FORM B
REQUEST FOR ADDITION OF A NEW COURSE

I. Course Identification

a. Proposed prefix and number: GEOL 3415
b. Proposed title (30 Character Max): Paleontology of Invertebrates
c. Proposed catalog description including prerequisites and credit: Fundamental concepts, principles, and methods involved in deciphering the origin, development and extinction of past life as revealed through the study of invertebrate fossils will be the focus of this course. Prerequisite: GEOL 1404. Credit 4.

d. Companion course/Co-requisite: N/A
e. May course be repeated for credit? No
f. Maximum number of credit hours that can be earned: 4
g. Is course eligible to receive a grade of IP? No If yes, justification:
h. Is this course exempt from the 3-peat charge? No; If yes, justification:
i. Is the proposed course eligible to be offered as writing enhanced? (applies only to undergraduate courses) No ; if yes, attach Writing Enhancement Supplement.
j. Identify the majors and/or minors for which this course will be required: Geology majors
k. Identify the majors and/or minors for which this course may be an elective: Geology minors

II. Statement of Need and Program Compatibility

a. Justify the need for this course, including how the proposed course will support the present program curriculum.
The Geology Program is reviving a course that was dropped from the catalog because there was no one to teach the course. The Program has hired a faculty member capable of teaching the course. This course is often a prerequisite for the summer field course that is required for our majors. Not having this course has limited the field camp programs available to our majors. This course will also prepare students for advanced courses such as Stratigraphy and Sedimentology (GEOL 4400) and eventual employment within industry.

b. Explain how the addition of this course will directly or indirectly influence personnel rotation, inventory of courses, degree requirements, etc.
Stratigraphy and Sedimentology (GEOL 4400) will be offered Fall semesters and the proposed course will be offered Spring semesters. Both courses will be taught by the same faculty member. Students will take two freshman introductory geology courses, then Mineralogy (GEOL 3404) the following Fall, and this course the following Spring. This course will become part of the newly hired faculty member's regular course compliment. This will satisfy the prerequisites for GEOL 4400. This is part of the restructuring of the Geology curriculum with the intention of improving student preparation for advanced geology courses.

c. Identify courses with similar titles or similar contents currently offered in other departments. Explain how this course is different. Identify representatives from departments offering courses with similar titles or contents who have reviewed this proposal and summarize their responses.
None.

d. Identify who is likely to be the instructor(s) of this course.
Dr. Jonathan Sumrall

III. Course Content

a. List the course objectives as expected student outcomes. Objectives should be specific, measureable, and appropriate for the course level (i.e., graduate courses should not “introduce” or “identify”).
Upon completion of this course, the student will be able to:
1) Identify modes of fossilization;
2) Develop a critical understanding of evolution of invertebrates throughout geologic time;
3) Develop a basic understanding of invertebrate fossil classification;
4) Identify key fossil assemblages in the field.

b. Identify the proposed text(s) for the course (include full name of author, title, publisher and date). **If the text is more than 5 years old, please provide a justification.**

Author	Title And Publisher	Year
Harold L. Levin	Ancient Invertebrates and Their Living Relatives; Prentice Hall	1998
	The text is one of the hallmark textbooks on Invertebrate Paleontology. The text conveys paleontological concepts in an effective manner and with a language that geology undergraduates will be able to understand. In addition to the paleontological descriptions, Levin connects the major groups of invertebrates with their relatives found in the world today. This is lacking from many paleontological texts. Finally, Levin distills the information down to the phyla of invertebrates that left a significant fossil record. This approach helps form a solid paleontological foundation to be used in advanced geology courses.	

c. Using a 15-week class schedule, identify the topics to be covered during each week of the semester:

Week 1	Course Administration and Introduction to Invertebrates
Week 2	Meaning of Fossils, Early Life
Week 3	Protoctista
Week 4	Porifera
Week 5	Cnidaria
Week 6	Bryozoa
Week 7	Bryozoa / Brachiopoda
Week 8	Brachiopoda / Mollusca
Week 9	Mollusca
Week 10	Arthropoda
Week 11	Arthropoda
Week 12	Echinodermata
Week 13	Graptolites / Conodonts
Week 14	Exam 3 and Review for Final Exam
Week 15	Final Exam

IV. Library materials required for this course. This section is to help the Library review the adequacy of the current collection and plan for the future allocation of resources to better meet the needs of students enrolled in this course.

a. Please indicate the **types** of library resources you expect students to use for this course. Using a scale of 0 to 7, indicate the **extent of use** anticipated for each type of library resource selected. [0 = no use to 7 = extensive use]

Types of print/electronic library resources needed	**Extent of use anticipated (on a scale of 0 to 7)**
Scholarly, Peer-Reviewed Journals	5
Electronic Databases	5
Books	5
Trade Journals	0
Newspapers	0
Popular Magazines	0
Audio-Visual	0
Other (please specify)	0

b. Please identify **specific** resources that the Library needs to **acquire** in support of this course. These resources could include but are not limited to (both print and electronic) journals, electronic databases, books, etc. Please identify **new titles** that should be acquired or **subject areas** in the collection that may need to be **enhanced** or **updated**.

