For help screens, select a field and press F1 SECTION I. COURSE SUBMISSION INFORMATION	6 - F 1000 -
1. Course: (Enter proposed discipline, number & title here. If changing the number or title of an existing course, give old number of the course of the	RGF 12330
Discipline/No: GLG 289 Title: Dinosaurs for Educators	mber or title in box 4 below.)
Directive Tenti. 402	Oo not publish in Time Schedule Oo not publish in College Catalog
2. Type of Approval: (applies to both new courses and changes)  ☐ Full Approval ☐ Conditional Approval ☐ This proposal previously received conditional approval for the Term: ☐ Inactivation (Submit Sections I and II only.)  ☐ Type of Approval: (applies to both new course is being submitted for: (changes is being submitted for: (	tly to Section II.)
4. Change Information: (Check all that apply. Make proposed changes in Section III, Course Syllabus.)  Minor Changes  Course Discipline/Number (was	rere:) form.) hary Approval Form for Distance Distance Section.)
5. Rationale for changes:	
SECTION II. COURSE REVIEW INFORMATION AND SIGNATURES	
1. Department Review (To be completed by department chair; if recommendation is no, initial and return to prepare Will significant new resources be required?	1
Print: Dave Thomas  Faculty/Preparer  Print: Kathleen Butcher  Signature  Signature  Signature  Signature	Date: 6/30/6/
Department Chair	
2. Division Review (To be completed by division dean; if recommendation is no, initial and return with rationale a Will significant new resources be required?  yes no (If yes, have they been secured? yes no Is this a curricular priority for your division? yes no (Comment What is your estimate of projected enrollment?  And paper left Amidale states.	)
Recommendation Yes No Division Dean's Signature	8/72/0/ Date
3. Curriculum Committee Review (Attach additional comments if necessary.)  Recommendation Yes No Lygnar for Puth Hatcher  Curriculum Committee Chair's Signature	9/20/01 Date
4. Vice President for Instruction and Student Services Approval (Attach additional comments if necessary.)	,
Approval Yes No Vice resident's Signature	2/20/0/
og File ACS Code Catalog File Date 4/3/02-ft Ac	cess Date

SECTION III. COURSE SYLLABUS	

For help screens, select a field and press F1. A. COURSE DETAILS (discipline # and title will automatically be entered in 1 and 2 below upon saving or previewing) 1. Course Discipline & No.: GLG 289 2. Course Title: Dinosaurs for Educators 3. Course Description: This course is designed for future and present teachers to review definitions, old myths and new dinosaur theories. Dinosaur bones and other fossils will be used to understand the evolution, extinction and behavior of dinosaurs. Students will evaluate dinosaur related products, write lesson plans, make a presentation and learn how to clean and prepare dinosaur bones. Field trips are required. 5. Class Capacity: 30 4. Credit Hours: 3 6. Course Options: If Variable credit, Give Range: (If nonstandard, attach Class Distance learning (Attach preliminary distance Capacity Exception form.) approval form and Section Handout.) If repeatable for credit, how many Honors (Complete Part G.) times? P/NP Grading (Attach rationale.) Contact Hours per Semester in: Prerequisite(s): 9. Corequisite(s): (limit to 2) Lecture: GLG 202 Lab: Clinical: Experiential: Total Contact Hrs: 10. a. Course Purpose: b. Is this course a requirement for a c. Indicate schools to which you want **Program Specialty** program? Curriculum Services to send syllabus: Program Support (If transfer is approved, attach documentation.) Yes (specify the program(s) below) Nonprogram Specialty M EMU - GESCOOD (30rd) Transfer UM Enrichment Other MSUGGE Elective credit Basic Skills

**B. MAJOR INSTRUCTIONAL UNITS** A major instructional unit is a grouping of topics that naturally relate to one another. List in order the major instructional units. Add additional numbers as needed.

- 1. Dinosaur Hunters
- 2. Evolution, Phylogeny and Classification
- 3. Fossils, Sedimentary Environments and Geologic Time
- 4. The Origin of Dinosaurs
- 5. Theropod Dinosaurs
- 6. Sauropod Dinosaurs
- 7. Ornithischian Dinosaurs
- 8. Hot Blooded vs. Cold Blooded Dinosuars
- Dinosaurs and Birds
- 10. Dinosaur Extinction Theories
- 11. Writing Lesson Plans
- 12. Presenting Dinosaur Lessons to the Class

#### D. INSTRUCTIONAL OBJECTIVES AND CORE ELEMENTS SUPPORTED

DIRECTIONS: (These Units should match those listed in Section B.) Use student outcome based language. (Example: The student will develop and support a thesis in an essay.) If the objective is being used to directly support a core element, write the core element number in the box to the right. If needed, additional information on how the core element is to be met and/or assessed for accomplishment can be included under the objective. If desired you may add a section of "overall course objectives" which are not associated with a specific unit. This may be particularly helpful for addressing core elements.

