

KENT STATE UNIVERSITY CERTIFICATION OF CURRICULUM PROPOSAL

Preparation Date **27-Nov-19** Curriculum Bulletin _____
 Effective Date **Fall 2019** Approved by EPC _____
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Department **GEOL**
 College **AS - Arts and Sciences**
 Degree **Minor (non degree)**
 Program Name **Paleontology** Program Banner Code **PGEO**
 Concentration(s) _____ Concentration(s) Banner Code(s) _____
 Proposal **Establish program**

Description of proposal:

This action is to create a new Minor in Geology entitled Paleontology. This would provide the benefit of some Paleontology and related curricula to those students who are pursuing majors outside of Geology (both science and non-science).

Does proposed revision change program's total credit hours? Yes No

Current total credit hours: _____ Proposed total credit hours _____


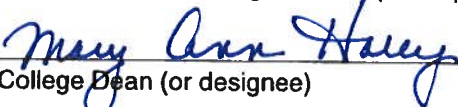
Describe impact on other programs, policies or procedures (e.g., duplication issues; enrollment and staffing considerations; need; audience; prerequisites; teacher education licensure):

The proposed Minor will have no fiscal or facilities impact. There will be no need for additional staff although course enrollments will probably increase a bit. The audience will be those students who are interested in Paleontology but do not want to enroll in the BA or BS Geology Major.

Units consulted (other departments, programs or campuses affected by this proposal):

BSCI, ANTH

REQUIRED ENDORSEMENTS

 Department Chair / School Director	<u>12/2/2019</u>
_____ Campus Dean (for Regional Campuses proposals)	____/____/____
 College Dean (or designee)	<u>12/13/19</u>
_____ Dean of Graduate Studies (for graduate proposals)	____/____/____
_____ Senior Vice President for Academic Affairs and Provost (or designee)	____/____/____

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Proposal Summary Establish Minor in Paleontology

Description of Action, Including Intended Effect

This action is to create a new minor in Geology entitled Paleontology. This would provide the benefit of some focused Paleontology and related curricula to those students who do not want to pursue a full major in Geology or Earth Science.

Impact on Other Programs, Course Offerings, Students, Faculty, Staff (e.g., duplication issues)

The curriculum for the Paleontology minor will involve no additional courses beyond what is available for the major in Geology.

Fiscal, Enrollment, Facilities and Staffing Considerations

The proposed Minor will have no fiscal or facilities impact. There will be no need for additional staff although course enrollments will probably increase a bit.

Evidence of Need and Sustainability if Establishing

Paleontology has been a strength in the Department of Geology for over 50 years. Paleontology is highly relevant and visible to the general public and of high interest to science, education, and environmental studies majors. Current scientific issues, such as the proposed 6th Mass Extinction and the naming of a new geological time period based upon human activity, the Anthropocene, have directed interest at the impact of humans on the biosphere. Current interest in genomics and evolutionary biology necessitate the need for an historical context based upon the fossil record. Thus, the new minor provides a venue for those with interest in Paleontology and evolution to pursue it in conjunction with complimentary majors in other areas.

Provisions for Phase-Out if Inactivating

NA

Timetable and Actions Required: *a chronology of actions required to approve the proposal with an anticipated implementation date for each action*

Fall 2019	Department Approval
Fall 2019	A&S CCC Approval
Fall 2019	EPC/Faculty Senate Approval
Fall 2020	Effective Date

Paleontology minor

Kent State University 2020 Catalog

College College of Arts and Sciences**Department** Department of Geology 221 McGilvrey Hall

Tel: 330-672-2680

E-mail: geology@kent.edu

Web: <https://www.kent.edu/geology>

The Paleontology minor prepares students to integrate concepts in geology and biology to address issues in conservation paleobiology, historical and current causes of extinctions, and evolutionary patterns on geological scales. Scientific knowledge about Paleontology is used to inform different areas of formal study such as biological sciences, conservation biology, anthropology, environmental studies, geography, and museum and natural history education. Students will gain broad knowledge of paleobiology and the interplay between the geosphere and the biosphere over geologic time as well as in the Anthropocene. Competencies focus on evolutionary processes over geologic time applied to interpretation of modern and historic floras and faunas and communication about these issues to policymakers and the public.

Fully offered at:

Kent Campus

Stark Campus

Admission Requirement: minimum 2.0 GPA is required to declare this minor.**Graduation Requirement:** minimum 2.0 GPA in minor is required.

Attribute Legend: **DD** Diversity-Domestic; **DG** Diversity-Global; **ELR** Experiential Learning; **KAD** Kent Core Additional; **KBS** Kent Core Basic Sciences; **KCM** Kent Core Composition; **KFA** Kent Core Fine Arts; **KHU** Kent Core Humanities; **KMC** Kent Core Mathematics and Critical Reasoning; **KSS** Kent Core Social Sciences; **WIC** Writing Intensive

Please read the sections in the University Catalog on Kent Core, diversity, writing-intensive and the experiential learning requirements.

