General Education Course Information Sheet

Please submit this sheet for each proposed course

Department & Course Number Earth and Space Sciences 17 (ESS 17)

Course Title Dinosaurs and Their Relatives

Indicate if Seminar and/or Writing II course

1 Check the recommended GE foundation area(s) and subgroups(s) for this course

Foundations of the Arts and Humanities

- Literary and Cultural Analysis
- Philosophic and Linguistic Analysis
- Visual and Performance Arts Analysis and Practice

Foundations of Society and Culture

- Historical Analysis
- Social Analysis

Foundations of Scientific Inquiry

- Physical Science
  With Laboratory or Demonstration Component must be 5 units (or more) **X**
- Life Science
  With Laboratory or Demonstration Component must be 5 units (or more) **X**

2. Briefly describe the rationale for assignment to foundation area(s) and subgroup(s) chosen.

This course uses dinosaurs as a tool to teach the basics of how science gets done, as well as the core ideas in the fields of geology and biology, such as plate tectonics, evolution, and ecology. There are weekly labs, and a lab practical, using paleontological specimens to investigate particular points

3. "List faculty member(s) who will serve as instructor (give academic rank):
Anthony Friscia (Adj. Asst. Professor)

Do you intend to use graduate student instructors (TAs) in this course? Yes **X** No

If yes, please indicate the number of TAs **4**

4. Indicate when do you anticipate teaching this course over the next three years:

2012-2013	Fall		Winter	**280**	Spring	
	Enrollment		Enrollment		Enrollment	
2013-2014	Fall		Winter	**280**	Spring	
	Enrollment		Enrollment		Enrollment	
2014-2015	Fall		Winter	**280**	Spring	
	Enrollment		Enrollment		Enrollment	

5. GE Course Units

Is this an ***existing*** course that has been modified for inclusion in the new GE? Yes **X** No

If yes, provide a brief explanation of what has changed. The course has always has a lab component, and covered both physical and life sciences. The change is being made to more accurately reflect its content

Present Number of Units: 4 Proposed Number of Units: 5

6. Please present concise arguments for the GE principles applicable to this course.

❑ General Knowledge	This course uses dinosaurs as a tool to teach the basics of how science gets done, as well as the core ideas in the fields of geology and biology, such as plate tectonics, evolution, and ecology.
❑ Integrative Learning	Paleontology by definition is integrative, using methods and ideas from biology, geology, chemistry, physics, statistics, and history.
❑ Ethical Implications	Some discussion is had about ethics of collecting fossils on public lands and the permitting system used for collecting.
❑ Cultural Diversity	Not applicable.
❑ Critical Thinking	The laboratory requires students to integrate concepts from throughout the year and apply them to actual specimens.
❑ Rhetorical Effectiveness	Not applicable.
❑ Problem-solving	Not Applicable.
❑ Library & Information Literacy	Not Applicable.

(A) STUDENT CONTACT PER WEEK (if not applicable write N/A)

1.	Lecture:	**2.5**	(hours)
2.	Discussion Section:		(hours)
3.	Labs:	**2**	(hours)
4.	Experiential (service learning, internships, other):		(hours)
5.	Field Trips:	**.5**	(hours)

(A) TOTAL Student Contact Per Week **5** **(HOURS)**

(B) OUT-OF-CLASS HOURS PER WEEK (if not applicable write N/A)

1.	General Review & Preparation:	**4.5**	(hours)
2.	Reading	**4.5**	(hours)
3.	Group Projects:		(hours)
4.	Preparation for Quizzes & Exams:	**1**	(hours)
5.	Information Literacy Exercises:		(hours)
6.	Written Assignments:		(hours)
7.	Research Activity:		(hours)

(B) TOTAL Out-of-class time per week **10** **(HOURS)**

GRAND TOTAL (A) + (B) must equal at least 15 hours/week **15** **(HOURS)**

Syllabus
ESS17: Dinosaurs and Their Relatives

COURSE DESCRIPTION: This course will introduce students the concepts in paleontology, including geological and biological topics, using dinosaurs as a model group. Geological topics will include deep time, radiometric dating and plate tectonics. Biological concepts will include comparative anatomy, evolution, classification, physiology, and ecological community structure. Dinosaurs make an excellent basis for studying these concepts, as they have been investigated in all these areas, by geologists and biologists alike.

Class web site: **Go through your my.ucla.edu page**

Bruincast: This class with be podcasted. Go to www.bruincast.ucla.edu to download the audio files of the lectures.
NB – This should NOT be taken as an excuse to skip class. You will be more engaged, and learn more, when you actually attend class, instead of listening to an audio file while working on another class, getting on facebook, watching a movie, etc. The podcast is intended for review pruposes…

Use the class web site to stay abreast of assignments, readings, and notices, as well as answers to exam and lab questions. Also, students are encouraged to use the course bulletin board linked to this site in order to post questions, and the chat facility for electronic office hours.