#### Unit Objectives

**Core Elements** 

- # 1 Given an outline, students will be able to design and construct a lesson plan and present it to the class.
- #2 Given a chart of prehistoric animals, students will be able to distinguish dinosaurs from non-dinosaurs and provide two reasons for their distinction.
- #3 When given a model set of dinosaur bones, students will be able to reconstruct the skeleton, label all the bones, determine the order, family, genus and species of the dinosaur and specify whether it was an herbivore or carnivore.
- #4 When provided an outline with examples, students will be able to evaluate classroom related materials for scientific accuracy.
- # 5 Given artificially created dinosaur trackways, students will use them to mathematically calculate the speed and length of bipedal and quadrupedial dinosaurs.
- # 6 Using a circle compass, protractor and ruler, students will be able to determine the percentage of stereovision in humans and to determine which dinosaurs had stereo or nonstereovision.
- # 7 Given a set of dinosaur physical traits, students will organize and classify the traits into proper scientific orders, sub orders and genera.
- #8 When given models of dinosaurs made to a scale of 1:40, students will be able to mathematically calculate the actual weight, length and height of them.
- #9 After reading books, articles and viewing a film, students will be able to compare and contrast the evidence for cold-blooded vs. warm-blooded dinosaurs, the dinosaur-bird connection and the causes for dinosaur extinction.
- # 10 Given a list of Greek and Latin root words, students will interpret dinosaur names into English and use the list to create new names. They will also describe the criteria used to name dinosaurs.
- #11 Given fossils from various geologic time periods, students will organize by age, sketch, identify and classify them according to the five types of fossil preservation.
- # 12 After collecting fossils on a field trip, students will correctly identify and classify them.
- # 13 Students will be able to identify twenty-four different dinosaurs with 80% accuracy.
- #14 Students will visit a museum and complete a dinosaur related report.

### E. INSTRUCTIONAL METHODS AND EVALUATION

1. Instructional Methods: (Check the appropriate box Lecture/Discussion	Field Trips 1) UM Exibit Museum,
Clinical Instruction	Team Assignments
Self-Paced Learning	
Internet Instruction	
Computer Simulations	
On-Site Work Experience	Interactive TV
Other	
2. Evaluation Criteria:  Attendance	☑ Quizzes
Class Discussion	⊠ Tests
Papers	Midterm
Portfolio	Final Exam
□ Projects     □ Projects	Home Work
Reports	□ Presentations     □
Clinical/Work	Performances
Other	
3. Attendance Requirements: (For Certification or no	onevaluative purposes.)
Attendance is mandatary	
F. EQUIPMENT, FACILITIES, TEXTS, MATERIA  1. Special Equipment/Facilities: (Check the appropria   Lab equipment	ALS, AND SUPPLIES ate boxes and describe as needed.)  Testing Center
LRC Reserves	Student Competitions
⊠ Computers	Off-Campus Sites
CD ROM	Student Tutors
Field Trips College vechicles	Distance Learning Classroom
Other	

Author:	Spencer Lucas	Copyright Yr: 2000
Publisher:	McGraw-Hill	Est. Cost: \$70
Title:	Dinosaurs for Educators Course Pack (Required)	
Author:	Dave Thomas	Copyright Yr: Current
Publisher:	Dave Thomas	Est. Cost: \$15
		**************************************
Title:	The Dinosaur Data Book (Recommended)	
Author:	The Diagram Group	Copyright Yr: 1991
Publisher:	Gramercy Books	Est. Cost: \$12
		**************************************
Title:	Investigating Science with Dinosaurs (Recommendation	ded)
Author:	G. Munsart	Copyright Yr: 1993
Publisher:	Teacher Ideas Press	Est. Cost: \$20
Title:		
Author:		***************************************
Publisher:	***************************************	Est. Cost:
Other Texts		
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### EASTERN MICHIGAN UNIVERSITY

September 5, 2002

Lisa Nelson Washtenaw Community College 4800 East Huron River Drive P.O. Box D-1 Ann Arbor, MI 48106-1610

Dear Lisa,

I wanted to make a clarification regarding the transfer of GLG 289 Dinosaurs for Educators. This course transfers to EMU as ESSC 000 (General Earth Science Credit). However, this course cannot count in place of any required or elective course in Geology/Geography Department programs.

As always, feel free to contact me if you have any questions.

Sincerely,

Carol Evans

Transfer Equivalency Evaluator

Sent: 10/19/01



## WASHTENAW COMMUNITY COLLEGE

### Course Transfer Agreement

The Washtenaw Community College course listed below is being submitted for review for equivalency credit. Please review the attached syllabus and complete all of the items below indicating if the course is approved for equivalency credit.

Course Number & Name: GLG 289 Dinosaurs for Educators
Credits: 3
is vis not approved for transfer at <u>Eastern Michigan University</u>
The course above will transfer as Aental Transfer Credit Hours
Please describe what type of course this will transfer as: (GESC 000)
A Basic Skills Course
A General Elective Course
Other, Please explain:
Approved by:
Registrar/Director of Student Records Credit Evaluator Date

Please return to:
Curriculum & Articulation Services, SC 234
Washtenaw Community College
4800 East Huron River Drive
PO Box D-1

Ann Arbor, MI 48106-1610

Add: Transter Notebook +
Oglalus file
(mark on Sylvacus)

Subject: REgarding GLG 289

Date: Fri, 9 Nov 2001 13:34:51 -0500

From: "Karen O'connor" <adem12@pilot.msu.edu>

Organization: MICHIGAN STATE UNIVERSITY ENROLLMENT SERVICES

To: <pcygnar@wccnet.org>

Dear Ms. Cygnar,

I have granted 3 GLG gcu (elective) Michigan State University credits for your GLG 289 course "Dinosaurs for Educators".

Hope this helps! Thanks, Karen O'Connor MSU