	67	64	60	56	54	<54

For more information:
https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx#hgrades
http://www.isis.ufl.edu/minusgrades.html]

COURSE SCHEDULE:

FINAL EXAM: August 8-9th, 2013 (Reserve your time with ProctorU)

DETAILED DUE DATE/GRADING SCHEDULE ("EC" = EXTRA CREDIT)

Week	Date	Module	Topics	Assignments	Points (1000)
1	July 1	1: Air	Chapter 1: The Air we Breathe	(Drop-Add period) Read syllabus and take syllabus quiz	5 EC
	2				
	3			Submit group leader for map activities	5 EC
	4		Chapter 2: Protecting the Ozone Layer	Map #1: everyone in the group maps 1 point with poor AQI, post a link on the DB (post #1)	DB: 3
					MAP: 25 total
				Photo blog #1: 3 posts with comments of recent news articles related to pollution; post a comment on the DB (post #2)	Blog: 2.5
					DB: 3
	5			DB posting #3: Play SmogCity2 and post comments	4
	6				
	7			HW#1 due (Chapter 1) Online quiz Chapter 1	11 21
2	8			Map #2: everyone maps 1 point under the ozone hole;	

				Photo blog #2: 3 posts from recent news articles related to ozone hole or ozone depletion	2.5
				Survey #1	5 EC
	9		Chapter 3: Climate Change	DB posting #4: UV index where you are and do you take precautions	4
	10			HW#2 due	11
	11			Online quiz Chapter 2	21.5
	12	2: Water	Chapter 5: Water for Life	Map #3: everyone maps 1 point where climate change is evident;	
				DB posting #5: is global warming preventable, will the earth ever cool down to previous temperatures?	4
	13			Photo blog #3: 3 posts with comments from recent news articles about climate change or global warming	2.5
	14			DB posting #6: what's your carbon footprint?	4
				HW#3 due	11
				Written assignment #1 is due	62.5
3	15			Online quiz Chapter 3	21.5
	16			Photo blog #4: 3 posts from articles about water availability or quality	2.5
	17				
	18		Chapter 6: Acid Rain	Map #4: everyone maps location with poor water availability	
				DB posting #7: What is your water footprint?	4
	19	3: Energy	Chapter 4: Energy from Combustion	HW #4 is due (Chapter 5)	11
				DB #8: air quality with a link to a live webcam	4
	20			Photo blog #5: 3 articles about acid rain/ocean acidification	2.5
				Map #5: locations that frequently have poor visibility	
	21			Report from laboratory exercise is due	62.5
4	22			Midterm Exam (Proctored) on Chapters 5 & 6	175
	23			HW #5 is due (Chapter 6)	11
				Photo blog #6: 3 articles about energy generation	2.5

				Map #6: locations where new ways of harnessing energy are being tried	
	24				
	25		Chapter 7: Nuclear Fission	Online quiz Chapter 4 Survey #2 (Self-Assessment)	21.5 5 EC
	26			DB posting #9: what is your personal radiation dose?	4
	27			Map #7: locations with nuclear reactors	
				Photo blog #7: 3 articles related to nuclear power or weapons	2.5
	28			HW #6 (Chapter 4)	11
5	29	4: Molecules and Medicine	Chapter 10: Designing Drugs	DB posting #10: check the levels of radiation you experienced after Fukushima. Were you exposed to dangerous levels of a particular type of radiation?	4
	30			Online quiz Chapter 7	21.5
	31			Photo blog #8: 3 articles about drug development or approval or side effects	2.5
				Map #8: locations of pharmaceutical companies	
				HW #7 (Chapter 7)	11
	August 1		Chapter 11: Nutrition	DB posting #11: give a unique example of a drug and tell us what functional groups it contains	4
	2			Online quiz Chapter 10 Survey #3	21.5 5 EC
	3			Photo blog #9: 3 articles about nutrition, obesity, HFCS, etc.	2.5
	4			HW #8 (Chapter 10)	11
6	5			DB posting #12: keep a food diary for 36 h, and discuss whether your intake was in line with the USDA's recommendations	4
	6		Chapter 12: Genetic Engineering	Online quiz Chapter 11 Photo blog #10: 3 articles about genetic engineering	21.5 2.5
	7			Map #9: locations where GM foods are produced	
				DB posting #13: pro/con GM foods	4

				HW #9 (Chapter 11)	12
	8			Proctored final exam (cumulative)	350
	9				

Disclaimer: This syllabus represents my current plans and objectives. As we go through the semester, those plans may need to change to enhance the class learning opportunity. Such changes, communicated clearly, are not unusual and should be expected.