Attribute	Course	Title	Credits
KBS	GEOL 11042	Earth and Life Through Time	3
	GEOL 11043	Earth and Life Through Time Lab	1
	GEOL 34061	Principles of Paleontology	4

Two courses from the following electives, one of which must be GEOL 6-7

ANTH	18630	Human Evolution	3
ANTH	48810	Human Paleontology	3
BSCI	30560	Invertebrate Zoology	4
BSCI	30275	Local Flora	3
BSCI	40163	Evolution	3
BSCI	40556	Vertebrate Zoology	4
GEOL	44070	Sedimentology and Stratigraphy	4
GEOL	41082	Mass Extinctions (new F20)	3
GEOL	44072	Marine Processes (new F20)	3
GEOL	41079	All About Dinosaurs	3
GEOL	44074	Paleoceanography	3

Total Credits**14-15**

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Hi Daniel

I checked in with Scott and Dave, and we all agree this look fine and you have Geography's support.
Thanks for checking in.

Jen

Dr. Jennifer Mapes
Associate Professor
Undergraduate Coordinator
Department of Geography

Hi Dan,

Thank you- this looks like an excellent addition. We have a human paleontology course (ANTH 48810) that might be a suitable elective to consider as well.

All best,

Mary Ann

Mary Ann Raghanti, Ph.D.

Professor and Chair

Department of Anthropology

Daniel

IMO, Local Flora is the best fit for Paleo of those two. It focuses on identification and taxonomy, and has a parallel content outline to Vert and Invert Zoo. I am pretty sure students can take Local Flora without Foundations.

Gen Plant Biol requires Foundations and doesn't cover nearly as much taxonomy and ID, so may not be as useful.

Andrea

Hi Daniel,

The UGCC has been discussing your minor proposals and feel that the BSCI electives that would do not have many pre-reqs would be a better fit.

For Plant sciences I am not certain how relevant they might be to Paleontology, but folks on the UGCC suggested these plant courses as electives:

BSCI 30270 GENERAL PLANT BIOLOGY

BSCI 30275 LOCAL FLORA (ELR)

Maybe Andrea can chime in on their fit.

They both list Foundation as another pre-req, but we can ask instructors whether they have approved students that had only met the Diversity pre-requisite.

Thanks for asking us our opinion,

Gail

From: CASE, ANDREA <acase@kent.edu>
Sent: Monday, December 2, 2019 5:05 PM
To: HOLM, DANIEL <dholm@kent.edu>
Cc: Singh, Kuldeep <ckuldeep@kent.edu>; FRAIZER, GAIL <gfrazier@kent.edu>
Subject: Re: Proposed minors in Geology

Hi Daniel,

Thanks. Just a couple of comments:

Paleo – the BSCI Evolution course has a LOT of hidden prereqs, as it requires Genetics, Biological Diversity, AND Foundations. Our UGCC recommended some elective courses in plant sciences, and we have several that require only Biological Diversity. I can ask which specific ones they recommend if you like.

Env Geol – there is a new GEOL course in Biogeochemistry that seems appropriate for this minor

Andrea

From: "HOLM, DANIEL" <dholm@kent.edu>
Date: Monday, December 2, 2019 at 10:44 AM
To: "CASE, ANDREA" <acase@kent.edu>
Cc: Kuldeep Chaudhary <ckuldeep@kent.edu>
Subject: Proposed minors in Geology

Hi Andrea:

Attached are finalized proposals for two new minors in Geology: Environmental Geology and Paleontology. Please send us an email regarding your approval of these proposed minors.

Many thanks, Daniel

Haley, Mary Ann

From: HOLM, DANIEL
Sent: Wednesday, December 04, 2019 4:00 PM
To: Haley, Mary Ann
Subject: More support for Paleontology minor

From: Meindl, Richard <rmeindl@kent.edu>
Sent: Wednesday, December 4, 2019 3:19 PM
To: HOLM, DANIEL <dholm@kent.edu>
Subject: New Minor

Hi Dan,

The biological anthropology faculty have examined your proposal for a new minor in Paleontology. We see no encroachment or overlap with any of our programs. We predict that Geology's new minor will be very successful, and you have our approval.

We are happy to see our freshman course ANTH 18630 ("Human Evolution") serving as one of the electives. We would point out that you might want to consider ANTH 48810 ("Human Paleontology") as well. It's taught regularly in Anthropology, and sometimes by a National Academy of Science Fellow, but all of the instructors have won very good reviews by students with different majors.

Best,

Rich