• AREA B1: Physical Science – No Lab Component

See GE Handbook for information on each section of this form

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| Course Abbreviation and Number: GES 100 Course Title: The Physical Science Around Us | | | | | | |
|------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|-------------------------|--|--|--|
| | | Course Tide. The Fhysical Science Around Us | | | | |
| Number of Units: 3 | | | | | | |
| College or Program: | | Desired term of implementation: | Mode of Delivery: | | | |
| ☐CHABSS ⊠CSM ☐CE | CHHS COBA | ☐ Fall ☐ Spring | face to face | | | |
| □Other | | | ☐ hybrid☐fully on-line | | | |
| | | Summer Year: 2014 | iuny on-line | | | |
| Course Proposer (please pri | nt): Jose Mendoza | Email: jmendoza@csusm.edu | Submission | | | |
| | | | Date: | | | |
| | | | | | | |
| demonstrates how they are a primarily basic chemistry of subjects will require some r of three hours of lecture per | 1. Course Catalog Description: Introduces some of the basic principles and ideas of physical science and demonstrates how they are applicable to everyday experiences in the world. Fundamental ideas introduced are primarily basic chemistry concepts and principles that are covered from a conceptual viewpoint, although the subjects will require some mathematical knowledge. This class is intended for non-science majors consisting of three hours of lecture per week. | | | | | |
| | | ses certified for GE credit must cont | ain the following: | | | |
| Course description, co | ourse title and course num | nber | | | | |
| | | ion Area and student learning objectiv | | | | |
| course, linked to how students will meet these objectives through course activities/experiences | | | | | | |
| Topics or subjects cov | vered in the course | | | | | |
| Registration condition | ns | | | | | |
| Specifics relating to h | ow assignments meet the | writing requirement | | | | |
| | dule including readings | | | | | |
| | | | | | | |
| Grading components i | including relative weight | of assignments | | | | |
| | | | | | | |
| SIGNATURES | | | | | | |
| | | 2 1 | | | | |
| | | Meny | | | | |
| | <u>/2/14</u> | 5. | /3/14 | | | |
| Course Proposer Please note that the denartment | Date t will be required to report | Department Chair dassessment data to the GEC annually. | late | | | |
| i teuse note mui me uepuriment | i wiii be required to report (| | C Initial | | | |
| | Support Do not support* | S | Support Do not support* | | | |
| | | | | | | |
| Library Faculty Date | | Impacted Date | | | | |
| | | Discipline Chair | | | | |
| | | | . | | | |
| | Support Do not Support* | A | Approve Do not Approve | | | |
| I | . 🗆 🗆 | CEC Chair | | | | |
| Impacted Discipline Date Chair | | GEC Chair Date | | | | |

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* If the proposal is not supported, a memo describing the nature of the objection must be provided.

Course Coordinator: Phone: Email:

Part A: B1 Physical Science General Education Learning Outcomes (GELOs) related to course content. [Please type responses into the tables.]

| Physical Science GELOs this course will address: | Course content that addresses each GELO. | How will these GELOs be assessed? |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| B1.1 Students will explain accepted modern physical or chemical principles and theories, their areas of application, and their limitations. | Basic concepts addressed: 1) Atomic Theory and its application to the explanation of physical and chemical properties of matter, 2) Conservation of mass and balancing chemical equations, 3) Simple theories of chemical bonding used for predicting structures and properties of simple molecules and ionic compounds, 4) Elementary quantum mechanics to describe atomic structure, 5) Conservation of energy applied to physical and chemical changes, and 6) Common organic compounds and simple bio-molecules. | Students will be assigned problems in multiple homework assignments, quizzes and tests involving one or more of the learned concepts and expected to apply their knowledge to solving it, using analytical reasoning skills. Students will complete assignments during class time in which they will be expected to write solutions in a clear and logical fashion that are consistent with modern chemical principles and theories. |
| B1.2 Students will apply the discipline's customary methods to solve problems through data collection, critical evaluation of evidence, the application of quantitatively rich models, and /or employment of mathematical and computer analysis. | Quantitative knowledge about the amounts of reactant consumed and product generated during a chemical change using simple ratios. Interpret and evaluate experimental evidence related to environmental pollutants and their effects (pollutant emissions, sources and degradation of materials in the environment). | Students will be given problems to apply mass and energy relationships during a chemical change. For example, specific masses of substances supplied to calculate the final amount of chemical product that can be obtained or energy derived. When applicable, students will be asked to solve problems related to chemical changes in the natural environment. |
| B1.3 Students will be able to articulate what makes a good scientific theory, incorporating values of parsimony, agreement with experimental or observational evidence, and coherence with other mathematical or physical theories. | Atomic theory, simple bonding theory and elementary quantum mechanics will be presented in the context of experimental observations that prompted the development of these theories. | Students will be asked to explain why theories presented in the class are reliable enough to explain relevant problems presented in this course as well as examine their limitations. Students will be asked to draw simple electron dot structures from a chemical formula to predict molecular structure, polarity and intermolecular forces to understand macroscopic properties, then apply these theories to common organic compounds |