New titles needed or subject area to be enhanced:
None, key paleontology journals and resources already can be accessed at NGL.

V. Please identify equipment and technological resources required for this course. This section addresses the need for specialized laboratory equipment, computer software or other physical resources not generally available on campus.
None.

After this form has been completed, contact a Bibliographer/Librarian to complete the Library Collection Review (LCR) form. The LCR form should be attached to Form B before the proposal is forwarded to your College Curriculum Committee.

FORM B
—CHECK LIST—
Please check each box to verify review.

Overall

☒ The version of Form B currently posted on the Academic Affairs web site under Curriculum Forms is being used.

☒ Font is Times New Roman, 11 pt, no bold, no "all caps."

☒ The form has been proofed for spelling and grammar errors. Please note that the Form B template does not have grammar and spell check.

☒ Every question has a response. If there is not an affirmative response, use "N/A," "No," or "None" as appropriate.

Part I - V

☒ I.c. The catalog description is in complete sentences.

- ☒ Course catalog descriptions should be understandable to members outside the discipline. Avoid acronyms, abbreviations and terminology specific to the discipline not usually recognized by the general public. Commonly recognized terminology is acceptable, e.g., NASA, DNA, S Corporation.
- ☒ The final sentence of the catalog description lists any prerequisites, followed by credits, e.g., Prerequisite: IT 161. Credit 3.
- ☒ Use terms such as "basic," "fundamental," "introduction," and "overview" sparingly. Upper division courses should seldom be introductory.

☒ I.d. Companion courses require concurrent enrollment. This is a rare occurrence. If applicable, the companion course should be listed in the course description.

☒ I.i. If the course is proposed to be writing enhanced, course requirements listed in the 15-week class schedule should reflect writing assignments.

☒ II.b. There is nearly always an impact if a new course is added. Adding a new course may require that new faculty be hired or existing teaching assignments be modified, existing courses be deleted, or degree requirements be modified. Offer specific explanation of the modifications.

☒ II.c. Review SHSU course offerings to identify courses with similar titles or content. Err in favor of listing courses that potentially could overlap. Include documentation of discussions with appropriate departmental chairs to avoid duplication.

☒ III.b. Note that the form requires both Title and Publisher. Do not omit the publisher.

Provide a justification if the proposed texts are more than five years old. Check to see if proposed textbooks over two years old are out-of-print.

☒ III.c. If the course features differential content or directed study, provide a sample 15-week class schedule.

☒ IV. The library has been supplied with an electronic copy of this course request at least 2 weeks prior to the college submission deadline.

I certify that the Form B submitted to the University Curriculum Committee has been reviewed and complies with the stipulations on this checklist.

Brian Cooper	2/8/14	Marcus Gillespie	9/10/14
Department Chair Signature	Date	College Curriculum Committee Chair Signature	Date

Form Revised: February 2011 Date Created: 9/29/2014

LIBRARY COLLECTION REVIEW for PROPOSED COURSE

Proposed Course Prefix and Number: GEOL 3415
Proposed Title: Paleontology of Invertebrates

1. Results of the librarian's review of the adequacy of library holdings to support the proposed course content areas and assignments. Please be specific, and indicate whether the subject areas of the course require new expenditures, or are already included in the collection due to library support of courses with similar information needs.
   A search of the Library's catalog revealed an adequate collection of books, journals and government documents on invertebrate paleontology that will support this course. The Library's electronic resources will provide access to e-books and streaming video on various aspects of invertebrate paleontology. In addition to the full text databases, Academic Search Premier, and Omni Full-text, the Library provides access to GeoRef, an online bibliographic database covering geology and geography, and Web of Science.. The Library provides access to full text articles in journal collections such as ScienceDirect, Springer Online, and Wiley Online; a keyword search of these resources indicates they will support this course.

2. Identify additional resources that are likely to be needed, and the approximate cost of the materials.

3. Bibliographer's comments (state any concerns regarding the library's support of the course).
   The Library can support this course.

Signed: Ann H. Holder Date: 3/3/14
Bibliographer

Signed: Ann H. Holder Date: 3/3/14
Library Director

WRITING ENHANCEMENT SUPPLEMENT

Proposed Course Prefix and Number: GEOL 3415
Proposed Title: Paelontology of Invertebrates

Briefly explain how the writing requirement will be met in this course, keeping in mind that 50% or more of the course grade must be derived from written assignments, either formal or informal.

Reviewer's Notes:

Signed: _____ Date: _____
Writing Enhanced Committee Chair