



EXECUTIVE VICE PRESIDENT AND PROVOST
THE UNIVERSITY OF TEXAS AT AUSTIN

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February 23, 2016

Dr. Steven Leslie
Executive Vice Chancellor for Academic Affairs
The University of Texas System
OHH 304 (P4300)

Dear Dr. Leslie:

Enclosed for your approval are proposed changes to the Degrees and Programs section of the Jackson School of Geosciences chapter of the *Undergraduate Catalog 2016-2018* (D 14848-14854). The proposal was approved by the Faculty Council on February 17, 2016. The authority to grant final approval on this change resides with UT System.

Sincerely,

A handwritten signature in black ink, appearing to read "Judith H. Langlois".

Judith H. Langlois
Executive Vice President and Provost, *ad interim*

JHL: lac

Enclosure

cc: Gregory L. Fenves, President of the University

ec: Hillary Hart, Secretary, Office of the General Faculty
Carol Longoria, Assistant Deputy to the President
Richard Ketcham, Associate Dean, Jackson School of Geosciences
Nicole Evans, Assistant Dean, Jackson School of Geosciences
Brenda Schumann, Associate Registrar
IRRIS Team
Debbie Roberts, Executive Assistant, Office of the General Faculty
Victoria Cervantes, Sr. Administrative Associate, Office of the General Faculty
Suzanne Revisore, Assistant to the EVCAA, UT System



OFFICE OF THE FACULTY COUNCIL

THE UNIVERSITY OF TEXAS AT AUSTIN

P. O. BOX 7816 • Austin, TX 78713-7816

(512) 471-5934 • Fax: (512) 471-5984 • <http://www.utexas.edu/faculty/council>

February 18, 2016

Judith H. Langlois
Interim Executive Vice President and Provost
The University of Texas at Austin
MAI 201
Campus Mail Code: G1000

EXECUTIVE VICE PRESIDENT AND PROVOST UT AUSTIN	
REC'D	FEB 22 2016 ✓
REFER TO _____	
HANDLE _____	
COMMENT & RETURN _____	
FILE OR DISCARD _____	

Dear Dr. Langlois:

Enclosed for your consideration and action are changes to the Degrees and Programs section of the Jackson School of Geosciences chapter in the *Undergraduate Catalog, 2016-2018* (D 14848-14854). The legislation was classified as being of *exclusive* interest to only one college or school and was approved by the Faculty Council on a no-protest basis on February 17, 2016. The authority to grant final approval resides with UT System.

Please let me know if you have questions or if I can provide other information concerning this item.

Sincerely,

Hillary Hart, Secretary
General Faculty and Faculty Council

HH:dlr

Enclosures

xc: Gregory L. Fenves, president
Janet Dukerich, senior vice provost

ec: Carol Longoria, deputy to the president
Richard Ketcham, associate dean for academics, Jackson School of Geosciences
Nicole Evans, assistant dean for student services and administration, Jackson School of Geosciences
Carol Longoria, deputy to the president
Allen Walser, manager of reporting and analysis, IRRIS
Brenda Schumann, associate registrar
Lydia Cornell, program coordinator, provost's office
Michelle George, administrative manager for faculty affairs, provost's office

DOCUMENTS OF THE GENERAL FACULTY

PROPOSED CHANGES TO THE DEGREES AND PROGRAMS SECTION OF THE JACKSON SCHOOL OF GEOSCIENCES CHAPTER IN THE *UNDERGRADUATE CATALOG 2016-2018*

Dean Sharon Mosher in the Jackson School of Geosciences has filed with the secretary of the Faculty Council the following changes to the *Undergraduate Catalog, 2016-2018*. The secretary has classified this proposal as legislation of *exclusive* application and of primary interest only to a single college or school.

The Committee on Undergraduate Degree Program Review recommended approval of the changes on February 10, 2016, and forwarded the proposal to the Office of the General Faculty. The Faculty Council has the authority to approve this legislation on behalf of the General Faculty. The authority to grant final approval on this legislation resides with UT System.