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| | | and bio-molecules |
|------------------------------------------|------------------------------------------|-------------------------------|
| B1.4 Students will be able to identify | Chemicals are presented in the context | Students will be expected to |
| areas in which ethics either (1) directs | of radioactivity, surface air pollution, | comment on the ethical |
| or limits physical science research or | acid rain, ozone depletion, global | implications of substances |
| (2) is informed by the products of this | warming, scarce natural resources, | discharged into the |
| research | waste disposal, consumer products | environment. For example, an |
| | and nutrition to understand their | analysis of society energy |
| | impact on society and value judgments | demand for fossil fuels and |
| | that are made to evaluate the | resulting greenhouse gas |
| | appropriateness of these substances in | emissions. They will be asked |
| | the natural environment. | to consider the ethical |
| | | implications by applying |
| | | learned chemical concepts and |
| | | analytical reasoning skills. |

Part B: General Education Learning Outcomes required of all GE courses related to course content:

| GE Outcomes required of <u>all</u> Courses | Course content that addresses each GE outcome? | How will these GELOs be assessed? |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Students will communicate effectively in writing to various audiences. (writing) | In-class exercise problems will require students to explain their thinking in detail. Students will complete essay-like writing assignments about chemistry in the context of current environmental and consumer issues. | Students will be asked to solve and submit exercise problems during class time. Students will be expected to write explanations to problems and defend their answers. Essaylike writing assignments will require students to apply learned scientific theories and concepts to answer questions about pollution, consumer products, energy production, |
| Students will think critically and analytically about an issue, idea or problem. (critical thinking) | Problems and assignments require integrating many aspects of the course material. Student will need to determine what is being asked of them and consider the problem solving strategies to reach a solution. | climate change and diet. In-class exercises are designed for group work and will require students to use scientific thinking to express problem solutions in a logical way. Students will be asked to distinguish between common misconceptions about the physical world that are unsupported by scientific study and scientific understandings which can be supported by experiments. |
| Students will find, evaluate and use information appropriate to the course and discipline. (Faculty are strongly encouraged to collaborate with their library faculty.) | Students will learn how to use a periodic table for information about atomic masses, atomic numbers, electron orbital occupancies and common modes of chemical bonding. Students will evaluate and use scientific information from multiple sources to apply chemistry concepts to questions about the environment, consumer products and health. | Students will be tested on their ability to interpret the periodic table. Students will be evaluated on their ability to accurately interpret scientific information that is consistent with accepted chemical theories and principles in the context of real-world experiences. |

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Part C: GE Programmatic Goals: The GE program aligns with CSUSM specific and LEAP Goals. All B1 courses must meet at least one of the LEAP Goals.

| GE Programmatic Goals | Course addresses this LEAP Goal: |
|------------------------------------------------------------|---------------------------------------------------|
| LEAP 1: Knowledge of Human Cultures and the | $\square No \boxtimes Yes$ |
| Physical and Natural World. | |
| LEAP 2: Intellectual and Practical Skills | \square No \square Yes |
| LEAP 3: Personal and Social Responsibility | \square No \square Yes |
| LEAP 4: Integrative Learning | $\square No \square Yes$ |
| CSUSM Specific Programmatic Goals | Course content that addresses the following CSUSM |
| | goals. Please explain, if applicable. |
| CSUSM 1: Exposure to and critical thinking about | No ☐Yes (please describe): |
| issues of diversity. | |
| CSUSM 2: Exposure to and critical thinking about the | $\square No \square Yes (please describe):$ |
| interrelatedness of peoples in local, national, and global | |
| contexts. | |

Part D: Course requirements to be met by the instructor.

