Teaching in the Twenty-First Century

1. What is the theme you propose for your group of courses? In what ways do you think this theme speaks to issues important to our freshman population? To the University’s mission?

Ask students who are entering credential programs when they decided they wanted to become teachers. Most will reply that they “always” wanted to be one, speaking with enthusiasm about that special teacher who first lit their imaginations. Teaching for the Twenty-First Century is designed for such students—that is, for freshmen who intend to make education their career goal. They will need to be well prepared and flexible, equipped with the knowledge to meet state credentialing requirements (e.g., the CBEST and CSET) and with the skills demanded by recent educational reforms (such as the Next Generation Science standards and the Common Core). The cluster will give them the foundation they need to progress smoothly and steadily toward their Bachelor’s degree, a credential program, and ultimately a teaching position in the public schools.

The cluster contributes to the University’s mission to “prepare students to apply their education to meaningful lifework, and to be socially responsible contributors to society.” Effective elementary education is the key to promoting children’s natural intellectual curiosity; it is one of the key factors encouraging upward social mobility and democratic principles. Because we will focus on both the skills and knowledge expected of future teachers, the cluster aligns with the University’s strategic commitment to “demonstrate our continuing record of leadership and innovation in higher education, focused on twenty-first century skills.”

2. List the three courses (prefix, number, title, units)

   GEOL 1000, Earth Systems Science (4 units)
   CHEM 1100, Introduction to College Chemistry (4 units)
   HIST 2040, Humanity, Science and Nature in History (4 units)

3. Explain how the theme will be used to integrate course content in each course. If appropriate, please describe how students will be involved in researching the theme and when in the year that will happen. (Describe the contribution of each discipline’s perspective on the theme that will help create a coherent learning experience for the students.) A well thought out commitment to student research in the cluster will be a bonus for consideration.

Teaching is the theme that will unify the courses in the cluster. While we don’t aim to teach pedagogy—that’s for our colleagues in TED—we all have experience in teacher preparation. Our courses cover specific topics mandated by the California Commission on Teacher Credentialing and so provide subject matter preparation for the CSET (Multiple Subject, California Subject Examinations for Teachers). More importantly, however, cluster instruction is intended to develop the critical thinking skills that will be required of teachers for the next generation. Computers have made access to facts relatively simple; however, they don’t teach analysis, which is essential to an understanding of the sciences and an appreciation of the humanities.

The cluster introduces two sciences (CHEM and GEOL) and joins them with a HIST course, all of which provide the content knowledge required of elementary school teachers. In preparing these courses, we have taken into consideration the California state standards as reflected by the MS CSET and recent educational reforms (Next Generation Science and the Common Core).
4. Explain how each course in the proposed learning community will support student learning of each of the cluster’s lower division general education area learning outcomes (passed by Academic Senate February 17, 2004). Please use the GE course application forms to address this question. (If the course has already been approved for GE credit, and the current application form was used, please attach a copy. If the course has not yet been approved for GE credit, the use of the application form will permit review for GE credit, even if the cluster application is not selected.

Pre-service elementary school teachers are required to take introductory courses in Geology, Chemistry and World Civilizations as part of their credentialing preparation, while students pursuing single subject credentials specialize in a particular field; however, all will be required to have familiarity with certain “anchor standards” (i.e., standards that continue from kindergarten through high school, albeit with increasing sophistication at each level). With classes of pre-service teachers, instructors will focus more deliberately on pedagogical issues as well as content in the cluster classes. Both GEOL and CHEM are already in the process of aligning their introductory courses to the new Next Generation Science Standards. The HIST course will bring in the reading standards (which in grades K-5 apply to science, language arts, and history/social studies) of the new Common Core, which stresses critical thinking and supporting oral and written arguments with evidence derived from close reading of texts. We have always expected those skills in college students; in this cluster, freshmen will work on developing their own skills and understanding with the consciousness that, in time, they will pass on what they have learned to their own students.

CHEM 1100 and GEOL 1000 have already been approved for GE credit in Areas B1, B3 and B5. Approved application forms attached. HIST 2040 is a new course. Please see attached GE course application form.

5. Please note: for mixed area learning communities (a mix of science and/or humanities and/or social science), courses must meet learning outcomes in each area covered by the learning community. For example, a learning community with a course in humanities, one in social science, and one in science must demonstrate that the learning outcomes in humanities, social science, and science are addressed by the relevant courses.

See attachments for learning outcomes for each course.

6. Attach course outlines for the three courses. Each course outline should indicate how the theme would be used in the course and any student activities that cross all three courses. (For example, will there be common reading(s) in the three courses? Will there be common assignments, or assignments on which students work the entire year? Will students keep a cluster portfolio? Will there be a common service learning experience for the students? etc.)