TOPIC READINGS, VIDEOS, EXERCISES:

Chapter 1: The Air We Breathe

Read:
Textbook Chapter 1
http://www.epa.gov/region07/air/quality/health.htm
http://earthobservatory.nasa.gov/IOTD/view.php?id=46823
http://www.epa.gov/iaq/ia-intro.html
http://www.epa.gov/eogapti1/course422/ap4.html
http://www.epa.gov/air/criteria.html
http://www.epa.gov/oaqps001/greenbk/mapnpoll.html
http://www.stateoftheair.org/2012/city-rankings/most-polluted-cities.html
http://www.stateoftheair.org/2012/health-risks/
http://www.earthobservatory.nasa.gov/IOTD/view.php?id=80375
http://earthobservatory.nasa.gov/Features/ChemistrySunlight/

Watch:
http://www.youtube.com/watch?v=Hx_yWFQvJT4

Chapter 2: Protecting the Ozone Layer

Read:
Textbook Chapter 2
http://earthobservatory.nasa.gov/Features/OzoneWeBreathe/ozone_we_breathe.php
http://earthobservatory.nasa.gov/Features/Aura/Aura.php
http://earthobservatory.nasa.gov/Features/Ozone/ozone.php
http://ozonewatch.gsfc.nasa.gov/
http://earthobservatory.nasa.gov/Features/WorldWithoutOzone/
http://earthobservatory.nasa.gov/Features/RemoteSensingAtmosphere/remote_sensing6.php

Watch:
http://www.youtube.com/watch?v=qUfVMogIdr8
http://earthobservatory.nasa.gov/Features/WorldOfChange/ozone.php
http://www.youtube.com/watch?v=CEHsFO-6m98
http://www.youtube.com/watch?v=7QGD-KiqKdE

http://www.youtube.com/watch?NR=1&v=J5ViCNJAkHg&feature=endscreen
http://www.youtube.com/watch?v=I1wrEvc2URE&feature=related
http://svs.gsfc.nasa.gov/vis/a000000/a000800/a000826/index.html
https://www.youtube.com/watch?v=cfXzwh3KadE
http://www.youtube.com/watch?v=KRcwNEEqp8A

Chapter 3: Climate Change

Read:
Textbook Chapter 3
http://www.epa.gov/climatechange/science/causes.html
http://www.pbs.org/wgbh/pages/frontline/environment/climate-of-doubt/timeline-the-politics-of-climate-change/
http://earthobservatory.nasa.gov/Features/GlobalWarming/page1.php
http://www.epa.gov/climatechange/ghgemissions/gases.html
http://www.epa.gov/climatechange/ghgemissions/global.html
http://ghgdata.epa.gov/ghgp/main.do

Watch:
http://www.nasa.gov/topics/earth/features/2012-temps.html
http://www.youtube.com/watch?v=3JX-ioSmNW8
http://www.youtube.com/watch?v=2_10jtPCjQw&list=SP38EB9C0BC54A9EE2&index=7
http://www.youtube.com/watch?v=ZzCA60WnoMk
http://earthobservatory.nasa.gov/IOTD/view.php?id=7839
http://earthobservatory.nasa.gov/Features/WorldOfChange/decadaltemp.php
http://www.youtube.com/watch?v=3JX-ioSmNW8&list=SP38EB9C0BC54A9EE2
http://www.cbc.ca/archives/categories/environment/climate-change/turning-up-the-heat-four-decades-of-climate-change/a-radical-idea.html
https://www.youtube.com/watch?v=OqsRD4HPtH0
http://www.youtube.com/watch?v=JRayIgKublg
http://www.youtube.com/watch?v=HrIr3xDhQ0E
http://www.youtube.com/watch?v=bbgUE04Y-Xg
http://www.youtube.com/watch?v=2_ZQRIsn2pA