Lecture Schedule: Tu/Th 2:00 p.m. - 3:15 p.m. – Young CS50

Instructor: Anthony Friscia (Integrative Biology and Physiology)

Teaching Associates: John Cantwell, Dallon Stang, Evan Wolf, Ian Foster (Earth and Space Sciences)
(for contact information of all members of the teaching team, see the course web site)

Office Hours – The instructor and TAs will each hold individual office hours at the times posted on the class web site.

Lab/Discussion Sections
Each student is assigned to a Lab/Discussion section that meets for 2 hours per week, and attendance is mandatory. Labs meet in Geology 3820. There will be weekly activities and assignments associated with the labs.

Field trip – An optional field trip may be offered sometime in February

Textbooks (required) All available at the ASUCLA Bookstore:

1. Introduction to the Study of Dinosaurs by Anthony Martin, 2006, Blackwell Publishing, ISBN: 9781405134132
2. Dinosaur Odyssey by Scott Sampson, 2009, University of California Press, ISBN: 9780520269897

Grading and exams

Midterm exam ……	25%
Lab assignments ……	20%
Lab Exam ……..	15%
Participation/Quizzes …….	10%
Final Exam ……	30%
Total ……..	100%

- The exams will consist of a combination of multiple choice and short-answer questions.
- One or two online quizzes will be given each week and will cover the readings, as well as other course material. They will be due before the lectures. You can miss one quiz during the quarter. You will be notified what will be covered on the quizzes the week before.
- *Policy on make-up exams*: make-up exams are possible only in dire and documented circumstances, and only if the instructor is notified in advance.
- *Policy on late assignments*: 50% grade reduction if turned in within 1 week of due date.
- *Participation includes attendance in both lectures and labs, vocal participation in discussions, asking questions in lectures, attendance at office hours and review sessions, and appropriate use of the discussion forum. Not all of these activities are mandatory, but they all contribute to the participation grade.*

LECTURE SCHEDULE

Week 1

January 10, Tuesday: "What is a Dinosaur?"
Reading: Chapter 1 (Martin); Chapter 3 (Sampson)

January 12, Thursday: "History of Dinosaur Discovery"
Reading: Chapters 2 & 3 (Martin); Chapter 1 (Sampson)

Week 2

NO LABS – Martin Luther King, Jr. Day, Monday, January 16

January 17, Tuesday: "Plate Tectonics and Dating"
Reading: Chapter 4 (Martin); Chapter 4 (Sampson)

January 19, Thursday: "Life Before the Dinosaurs"
Reading: Chapter 2 (Sampson)

Week 3

January 24, Tuesday: "Dinosaur Origins and Anatomy"
Reading: Chapters 5 & 6 (pgs. 162-177) (Martin)

January 26, Thursday: "Dinosaur Evolution and Classification – Part 1"
Reading: Chapter 6 (pgs. 147-162) (Martin); Chapter 6 (Sampson)

Week 4

January 31, Tuesday: "Dinosaur Evolution and Classification – Part 2"
Reading: Chapter 6 (pgs. 147-162) (Martin); Chapter 6 (Sampson)

February 2, Thursday: "Dinosaur Ecology and Physiology"
Reading: Chapter 8 (pgs. 226-249) (Martin); Chapters 5, 11 (Sampson)

Week 5

February 7, Tuesday: "Theropods – The Meat-Eaters"
Reading: Chapter 9 (Martin); Chapters 8 & 9 (Sampson)

February 9, Thursday: **MIDTERM EXAM**

Week 6

February 14, Tuesday: "Eating Plants the Dinosaur Way(s)"
Reading: Chapter 10 (Martin); Chapter 7 (Sampson)

February 16, Thursday: "Horns and Spikes"
Reading: Chapters 12 & 15 (Martin)

Week 7

NO LABS – Presidents' Day Holiday: Monday, February 20

February 21, Tuesday: "Sex and the Single Dinosaur"
Reading: Chapters 8 (pgs. 217-226), 11; Chapter 10 (Sampson)

February 23, Thursday: "Mesozoic Communities – Part 1"
Reading: Chapter 12 (Sampson)

Week 8

February 28, Tuesday: "Mesozoic Communities – Part 2"
Reading: Chapters 13 & 14 (Sampson)

March 1, Thursday: "Reptiles in the Sea and Air"
Reading: online

Week 9

March 6, Tuesday: "Birds = Living Dinosaurs"
Reading: Chapter 15 (Martin)

March 8, Thursday: "Ichnology and Taphonomy – not just funny words"
Reading: Chapters 7 & 14 (Martin)

Week 10

March 13, Tuesday: "Extinction!"
Readings: Chapter 16 (Martin); Chapter 15 (Sampson)

March 15, Thursday: "After the Dinosaurs"
Reading: online

March 22, Thursday, 11:30am-2:30pm: Final Examination

List of Lab Activities:

Week 1: Fossils and Fossilization
Week 2: NO LABS
Week 3: Comparative Anatomy and Fossil Relationships
Week 4: Ornithischians
Week 5: Saurischians
Week 6: Jurassic Lark
Week 7: NO LABS
Week 8: Marine Reptiles and other Dinosaur Relatives
Week 9: Flight
Week 10: Lab Exam

Lab Times and TA Assignments:

Section 1A Monday 9-11 – Dallon Stang
Section 1B Monday 1-3 – Dallon Stang
Section 1C Monday 3-5 – John Cantwell
Section 1D Tuesday 8-10 – Evan Wolf
Section 1E Tuesday 10-12 – Evan Wolf
Section 1F Tuesday 12-2 – Evan Wolf
Section 1G Monday 11-1 – Dallon Stang
Section 1H Wednesday 12-2 – John Cantwell
Section 1I Wednesday 2-4 – John Cantwell
Section 1J Wednesday 9-11 – Ian Foster
Section 1K Thursday 9-11 – Ian Foster
Section 1L Thursday 11-1 – Ian Foster

UCLA Course Inventory Management System

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Course Revision Proposal

	Earth & Space Sciences 17 Dinosaurs and Their Relatives	
	Requested revisions that apply: ☐ Renumbering ☐ Title ☐ Format ☐ Requisites ☐ Units ☐ Grading ☐ Description	
	Multiple Listing: ☐ Add New ☐ Change Number ☐ Delete Concurrent Listing: ☐ Add New ☐ Change Number ☐ Delete	
	CURRENT	PROPOSED
Course Number	Earth & Space Sciences 17	Earth & Space Sciences 17
Title	Dinosaurs and Their Relatives	Dinosaurs and Their Relatives
Short Title	DINOSAURS&RELATIVES	DINOSAURS&RELATIVES
Units	Fixed: 4	Fixed: 4
Grading Basis	Letter grade or Passed/Not Passed	Letter grade or Passed/Not Passed
Instructional Format	Primary Format Lecture	Primary Format Lecture - 3 hours per week
	Secondary Format Laboratory	Secondary Format Laboratory - 2 hours per week
TIE Code	LECS - Lecture (Plus Supplementary Activity) [T]	LECS - Lecture (Plus Supplementary Activity) [T]
GE	No	Yes
Requisites	None	None
Description	Lecture, three hours; laboratory, two hours; one optional field trip. Designed for nonmajors. Exploration of biology, evolution, and extinction of dinosaurs and close relatives, in context of history of biosphere. Information from paleontology, biology, and geology. P/NP or letter grading.	Lecture, three hours; laboratory, two hours; one optional field trip. Designed for nonmajors. Exploration of biology, evolution, and extinction of dinosaurs and close relatives, in context of history of biosphere. Information from paleontology, biology, and geology. P/NP or letter grading.

Justification		This course should qualify for GE credit for Foundations of Scientific Inquiry, Life Science with Laboratory or Physical Science with Laboratory. It currently does not have such credit. A separate application and justification will be provided to the GE Governance Committee for approval.
Syllabus		File *SyllabusESS17W12.pdf* was previously uploaded. You may view the file by clicking on the file name.
Supplemental Information		The course description is not changed. It is a mistake that it does not carry the appropriate GE credit. The course is currently listed as only LS credit. It should have either LS or PS credit and both should be with laboratory/demonstration (L/D). This action is taken to rectify that mistake.
Effective Date	Fall 1992	Winter 2013
Department	Earth & Space Sciences	Earth & Space Sciences
Contact		Name KEVIN MCKEEGAN
Routing Help		E-mail kdm@argon.ess.ucla.edu

ROUTING STATUS

Role:	Department Chair or Designee - McKeegan, Kevin D. (kdm@argon.ess.ucla.edu) - 53580
Status:	Pending Action

Role:	FEC School Coordinator - Castillo, Myrna Dee Figurac (mcastillo@college.ucla.edu) - 45040
Status:	Returned for Additional Info on 6/6/2012 3:34:12 PM
Changes:	TIE Code
Comments:	Routing back to Kevin. If the course itself is not changing, no CIMS revision is necessary. Simply submit your GE proposal to me whenever it is ready.

Role:	Department Faculty Member - Mckeegan, Kevin D (kdm@argon.ess.ucla.edu) - 53580
Status:	Returned for Additional Info on 5/16/2012 5:32:00 PM
Changes:	TIE Code, Justification, Supplemental Info
Comments:	re-routed back to Myrna. Please see supplemental information regarding the GE credit for this course. Thanks.

Role:	L&S FEC Coordinator - Castillo, Myrna Dee Figurac (mcastillo@college.ucla.edu) - 45040
Status:	Returned for Additional Info on 5/16/2012 1:43:55 PM
Changes:	TIE Code
Comments:	Routing back to Kevin. The current and proposed course descriptions on this CIMS revision are identical. Please update to the new description you speak of in the justification.

Role:	Department Chair or Designee - Holbrook, Lauri Lynn (holbrook@ess.ucla.edu) - 53917
Status:	Approved on 5/14/2012 6:50:18 AM
Changes:	TIE Code
Comments:	Approved by designee Lauri Holbrook for ESS Chair Craig Manning.

Role:	Initiator/Submitter - Mckeegan, Kevin D (kdm@argon.ess.ucla.edu) - 53580
Status:	Submitted on 5/11/2012 3:50:16 PM
Comments:	Initiated a Course Revision Proposal

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