If no objection is filed with the Office of the General Faculty by the date specified below, the legislation will be held to have been approved by the Faculty Council. If an objection is filed within the prescribed period, the legislation will be presented to the Faculty Council at its next meeting. The objection, with reasons, must be signed by a member of the Faculty Council.

To be counted, a protest must be received in the Office of the General Faculty by February 17, 2016.



Hillary Hart, Secretary
General Faculty and Faculty Council

PROPOSED CHANGES TO THE DEGREES AND PROGRAMS SECTION OF THE JACKSON SCHOOL OF GEOSCIENCES CHAPTER IN THE *UNDERGRADUATE CATALOG 2016-2018*

Type of Change Academic Change
 Degree Program Change (THECB form required)

Proposed classification Exclusive General Major

1. IF THE ANSWER TO ANY OF THE FOLLOWING QUESTIONS IS YES, THE COLLEGE MUST CONSULT LINDA DICKENS, DIRECTOR OF ACCREDITATION AND ASSESSMENT, TO DETERMINE IF SACS-COC APPROVAL IS REQUIRED.

- Is this a new degree program? Yes No
- Does the program offer courses that will be taught off campus? Yes No
- Will courses in this program be delivered electronically? Yes No

2. EXPLAIN CHANGE TO DEGREE PROGRAM AND GIVE A DETAILED RATIONALE FOR EACH INDIVIDUAL CHANGE:

Core Curriculum & Flags

Relocated content previously included under JSG, Applicability of Certain Courses to align with revised presentation of degree plan requirements. No proposed changes to intent or wording.

Foreign Language Requirement

Addition of foreign language requirement using language to map to the foreign language level proficiency course lists in the College of Liberal Arts per the recommendation provided by the University Legislative Review Committee.

Research Courses

Aligns courses for a departmental honors and non-honors undergraduate research/thesis. Courses to be added to the inventory are represented by #XX where # represents semester credit hours.

Correspondence and Extension Courses

Portion of content relocated to JSG, Academic Policy and Procedure, Concurrent Enrollment. No proposed changes to intent or details of procedure/policy.

Pass/Fail Courses

Information regarding pass/fail courses and degree requirements is referenced in the 2014-16 Undergraduate Catalog (p 269). It provides limited information about pass/fail courses and how they may or may not be counted towards geological sciences degree requirements. The proposed language clarifies the role of pass/fail courses in Jackson School degrees and provides a reference for students when needed.

Introductory paragraph (p. 271)

Changes to the introductory paragraph to clarify that the major among all 3 degree plans is environmental science, and that biological, geographical, or geological sciences are majors within the degree.

Prescribed work common to all colleges (p. 271)

Change in field and research experience components were made in response to ongoing concerns about the quality of the research experience in both EVS 331 (previously Prescribed Requirement 9) and EVS 371 (previously Prescribed Requirement 8b). Specifically, the material previously addressed by EVS 331 was divided into two component parts. The first of these parts consisted of traditional Research Methods subjects, and was incorporated into a newly developed 1-credit hour course for environmental science majors (EVS 121), now listed as part of Prescribed Requirement 8. The remaining two credit hours, previously associated with a research project conducted in EVS 331, were reallocated to the capstone senior research experience, now listed as Prescribed Requirement 9. This change will allow students to spend more time focusing on, preparing for, and completing a single year-long (5-credit hour) research

project (see Prescribed Requirement 9a). A year-long 5-credit hour course sequence was also created through which students can, under the supervision of a single faculty, work on related research projects collaboratively (see Prescribed Requirements 9b). Finally, the small number of students who still intend to complete one of a limited number of one-semester courses previously deemed satisfactory of the senior field experience requirement will be permitted to pair that course with either a smaller project under EVS 271 or an advanced course useful to but not explicitly required by their degree plan (see Prescribed Requirement 9c). It is the belief of the faculty advisors to the environmental science degree plans that this change will improve the overall quality of the research education of the environmental science students.