Chapter 5: Water for Life

Read:
Textbook Chapter 5
http://earthobservatory.nasa.gov/IOTD/view.php?id=79228
http://www.whymap.org/whymap/EN/Downloads/Global_maps/globalmaps_node_en.html

Watch:
http://www.youtube.com/watch?v=HVT3Y3_gHGg

http://www.youtube.com/watch?v=tvai2XxrKUk
http://www.youtube.com/watch?v=9z14l51ISwg
http://www.epa.gov/ogwdw/watertreatmentplant/flash/index.html
http://www.youtube.com/watch?v=eIoSt0-K7wI
http://www.amnh.org/explore/science-bulletins/%28subcategory%29/24950
http://www.youtube.com/watch?v=nddXeGhZmbk&feature=youtu.be

Chapter 6: Acid Rain

Read:
Textbook Chapter 6
http://www.epa.gov/oar/airtrends/nitrogen.html#noloc
http://www.epa.gov/airtrends/sulfur.html

Watch:
http://www.youtube.com/watch?v=DP24BceOwt8
http://www.mhhe.com/biosci/genbio/tlw3/eBridge/Chp29/animations/ch29/1_nitrogen_cycle.swf
http://www.pmel.noaa.gov/co2/story/OA+Educational+Tools
http://www.youtube.com/watch?v=9EaLRcVdTbM&feature=channel_video_title
http://www.youtube.com/watch?v=5cqCvcX7buo&noredirect=1
http://www.amnh.org/explore/science-bulletins/%28watch%29/bio/documentaries/acid-oceans

Chapter 4: Energy from Combustion

Read:
Textbook Chapter 4
http://www.worldenergy.org/data/resources/resource/coal
http://www.bp.com/sectionbodycopy.do?categoryId=9037132&contentId=7069049#/Primary-Energy/Primary-energy-data-fueltype/?chartType=area&chartView=chart&regionID=none&countryID=none
http://energy.gov/maps/2009-energy-consumption-person
http://www.worldenergy.org/data/issues

Watch:
https://www.youtube.com/watch?v=20Vb6hlLQSg
https://www.youtube.com/watch?v=jk0WrtA8_T8
http://www.youtube.com/watch?v=VbIaK6PLrRM
http://www.pbs.org/wgbh/nova/tech/clean-air-technologies.html

Chapter 7: Nuclear Power

Read:

Textbook Chapter 7
http://www.epa.gov/radnet/radnet-data/index.html

Watch:
http://www.youtube.com/watch?v=If2AHeBRCk8
http://www.youtube.com/watch?v=yTkojROg-t8
http://www.youtube.com/watch?v=4OkR-B4BpvA
http://www.youtube.com/watch?v=udkQwW6aLik
http://video.pbs.org/video/1362880093/
http://www.youtube.com/watch?v=PKNbwcIaGng
http://www.youtube.com/watch?v=xX-4mtgLF7E&noredirect=1
http://www.youtube.com/watch?v=69UpMhUnEeY
http://www.youtube.com/watch?v=jS89td3gc8o
http://video.pbs.org/video/2220837749

Chapter 8: Drug Design

Read:
Textbook Chapter 8
http://articles.washingtonpost.com/2008-03-09/news/36881215_1_high-fructose-corn-syrup-corn-belt-hfcs
http://www.choosemyplate.gov/

Watch:
http://www.thenakedscientists.com/HTML/content/interviews/interview/1168/
http://science.discovery.com/tv-shows/greatest-discoveries/videos/100-greatest-discoveries-the-discovery-of-penicillin.htm
http://www.youtube.com/watch?v=C5ZK6nPPAbo
http://www.youtube.com/watch?v=DhxD6sVQEYc
http://www.youtube.com/watch?v=MMYqIn8W5J4
http://www.youtube.com/watch?v=H8WJ2KENlK0
http://www.youtube.com/watch?v=_zm_DyD6FJ0
http://www.youtube.com/watch?v=2Jgb_DpaQhM

Chapter 10: Genetic Engineering

Read:
Textbook Chapter 10

Watch:
http://www.youtube.com/watch?v=8kK2zwjRV0M
http://www.youtube.com/watch?v=qBfuVuelkoY&list=PL49BC5037B7AF5471&index=2
http://www.youtube.com/watch?v=zlqD4UWCuws
http://www.hhmi.org/biointeractive/dna/animations.html