The two science classes will focus on the Next Generation Science standards and will be offered in Fall and Winter to provide students with the essential scientific foundation. The History course will be offered in Spring, when students will be expected to bring in both their science literacy and their understanding of historical development in the design and execution of their final project.
HIST 2040: HUMANITY, SCIENCE AND NATURE IN HISTORY

Course content:

In his class we will focus on a single, but very large issue: the relationship of humanity to the natural world. The issue has particular relevance in our own day. We are dealing with the effects of anthropogenic climate change. We have a problem with the allocation of scarce resources, from the mining of the metals used in the construction of our cell phones or the distribution of water to the disruption of natural habitats and the loss of biodiversity. While the individual manifestations are particular to the modern world, we will see that the basic issue is an old one: human beings have often felt that they were, or should be, a part of nature, and yet they felt alienated from it. Where do we fit in the natural scheme of things? As we will see, people in the past may not have had access to the same technologies we do, but they have wrestled with similar issues. We can examine their responses, which varied in different cultures and at different times, putting them into a historical perspective which will help illuminate the concerns of our own time.

Goals for the course:

In writing assignments and group discussions, students will:

- demonstrate their ability to read and comprehend significant primary source documents and to explain how they illustrate long-standing human concerns (HIST SLO 1, GE SLO 1)
- compare and contrast the cultural responses to perennial questions about proper gender relations, just governments, ethical standards, and religious beliefs (HIST SLO 5, GE SLO 1 and 4)
- assess the way that ideas about these issues have changed over time and in different historical periods (HIST SLO 2 and 5, GE SLO 2)
- employ the historical method in assessing and utilizing primary source documents to develop a term project on some aspect of humanity's historical relationship with the natural world (HIST SLO 3, GE SLO 4)

Texts:

There are two full-length books assigned for the course: Mary Shelley, *Frankenstein* (Dover Thrift Edition, 1994) and Margaret Atwood, *Oryx and Crake* (Anchor Reprint, 1994). You are also responsible for a number of shorter readings (Genesis, Wordsworth), internet readings (http://www.climate.gov/), and images, which are available on Blackboard. Please see course schedule for details. Bring assigned readings and images to class as print-outs or on cell
phones or other electronic devices on the day they are to be discussed.

**Grading:**

Your final grade will be based on four quizzes on the assigned reading material (15 points each), your participation in discussion (50 pts), two written assignments (50 pts each, see course schedule), and your final project (see below, 100 pts).

Make-ups on the quizzes will be allowed with written verification of extenuating circumstances (e.g., obituary notice, doctor’s excuse); otherwise there will be a five-point penalty. There will be a five-point deduction on any written assignment received more than one class period after the due date, and a ten-point deduction for papers or projects that are a week or more overdue.

**Term project:**

For your term project, you will address some aspect of the humanity/nature dilemma in a digital presentation: the big issue that you will address is the relationship of human beings in the natural world. What aspect of that issue and how you present it is entirely up to you. You should focus on a contemporary problem that concerns you—e.g. climate change or the effect of mining rare metals on a specific South American community—and look at it in historical context. You only have to meet the following criteria:

1) your presentation must be no longer than 10 minutes and be designed to introduce and explain your issue to other students
2) you must clearly articulate the issue you are presenting
3) you should take a reasoned position (your thesis)
4) you should support your position with evidence
5) where possible, you should demonstrate your familiarity with the relevant scientific principles derived from your study of the other courses in the Teaching for the Twenty-First Century cluster

**Academic dishonesty:**

Be aware that I do not tolerate plagiarism. I reserve the right to question you on anything you’ve written. Use your own words. Give credit where it is due. Plagiarists will fail the course. I will also file an Academic Dishonesty report.

By enrolling in this class the student agrees to uphold the standards of academic integrity described at http://www20.csueastbay.edu/academic/academic

Turnitin.com: A final draft of each paper must be submitted to Turnitin.com by the same date on which the paper is due. The class number is xxxxxx; the password is xxxxxx. NOTE: you will not receive a grade on your essays unless you comply with this requirement.

**Attendance:** You are expected to attend every class meeting. Poor attendance affect your participation grade and quite possibly your overall performance in this course.

**Disabilities:** Students who need disability-related accommodations should meet with me privately to discuss their needs. I will happily work with Accessibility Services (phone: 510-885-3868 at Hayward or 925-602-6716 at Concord; email: as@csueastbay.edu) to make appropriate arrangements.

COURSE SCHEDULE

Week 1: “Be fruitful and fill the earth.” Reading historical documents: critical thinking and the Common Core. Humanity and the beginnings of civilization: agriculture and herding. Divinity and nature east and west (China, Egypt/Mesopotamia, Greece) Assignment: Genesis (Creation, Babel, Noah).