| Course Requirements: | How will this requirement be met by the instructor? |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Course meets the All-University Writing requirement: A minimum of 2500 words of writing shall be required for 3+ unit courses. | Seven essay-like writing assignments and weekly inclass assignments will be graded on the extent to which they use and explain standard chemical terminology in a clear and objective style. |
| Courses shall include an evaluation of written work which assesses both content and writing proficiency, using a writing style and use of language that is appropriate for the sciences. | Writing assignments will be graded based on accurately portraying scientific ideas as well as evaluated for using language that effectively relates chemical concepts with assignment topics. Grammar and syntax are not graded unless the quality of the writing style impedes understanding content. |
| Courses should demonstrate to students that the applications of physical science principles and theories can lead to lifelong learning in science and to productive and satisfying life choices. | Students are presented with chemical and molecular concepts to questions that impact life such as the environment, common consumer products and general nutrition to provide the foundation for a lifelong understanding and awareness of science issues that can contribute to responsible and informed life choices. |
| Courses should demonstrate to students the ways in which science influences and is influenced by societies in both the past and the present. | Students are presented with the historical development of scientific theories such as Atomic Theory as well as how science impacts current issues such as preserving the ozone layer; mitigating climate change, conserving natural resources; safely disposing hazardous materials and developing chemical products to improve the human condition. |
| Courses should empower students to communicate effectively to others about scientific principles and their application to real-world problems. | Students will apply chemical and molecular concepts to questions that impact life such as air quality, climate, common consumer products and nutrition in class assignments and activities. Students will communicate their understanding in writing to the instructor and practice communicating their understanding to classmates in group-work sessions. |

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| Courses shall build the students' information literacy in | Students are expected to find data from the periodic |
|------------------------------------------------------------|-----------------------------------------------------------|
| a way that is appropriate to the field and level of the | table to predict atomic structure and chemical bonding. |
| course. | Students are expected to find and use experimental |
| | evidence to support questions about environmental |
| | issues and those related to health and nutrition that are |
| | consistent with accepted scientific theories and |
| | principles. |
| Courses shall require students to think critically so that | Students will be encouraged to work with other |
| they are able to distinguish scientific arguments from | students while completing in-class exercises to develop |
| pseudo-scientific myths or opinions. | critical thinking and to distinguish scientific arguments |
| | from pseudo-scientific myths or opinions in areas |
| | related to the environment, health and nutrition. |
| | Students will be expected to recognize common |
| | misconceptions of how nature should behave from |
| | understandings based on reliable scientific models in a |
| | logical manner to arrive at conclusions borne out by |
| | experimental evidence. |

The Physical Science Around Us GES 100, Spring 2014 Monday and Wednesday, 11:30 am – 12:45 pm

Instructor: Dr. Dickinson

Office Hours: Monday and Wednesday 10:00 am – 11:15 am and Thursday 11:00 – 11:50 am

in SCI2 Rm 351 or by appointment

E-mail: adickins@csusm.edu

Course Description: Introduces some of the basic principles and ideas of physical science and demonstrates how they are applicable to everyday experiences in the world. Fundamental ideas introduced are primarily from the discipline of chemistry. Although the subjects will require some mathematical knowledge, the scientific principles covered are from a conceptual viewpoint. This class is intended for non-science majors.

Course Objectives:

The goal of GES 100 is to give non-science students the resources to explore and the background to appreciate the molecular world and the fundamental role it plays in daily life. In addition, the course is designed to develop your understanding of major scientific issues affecting our society and environment from a chemistry based perspective. This is a one-semester course that assumes no prior knowledge of chemistry. It introduces basic qualitative concepts about atomic structure, the Periodic Table, radioactivity, ionic and covalent compounds, states of matter, energy, chemical reactions, aqueous solutions, organic functional groups, synthetic polymers, and bio-chemicals such as lipids, carbohydrates and proteins.

These chemical and molecular concepts are applied to questions about air pollution, ozone depletion, climate change, fossil fuels and energy alternatives, common consumer products and nutrition to provide a better understanding of the impact chemistry has on these important scientific topics. Hopefully, this will lead to a continued awareness and understanding about scientific issues important to our society, as well as becoming a more informed citizen and consumer.

