Submit one printed copy of this form with signatures and one printed copy of the syllabus to the Provost/VPAA's Office (Austin Building, Room 309). Initial submissions are due no later than February 15, 2013.

1. College: **Science and Mathematics**
2. Department: **Geology**
3. Course status: **existing; does not require modification**
4. Course prefix and number: **GOL 131**
5. Course title: **Introductory Geology**
6. Course catalog description: **Introductory Geology (GOL 131) - Four semester hours, three hours lecture, two hours laboratory per week. Designed for the student with no geology background, this course provides an introduction to the study of minerals, rocks, and the processes that modify and shape the surface features of the Earth. Focus on energy, mineral and water resources; volcanism; and other practical aspects of geology. Required lab fee. No prerequisites.**
7. Number of semester credit hours: **4**
8. Estimated total course enrollment per year: **200**
9. Course prerequisites and/or required qualifications for enrolling in the class:
10. Course **is/will be** available online.
11. Foundational Component Area: **Life and Physical Sciences**
12. Explain why this course fits into this foundation component area: **Introductory Geology is the scientific study of the earth's processes. In this course, students will be introduced to and apply the scientific method to evaluate various hypotheses. Students will learn about the earth's structure and the physical processes that have helped create the unique environment and economic resources that are part of our natural world.**
13. Core Objectives
    - Critical Thinking - Students will be introduced to the scientific method through laboratory exercises led by the instructor and writings within the laboratory manual; they will use this method to form hypotheses about the identification of geologic materials and the formation of geomorphic landforms. Instructions on critical thinking will be introduced during the first week of laboratory exercises and used to identify minerals. In subsequent weeks, these critical thinking tools will also be applied to rock identification and laboratory exercises. Students will be trained to think critically throughout the semester to define research questions, identify hypotheses, gather and analyze data, and determine which hypothesis receives the support of the data. Students will demonstrate their critical thinking skills in embedded questions designed to help them analyze geologic materials and express their observations and conclusions in written essay questions. As part of the group project, students will learn to collaborate with each other and analyze data to determine flow rates and inputs to hydrologic systems.
    - Communication Skills - Instructions on oral, written, and visual communication skills will be introduced during the second week of laboratory exercises with a partnered exercise. Students will be required to work together and communicate with each other to complete the exercise. Students will work with partners throughout the semester, enhancing collaborative communication skills through various laboratory exercises. Students will also be instructed on the presentation of scientific data in written and visual form by the laboratory instructor, by writings and examples within the laboratory manual, and by a handout, "Reporting Scientific Information". Students will demonstrate written and visual communication skills in various laboratory exercises, and as part of the group project in the Hydrogeology laboratory exercise. This project will help students create a digital representation of the data associated with groundwater flow. Students will follow proper science format, which will include written paragraphs, graphic representation of the data, and evaluation and synthesis of the results.
    - Empirical and Quantitative Skills - Students will be introduced to empirical and quantitative skills during the second week of laboratory exercises and asked to determine the density of an assigned group of minerals. The skills will be reinforced in the Sediment and Erosion Laboratory, the Meteorology Laboratory, the Topographic Map Laboratory, the Hydrogeology Laboratory, and the Eolian Laboratory. Students will demonstrate their empirical and quantitative skills through embedded questions that require them to manipulate and analyze data and then express their conclusions. Required activities will include making proper measurements, performing calculations, and graphically representing their data in order to draw conclusions.

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- Teamwork - Students will be instructed on working as a team during the second week of laboratory. They will work in teams of 2-4 to determine the density of a specific group of minerals using a balance, graduated cylinder, and calculator. This instruction, as well as written instructions in the form of a handout and writings in the laboratory manual, will foster good teamwork among the students. Students will continue to work in teams throughout the semester in various laboratory exercises, with a final group project during week 11 in the Hydrogeology Laboratory. Handouts and classroom discussion will help facilitate the teamwork process. Laboratory instructors will encourage participation and good teamwork.

14. Email the syllabus for this course to brewersj@sfasu.edu. Please include the course prefix, course number and the word "Syllabus" in the file's title (e.g. PSC 141 Syllabus).
    - The syllabus must meet the SFASU Course Syllabus Guidelines as published by the Provost/VPAA. A link to these guidelines can be found at http://www.sfasu.edu/acadaffairs.
    - Student learning outcomes should be clearly specified in the syllabus. These are course objectives—describing what students who complete the course will know or be able to do. Required core objectives (see above and Appendix 2) should be represented in the student learning outcomes.
    - A course calendar should be included in the syllabus. The calendar should list the topics that the course will cover and indicate the approximate amount of time to be devoted to each, either by percent of course time or number of weeks. The outline should indicate which topics will be required in all sections of the course and which may vary. If time in the course is to be specifically devoted to the required core objectives (see above and Appendix 2), that should be indicated in the course calendar.

Contact person for questions about this submission:

a. Mindy Shaw Faulkner
b. 936-468-2236
c. mgshaw@sfasu.edu

A separate description of the institution-level assessment procedures to be used for the core curriculum will be distributed by the Core Curriculum Assessment Committee. Course acceptance by the Core Curriculum Advisory Committee does not guarantee acceptance by the Core Curriculum Assessment Committee. Approval by both committees is required for a course to be included in the core.

Department chairperson signature:
_____ Date:_____

College dean signature:
_____ Date:_____

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