Major requirements – BS, EVS: Geological Sciences (p. 272)

Revised major requirements to address changes in departmental course offerings and remove references to unnumbered topics courses. Removal of Geological Sciences 404C from requirement #1 as this course will no longer be offered as a lower-division course. Its equivalent, Geological Sciences 405 will continue to be offered in the fall and spring semesters and will remain in the major requirements. For major requirement #4, unnumbered topics course Geological Sciences 371C (approved topics) has been replaced with standalone courses that address climate and water that have been approved by EVS program faculty.

3. THIS PROPOSAL INVOLVES (Please check all that apply)

- | | | |
|--|---|--|
| <input type="checkbox"/> Courses in other colleges | <input type="checkbox"/> Courses in proposer's college that are frequently taken by students in other colleges | <input type="checkbox"/> Flags |
| <input type="checkbox"/> Course in the core curriculum | <input type="checkbox"/> Change in course sequencing for an existing program | <input checked="" type="checkbox"/> Courses that have to be added to the inventory |
| <input type="checkbox"/> Change in admission requirements (external or internal) | <input checked="" type="checkbox"/> Requirements not explicit in the catalog language (e.g., lists of acceptable courses maintained by department office) | |

4. SCOPE OF PROPOSED CHANGE

Does this proposal impact other colleges/schools? Yes No

If yes, then how? This degree is jointly managed and awarded by 3 colleges: College of Natural Sciences, College of Liberal Arts, and Jackson School of Geosciences

b. Do you anticipate a net change in the number of students in your college? Yes No

If yes, how many more (or fewer) students do you expect?

c. Do you anticipate a net increase (or decrease) in the number of students from outside of your college taking classes in your college? Yes No

If yes, please indicate the number of students and/or class seats involved.

d. Do you anticipate a net increase (or decrease) in the number of students from your college taking courses in other colleges? Yes No

If yes, please indicate the number of students and/or class seats involved.

If 4 a, b, c, or d was answered with yes, please answer the following questions. If the proposal has potential budgetary impacts for another college/school, such as requiring new sections or a non-negligible increase in the number of seats offered, at least one contact must be at the college-level.

How many students do you expect to be impacted?

Impacted schools must be contacted and their response(s) included:

Person communicated with:

Date of communication:

Response:

e. Does this proposal involve changes to the core curriculum or other basic education requirements (42-hour core, signature courses, flags)? No If yes, explain:

If yes, undergraduate studies must be informed of the proposed changes and their response included:

Person communicated with:

Date of communication:

Response:

f. Will this proposal change the number of hours required for degree completion? No If yes, explain:

5. COLLEGE/SCHOOL APPROVAL PROCESS

Program approval date: May 6, 2015
 Dean's Scholars approval date (for changes to Option II): N/A
 College approval date: May 6, 2015

PROPOSED NEW CATALOG TEXT:

DEGREES AND PROGRAMS

Degrees

The Jackson School offers the Bachelor of Arts in Geological Sciences, the Bachelor of Science in Environmental Science, the Bachelor of Science in Geological Sciences, and, in partnership with the Cockrell School of Engineering, the Bachelor of Science in Geosystems Engineering and Hydrogeology. Whichever degree they pursue, geological sciences students must take courses in the Jackson School of Geosciences (JSG), the College of Natural Sciences, and the College of Liberal Arts. These units work together to meet students' individual needs and to ensure that they receive a superior education. Graduation from an accredited program is an advantage when applying for a position in industry, membership in a professional society or for registration as a professional geologist.

Core Curriculum

Each student must complete the University's core curriculum. The core curriculum includes the first-year signature course and courses in English composition, American and Texas government, American history, mathematics, science and technology, visual and performing arts, humanities, and social and behavioral sciences. The core is an integral part of all geosciences degree programs so graduates will be aware of their social responsibilities and the effects of technology on society.

Flags

In the process of fulfilling geosciences degree requirements, students must also complete: two courses beyond Rhetoric and Writing 306, or its equivalent, with writing flags, one quantitative reasoning flag, one global cultures flag, one cultural diversity in the United States flag, one ethics and leadership flag, and one independent inquiry flag. Courses that may be used to fulfill flag requirements are identified in the *Course Schedule* and may be used simultaneously to fulfill other requirements, unless otherwise specified.