GE student Learning Outcomes

- B1.1 Students will explain accepted modern physical or chemical principles and theories, their areas of application, and their limitations.
- B1.2 Students will apply the discipline's customary methods to solve problems through data collection, critical evaluation of evidence, the application of quantitatively rich models, and/or employment of mathematical and computer analysis.
- B1. 3 Students will be able to articulate what makes a good scientific theory, incorporating values of parsimony, agreement with experimental or observational evidence, and coherence with other mathematical or physical theories.

B1.4 Students will be able to identify areas in which ethics either (1) directs or limits physical science research or (2) is informed by the products of this research

Student Learning Outcomes:

Students are expected to develop mastery in the following areas and demonstrate the ability to:

- Measure distance, mass, volume, temperature and energy metric and SI units and make simple conversions within measurement systems. Distinguish between the physical and chemical properties of matter. Describe the three states of matter in terms of the Kinetic Molecular Theory. Describe Atomic Theory and its application to the properties of matter. Recognize the nuclear structure of any isotope and predict electronic structure of elements in the first three rows of the periodic table. Examine the periodic table and how the position of an element affects its atomic properties. Identify different types of radioactive decay, balance nuclear equations, calculate radioactive decay, interpret decay graphs and learn about the application of radioactivity in the generation of electricity, dating and nuclear medicine. Define and recognize different types of chemical bonding. Know how chemical bonding affects the properties of chemical compounds. Identify covalent and ionic compounds. Write the names and formulas of common compounds. Define the law of conservation of mass and apply to balancing simple chemical equations. Recognize different kinds of chemical reactions: combustion, acid/base, decomposition and precipitation type reactions. Use the concept of the mole and balanced chemical equations to relate the particle and macroscopic views of chemistry. Define the law of energy conservation and describe energy transformations during physical and chemical changes. Describe how fossil fuels and other energy alternatives meet societal energy demand. Describe the dual properties of light and how light interacts with matter. Understand the physical properties gases. Describe the composition and layered structure of earth's atmosphere. Understand the role greenhouse gases and ozone
- Describe the impact of human activity on the atmosphere. Recognize compounds and reactions that contribute to surface air pollution, ozone depletion and global warming.
- Draw simple electron dot structures of covalent molecules to predict molecular shape and polarity
- Distinguish different types of intermolecular attractive forces and their influence on

- properties such boiling point, vapor pressure and water solubility.
- Categorize solutes in aqueous solution (electrolytes and non-electrolyte) and describe solubility. Define various measures of concentration.
- Recognize the most common organic functional groups and describe how these dictate the properties of organic compounds in consumer items such as perfumes, soaps, sunscreens, prescription drugs and synthetic plastics.
- Recognize common bio-molecules (carbohydrates, lipids and proteins) and describe their basic biological functions and role in human nutrition.
- Integrate basic chemistry concepts in a societal and environmental context.

Required Course Materials:

Tro, Chemistry in Focus: A Molecular View of Our World (5th edition). Use the following URL to purchase the e-book and accompanying Online Web Learning (OWL) homework system: http://www.cengagebrain.com/shop/isbn/978-1-133-94110-1. This will give you instant access to OWL and the full e-book for a six-month term.

Bring a copy of the Periodic Table provided on the course website to every class. We will refer to the Periodic Table throughout the semester. Purchase a green book for assignments completed during class time.

In Class Activities:

There are weekly in-class exercises that are designed to reinforce lecture topics. These exercises are completed and reviewed during class time. You are encouraged to work with other students while completing your class work. This is an excellent opportunity to practice solving problems, ask questions, learn from your peers and prepare for quizzes and tests. Some of the solutions are recorded in your green book and collected at the end of the each class. Green book responses are graded for completion and accuracy (2 points each assignment).

The remaining solved worksheet problems are collected on the day of each scheduled exam for **extra credit**. These worksheets contain practice problems similar to OWL homework and questions found on quizzes and tests. **No make-up or late submissions will be accepted.**

Chemistry in Context Assignments:

Recent articles, audio recordings and films related to topics covered in class are assigned for you to read, listen to or view accompanied by a short writing assignment (5 points each). Due dates for these seven assignments are listed in the course schedule on the last page of the syllabus. Assignments will be submitted to TURNITIN on the course website. **No late assignments will be accepted**.

Responses will be evaluated based on the completeness and correctness of your submissions.

Your comments need to be well written, correct grammar or syntax are not graded but if they impede the understanding of the content, then the quality of your written assignment is diminished and you will lose points.