Week 3: Man and Creator and the rediscovery of nature in the European Middle Ages and Renaissance (Natural law, St Francis, Renaissance philosophy and art). East Asian attitudes (e.g., Daoism in art and politics) in Heian Japan and Tang China.


Week 5: Project outline and completion schedule due. The nineteenth century. Industrial revolution. The Romantics (intro):

Week 6: Mary Shelley, Frankenstein. The Romantics, cont. The idea of Progress writing assignment #1: What, in Mary Shelley’s view, were the major issues posed by scientific advances of the early nineteenth century? (Don’t forget that there was no real Frankenstein or his monster.) What developments motivated her concern? Did she have a solution? Support your answer with examples from the text. Which of her concerns are still relevant today?

Week 7: The nineteenth century: alienation and subjugation: colonialism, “scientific” racism, realism in art and literature.


Week 9: Contemporary concerns: resource allocation (water, South American miners), climate change. Writing Assignment #2: Oryx and Crake. To what extent is Atwood’s dystopia consistent with current trends? Which aspects, if any, seem a realistic prediction? What seems in your view improbable? Why? Support your answer with examples from the text and contemporary evidence.

Week 10: Presentation of student projects.
Application for General Education Credit
for Lower Division Humanities Course (Area C2 or C3)

Course title__Humanity, Science and Nature in History___ Course number__HIST 2040_____
Maximum enrollment___30_________

Courses approved for general education credit must provide students with explicit instruction in the
approved student learning outcomes. Please be as specific as possible in your explanations, describing
topics, readings, assignments, activities and assessments that illustrate how the course supports
students’ acquisition of the learning outcomes. Remember, there may be no one on the review
committees who has any knowledge of your discipline. Attach the course syllabus and any assignments and/or
assessments needed to support your explanations.

Please use this template to address ALL of the following learning outcomes.

Letters: Courses in Letters examine significant written and/or oral texts of the creative intellect. The major goals
are: (a) to teach the critical examination of ideas and theories through the use of historical, linguistic, literary,
philosophical, and/or rhetorical approaches and methods; and (b) to encourage understanding of enduring human
concerns and the intellectual and cultural traditions within which they arise.

1. Students will demonstrate through oral and written work how foundational works in the humanities
illuminate enduring human concerns and the intellectual and cultural traditions within which these
concerns arise, including both classical and contemporary artists and/or theorists.

    Students will read historical primary sources and view classic works of art that reflect past
attitudes about the relationship of humanity and the natural world. Readings will include Genesis,
classical and early modern bucolic poetry, Mary Shelley’s Frankenstein and/or the Romantic poets,
and a modern dystopian novel such as Margaret Atwood’s Oryx and Crake. Art will include images
from the Tang dynasty, Heian Japan, the European Renaissance and nineteenth-century realism,
which reflect cultural attitudes toward humanity in nature.

2. Students will demonstrate a developing understanding of the interaction among historical and cultural
contexts, individual works, and the development of humanities over time.

    Course discussion and short written assignments will focus on the historical context of the
works listed in question 1 above and what they reveal about changing attitudes toward nature over
time.

3. Through oral and written work, students will demonstrate their ability to critically employ concepts,
theories, and methods of analysis used in the humanities to interpret and evaluate enduring human
concerns.

    Through discussions and written assignments, students will analyze the intended
messages and the unspoken attitudes reflected in the works they are studying. They will begin to
think in terms of cultural context, realizing that values and “truths” change over time in response
to contemporary concerns. They will understand that while some concerns are indeed enduring,
historically people have responded in different ways. For example, students will look at images of
Daoist landscapes (e.g., by Lu Guang and Shitao) as evidence of the Daoist understanding of
humanity’s place in the natural world. The longer assigned texts will encourage them to reflect on
human concerns about scientific capabilities from the perspective of the early nineteenth century (Shelley) and the present (Atwood).

4. Students will critically reflect on the formation of human goals and values, and will articulate an understanding of the creativity reflected in works of the humanities that influenced the formation of those values.

   Students’ final project will be a creative digital presentation that will take a historical perspective on some aspect of the problem of humanity and nature with contemporary relevance. Where possible, they will bring in their understanding of the relevant scientific principles acquired in earlier sections of this cluster. The format will be fairly open. Students might, for example, develop a digital lesson that discusses anthropogenic climate change in the context of the Industrial Revolution; alternatively, the Industrial Revolution might inspire them to look more deeply at the theme of alienation from nature as expressed by early nineteenth-century Romantics. Seventeenth-century skepticism and eighteenth-century confidence in enlightened reason both have analogs in twenty-first century thought.