Foreign Language Requirement

Beginning level proficiency in a foreign language equivalent to one year (two semesters) competency is required. This requirement may be fulfilled by either completion of the two high school units in a single foreign language that are required for admission to the University as a freshmen or by earning college level foreign language credit to meet beginning level proficiency. For students who enter the University with fewer than two high school units in a single foreign language, the foreign language courses/credit used to address that deficiency may not be counted toward the total number of semester hours required for the GeoSci degree.

Students pursuing the BA must fulfill additional foreign language requirements.

Research Courses

Students in the BS Geological Sciences Option I, II or III degree programs may count up to 6 semester hours of geological sciences research courses toward the required total upper-division elective hours in geological sciences.

- *Geological Sciences 3XX and up to three credit hours of Geological Sciences 1XX, 2XX, and 3XX*
- *Geological Sciences 171H, 172H, 173H, and 379H; These courses are restricted to students enrolled in the Geological Sciences Departmental Honors Program*

Programs

The University and the Jackson School offer the following programs to supplement the degree plans mentioned above.

Undergraduate Research

The University offers an opportunity for undergraduates to participate in state-of-the-art research, for University credit, with distinguished scientists. If qualified, the student may also earn special departmental honors for exceptional research and may receive recognition through participation in the Bridging Disciplines Programs (p. 23), or the annual Undergraduate Research Forum sponsored by the College of Natural Sciences. Additional information about undergraduate research is available from the Jackson School Undergraduate Student Services Office.

Field Experiences

Fieldwork is an integral part of the Jackson School of Geosciences undergraduate experience and culture. As freshmen, Jackson School students enjoy a unique two-day orientation field trip before classes begin in the fall. Throughout their undergraduate career students have various opportunities to gain additional field experience as part of required coursework or smaller research trips. Students' classroom, laboratory, and field experiences culminate with the completion of Geological Sciences 660, *Field Geology*. Additional field experiences in hydrogeology, geophysics, and marine geology are some of the expanding list of options available to students in discipline-specific areas.

Jackson Scholars Program

The Jackson Scholars program is a learning initiative designed to foster achievement, initiative and motivation in scholarship and community. A goal of the Jackson School of Geosciences (JSG) is to promote "scholars" in the broadest sense where a scholar is defined not solely by classroom performance but also by a willingness to take initiative and participate in research, governance, work experience, study abroad, and/or community service.

Interested students register for the program during their freshmen, sophomore, or junior year. To apply, students outline their intentions to complete activities in the areas of scholarships and service, and submit a final portfolio for review by the associate dean for academic affairs during their senior year. Requirements vary for the activities available and students are encouraged to consult with a member of the JSG student services team as well as participate in workshops and information sessions offered to Jackson Scholars throughout the academic year. A Jackson Scholar who completes all program requirements will be recognized at the Jackson School commencement ceremony.

Certificate in Computational Science and Engineering

For information about this transcript-recognized certificate, see Certificate in Computational Science and Engineering (p. 14). The Jackson School sponsors this program along with the Cockrell School of Engineering, the College of Liberal Arts, and the College of Natural Sciences.

U-Teach Natural Sciences

The Jackson School participates in UTeach Natural Sciences, an innovative teacher preparation program offered by the College of Natural Sciences and the College of Education that allows students to pursue middle grades and secondary school teacher certification within a four-year mathematics, science, or computer science degree program. While learning the subject matter of their majors, students also learn how to teach. Upon

completing the program, students graduate with a bachelor's degree and are recommended for a middle-grades or secondary school teaching certificate. The UTeach Natural Sciences program invites students to explore their interest in teaching as early as their freshman year. Through courses taught by some of Texas's most respected secondary school math and science teachers, students learn quickly whether they are suited to the profession. A description of the UTeach Natural Sciences curriculum is given in UTeach Natural Sciences (p. 543); more information is available at the UTeach Natural Sciences Office. In the Jackson School, the Bachelor of Science in Geological Sciences teaching option prepares students to seek teacher certification.