Quizzes:

There will be 9 quizzes (most Wednesdays). Quizzes (5 points each) are given the first 5 minutes of class. Absolutely no cell phones, computers, iPods, iPads, tablets or any other electronic device will be allowed except a calculator. If any of these devices are in sight during the quiz (desk top, floor, lap,...), then a zero will be assigned as the quiz score.

Your top 8 quiz scores will be included as part of your final grade. The lowest quiz score will count as **extra credit**. A missed quiz will receive zero points and may count as your dropped quiz score. If you arrive late, no extra time will be given to complete the quiz. **Absolutely NO make up quizzes will be given.**

Homework Assignments:

OWL (Online Web Learning) is an online homework system. OWL homework assignments are a required component (16% of your total grade) for this class. There are weekly on-line homework assignments that are designed to reinforce lecture topics to improve learning. Chemistry is learned best with practice. OWL helps you practice the course material while providing immediate feedback and further guidance. Homework assignments and due dates are listed in the course schedule on the last page.

Your homework grade is based on the percent of required questions answered correctly. If you miss a question or don't understand a topic, OWL provides an explanation. Then OWL continues to ask similar questions until you demonstrate that you learned the topic by answering correctly. It is possible to receive full credit (100%) for each OWL homework assignment as long as you keep trying and don't give up! You have as many attempts as needed and there is no time limit to complete each assignment prior to the due date. OWL assignments are due by mid-night every Tuesday unless indicated otherwise. **No late assignments are accepted**.

As you work to complete each OWL assignment, there are practice assessments at the end of each unit to help you review unit topics and test your retention and comprehension that are extra credit. It is possible to earn **20 points of extra credit** in this manner. In addition, there are optional tutorials, simulations and interactive questions to help you learn and understand material presented in this class. These questions are NOT included in your homework grade, but provide an excellent alternative resource to illustrate concepts and present problem solving strategies.

Tests:

There will be four short tests (50 points each). These tests will be given the last 40 minutes of class. You may use one 3×5 index card of hand written notes (front and back). No cell

phones, computers, iPods, iPads, tablets or other electronic devices will be allowed except a calculator. If any of these other devices are in view (desk top, floor, lap, etc....), then a zero will be assigned as the test score. **Absolutely NO make-up tests will be given unless you have missed one exam AND have a valid excuse in writing (severe illness, family emergencies, etc.).** You must notify the instructor <u>prior</u> to the test time (except in true emergencies). You may drop your lowest test score at the end of the semester including a zero due to an absence.

Final Exam:

The final exam (80 points) is comprehensive and will cover the entire semester. You may use one 3×5 index card of hand written notes (front and back). The date of the final exam is Monday May 12 (1:45 - 3:45 pm). Note that this time is somewhat different than the regular meeting time. Do not make plans that will cause you to miss this exam.

Attendance:

Regular attendance is highly encouraged since there are weekly in-class activities and assessments completed during class time. This is a large class, so please try to avoid arriving late or leaving early to minimize disruptions. Questions and discussion about class topics are always welcomed, but keep private conversations between students to a minimum. When using your computers, please be courteous and <u>limit your use to class related activities</u>. Please do not use your cell phones for calls or texting during class time. No electronic devices are allowed out during quizzes and exams.

Cougar Courses:

Virtually all course materials are available on the class *Cougar Courses* website. PowerPoint lecture notes are available as PDF files. I may modify these notes as I review them while preparing my lectures, but these lecture notes can be a very useful guide to reading the textbook, taking notes during class, completing in-class and OWL assignments, and studying for quizzes and tests. All course announcements, links, grades, assignments, TURNITIN, example tests and answer keys are available on the course website as well.

Grading:

This course will be graded based on the criteria found on below.

| Tests (3 @ 50 pts) | 150 points | 37.5% |
|----------------------------------|------------|-------|
| Quizzes (8 @ 5 pts) | 40 points | 10.0% |
| Final Exam | 80 points | 20.0% |
| In-Class Assignments | 30 points | 7.5% |
| OWL Homework | 65 points | 16.2% |
| Chemistry in Context (7 @ 5 pts) | 35 points | 8.8% |
| Total | 400 points | 100% |

Extra Credit: OWL homework (20 points)

Worksheets (10 points)

Guaranteed: A- >90%;

B- > 80%;

C > 70%;

D- > 60%;

F < 60%

You need at least a 70% (280 points) to earn a C grade. Grades are posted on *Cougar Courses* for your review throughout the semester. Please check your grades regularly. If you have any concerns about grades, please see me as they occur - NOT at the very end of the semester when it is too late to address them. Points can only be regained (even those resulting from my mistake) within 2 weeks of the date the assignment grade is posted on-line.

Academic Honesty:

All students are expected to maintain academic honesty. All written work and assignments must be your original work. Infractions include cheating on quizzes and tests, plagiarizing assignments or allowing other students to copy your work. All submitted work must be your own. All wording that is borrowed from other sources must display quotation marks and must have appropriate references to the original source. Disciplinary action may include the lowering of a grade and/or a failing grade on a test, quiz, writing assignment, exercise or the class as a whole. Students should be familiar with university policies and procedures concerning academic honesty as detailed in the university catalog.

Writing Requirement:

The University writing requirement will be satisfied by completing seven writing assignments about chemistry in the context of current environmental and consumer issues, and the in-class assignments completed throughout the semester.

Students with Disabilities:

Students with disabilities who require accommodation must be approved by the Office of Disabled Student Services (DSS). Please contact this office as soon as possible and you should meet with me during office hours (or other mutually agreeable time). The DSS office is located in Craven Hall 4300. Their telephone number is (760) 750- 4905.

Spring 2014 Reading and Assignment Schedule: Although every attempt will be made to follow the schedule given below, actual dates may change.

| Dates | Week | Reading Assignments | Quiz/Test Schedule (Wednesday) | OWL Assignments (Tuesday) |
|------------|------|------------------------------------------------------------|--------------------------------------|---------------------------------|
| 1/22 | 1 | Introduction | | |
| 1/27, 1/29 | 2 | Classifying Matter: 1.1 – 1.3, 1.7 – 1.10, 2.4 | | HW1 (1/28) |
| 2/3, 2/5 | 3 | Atoms: 3.1 – 3.11, 7.1 – 7.5 | Quiz 1 | HW2 (2/4) |
| | | CFL Assignment due Friday, Friday Feb 7 | | |
| 2/10, 2/12 | 4 | Radioactivity: 8.1, 8.3 – 8.11, 10.9 | Quiz 2 | HW3 (2/11) |
| 2/17, 2/19 | 5 | Chemical Compounds & Reactions: 4.1 – 4.8 | Test 1 | HW4 (2/18) |
| | | Radiation and Food Assignment due Friday, Feb 21 | | |
| 2/24, 2/26 | 6 | Air Pollution: 11.1, 11.5 – 11.8, 13.9 – 13.11, 9.10, 9.11 | Quiz 3 | HW5 (2/25) |

| 3/3, 3/5 | 7 | Chemical Bonding: 5.1 – 5.5 Sports Drink Assignment due Friday, March 7 | Quiz 4 | HW6 (3/4) |
|------------|----|--------------------------------------------------------------------------------------------------------|--------|-------------|
| 3/10, 3/12 | 8 | The Ozone Layer: 11.9 – 11.11, 15.7 Supplemental Reading | Test 2 | HW7 (3/11) |
| 3/17, 3/19 | 9 | Molecules and Intermolecular Forces: 5.6, 5.7, 12.3, 12.4 Ozone Assignment due Friday, March 21 | Quiz 5 | HW8 (3/18) |
| 3/24, 3/26 | 10 | Global Warming and The Greenhouse Effect: 9.12, pg 29 Supplemental Reading | Quiz 6 | HW9 (3/25) |
| 3/31 – 4/4 | | Spring Break | | |
| 4/7, 4/9 | 11 | Energy and Chemical Reactions: 9.1 – 9.5, 9.7 – 9.9 Extreme Ice Assignment due Friday April 11 | Test 3 | |
| 4/14, 4/16 | 12 | Fossil Fuels and Energy Alternatives: 10.1 – 10.10 | Quiz 7 | HW10 (4/15) |
| 4/21, 4/23 | 13 | Organic Chemistry: 6.1 – 6.4, 6.6 – 6.14, 18.10 Hydraulic Fracturing Assignment due Friday April 25 | Quiz 8 | HW11 (4/22) |
| 4/28, 4/30 | 14 | Polymers, Soaps and Perfumes: 12.5, 15.2, 15.9 – 15.11, 17.2, 17.11 Biochemistry: 16.2 and 16.3 | Test 4 | HW12 (4/29) |
| 5/5, 5/7 | 15 | Biochemistry: 16.1 – 16.6 Nutrition: 18.1 – 18.5 Restaurant Analysis due Friday May 9 | Quiz 9 | HW13 (5/9) |
| 5/12 | | Final Exam Monday May 12 at 1:45 – 3:45 pm | | |

Re: GE recertification of GES 100, GES 101,

Jocelyn Ahlers

Mon 5/5/2014 10:46 AM

To:Jose Mendoza < jmendoza@csusm.edu >;

Hi, Jose -

Thanks for getting back to me so quickly. I am happy to sign off on these courses!