Simultaneous Majors

A student in the Jackson School of Geosciences (JSG) may pursue two majors simultaneously. The student must follow all procedures and meet all requirements outlined in *General Information* as well as those associated with both majors. A JSG student may not pursue any two geosciences majors, simultaneously including the BS Environmental Science degree option, simultaneously.

The simultaneous major option is available only to undergraduates who have completed thirty hours of coursework in residence at the University and who have been admitted to both degree programs.

Program Assessment Activities

Students in the Jackson School are required to participate in assessment activities related to maintaining accreditation with the Southern Association of Colleges and Schools in addition to their required coursework. Students are exempted from participation only in extenuating circumstances and with prior approval from the JSG Student Services office.

Applicability of Certain Courses

Core Curriculum

Each student must complete the University's core curriculum (<http://catalog.utexas.edu/undergraduate/undergraduate-studies/academicpolicies-and-procedures/#corecurriculum>). The core curriculum includes the first year signature course and courses in English composition, American and Texas government, American history, mathematics, science and technology, visual and performing arts, humanities, and social and behavioral sciences. The core must be an integral part of all geosciences degree programs so graduates will be aware of their social responsibilities and the effects of technology on society.

Flags

In the process of fulfilling geosciences degree requirements, students must also complete two courses beyond Rhetoric and Writing 306, or its equivalent, with writing flags, one quantitative reasoning flag, one global cultures flag, one cultural diversity in the United States flag, one ethics and leadership flag, and one independent inquiry flag. Courses that may be used to fulfill flag requirements are identified in the *Course Schedule* (<http://registrar.utexas.edu/schedules>) and may be used simultaneously to fulfill other requirements, unless otherwise specified. Refer to the Undergraduate Studies chapter of this catalog for additional information regarding flag requirements.

Physical Activity Courses

Physical activity (PED) courses and Kinesiology 119 may not be counted toward a degree in the Jackson School. However, they are counted as courses for which the student is enrolled, and the grades are included in the grade point average.

ROTC Courses

The Departments of Air Force Science, Military Science, and Naval Science maintain ROTC units on campus. Information about each program is available from the chair of the department concerned.

Nine semester hours of coursework in air force science, military science, or naval science may be counted toward any degree in the Jackson School. Such credit may be used only as electives or to fulfill the writing requirement, and only by students who are commissioned by the University ROTC program.

Correspondence and Extension Courses

~~Concurrent enrollment is enrollment simultaneously at the University and at another educational institution or in any combination of correspondence, extension and online or distance education courses.~~ During a long semester students enrolled in the Jackson School of Geosciences (JSG) are not allowed to take courses at another school or institution or by correspondence or extension at the University unless approved in advance by the Associate Dean for Academic Affairs. ~~associate dean for academic affairs.~~ Students must submit a concurrent enrollment petition and meet with a JSG academic adviser for approval well in advance of the start of the requested course.

~~A student in his or her final semester may not enroll concurrently at another institution in any course, including a distance education course, to be counted toward the degree. In the final semester, the student may also not enroll by extension or correspondence in coursework to be counted toward the degree. All transfer, extension, and correspondence coursework must be added to the student's official record before his or her last semester.~~

No more than 30 percent of the semester hours required for any degree in the Jackson School may be completed online, by correspondence, or through distance learning, including University Extension courses. These courses are not included in certain metrics, such as total hours, residency status, etc., and therefore may affect students' eligibility for some JSG programs.

Pass/Fail

All courses required for all geological sciences degrees must be taken for a letter grade unless the course is offered only on the pass/fail basis. A student may elect to take courses that do not count toward the degree or are being taken to remove a deficiency on the pass/fail basis rather than for a letter grade. To elect the pass/fail system of grading a student must have received at least thirty hours of college credit before registering for any course on the pass/fail basis, unless the course is offered only on the pass/fail basis. Complete rules on registration on the pass/fail basis are given in *General Information*

Bible Courses

No more than twelve semester hours of Bible courses may be counted toward a degree.