Best,

Jocelyn

--

Jocelyn C. Ahlers

Chair, Liberal Studies Department

Professor of Linguistics

Liberal Studies Department

California State University, San Marcos

760-750-8014; [jahlers@csusm.edu]jahlers@csusm.edu

From: Jose Mendoza < <u>imendoza@csusm.edu</u>>

Date: Monday, May 5, 2014 10:45 AM **To:** Jocelyn Ahlers < jahlers@csusm.edu>

Subject: RE: GE recertification of GES 100, GES 101,

Hi Jocelyn,

The courses content is the same!

Thanks,

Jose

From: Jocelyn Ahlers

Sent: Monday, May 5, 2014 10:29 AM

To: Jose Mendoza

Subject: Re: GE recertification of GES 100, GES 101,

Dear Jose -

Can you let me know if the course content of either of these has changed significantly through this process, or if this is simply the standard recertification?

Thanks!

Jocelyn

--

Jocelyn C. Ahlers

1 of 2 5/5/2014 10:54 AM

Chair, Liberal Studies Department

Professor of Linguistics
Liberal Studies Department
California State University, San Marcos
760-750-8014; [jahlers@csusm.edu]jahlers@csusm.edu

From: Jose Mendoza < <u>imendoza@csusm.edu</u>>

Date: Monday, May 5, 2014 8:45 AM **To:** Jocelyn Ahlers < <u>jahlers@csusm.edu</u>>

Cc: Yvonne Meulemans <<u>ymeulema@csusm.edu</u>>, Talitha Matlin <<u>tmatlin@csusm.edu</u>>

Subject: GE recertification of GES 100, GES 101,

Dear Colleague,

As part of the recertification process for LDGE, we are required to obtain signatures or an email from all affecte d departments.

Please review the attached docs and let me know if you approve (or not) the recertification of GES 100 and GES 101 as LDGE courses.

Please also let me know if you have any questions.

Thanks,

Jose

2 of 2 5/5/2014 10:54 AM

Re: GE recertification of GES 100, GES 101,

Talitha Matlin

Wed 5/7/2014 9:59 AM

To:Jose Mendoza < jmendoza@csusm.edu >;

Cc:Yvonne Meulemans <ymeulema@csusm.edu>; Jocelyn Ahlers <jahlers@csusm.edu>;

Hi Jose,

GES 100 looks good to go and has the necessary approval from the library.

For GES 101, I think that the course actually does meet the requirements, but the language might need to be tweaked a bit. For the Information Literacy learning outcome (See under Part B, GELOs: "Students will find, evaluate and use information appropriate to the course and discipline"), the assignment that might work best as an assessment measure of this is the one mentioned in section B1.4 ("Students are asked to complete assignments to discuss about the pro and con about nuclear power.") In order to meet the Information Literacy learning outcome, it should be made explicit that students must locate information on their own on the topic and use it to support their argument for the assignment.

Please let me know if you have any questions. I'm happy to work with you/Karno on drafting the assignment language to meet the recert requirements.

Best, Talitha

From: Jose Mendoza < <u>imendoza@csusm.edu</u>>

Date: Monday, May 5, 2014 at 8:45 AM **To:** Jocelyn Ahlers < <u>jahlers@csusm.edu</u>>

Cc: Yvonne Meulemans <<u>ymeulema@csusm.edu</u>>, tmatlin <<u>tmatlin@csusm.edu</u>>

Subject: GE recertification of GES 100, GES 101,

Dear Colleague,

As part of the recertification process for LDGE, we are required to obtain signatures or an email from all affecte d departments.

Please review the attached docs and let me know if you approve (or not) the recertification of GES 100 and GES 101 as LDGE courses.

Please also let me know if you have any questions.

Thanks,

Jose

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