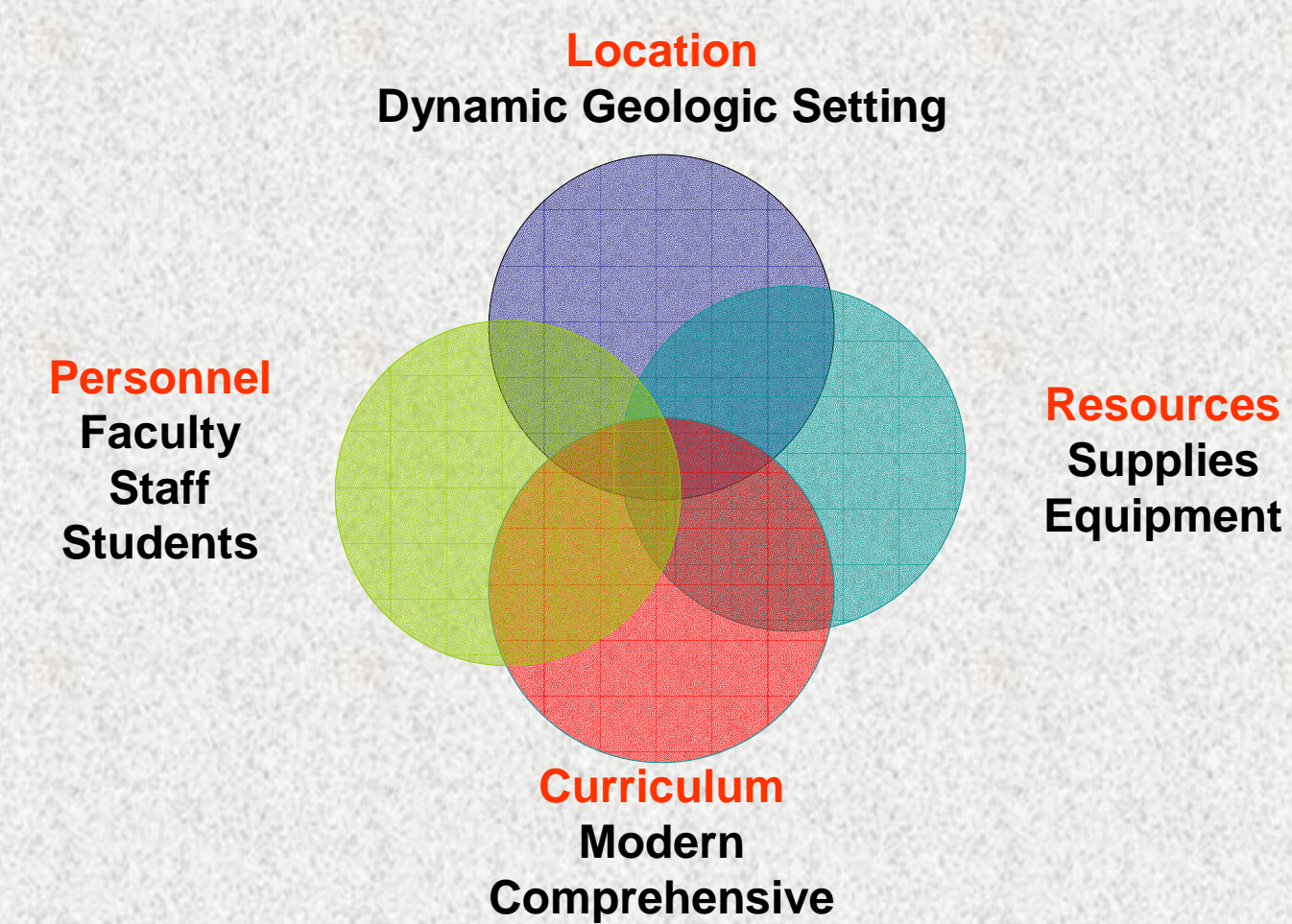


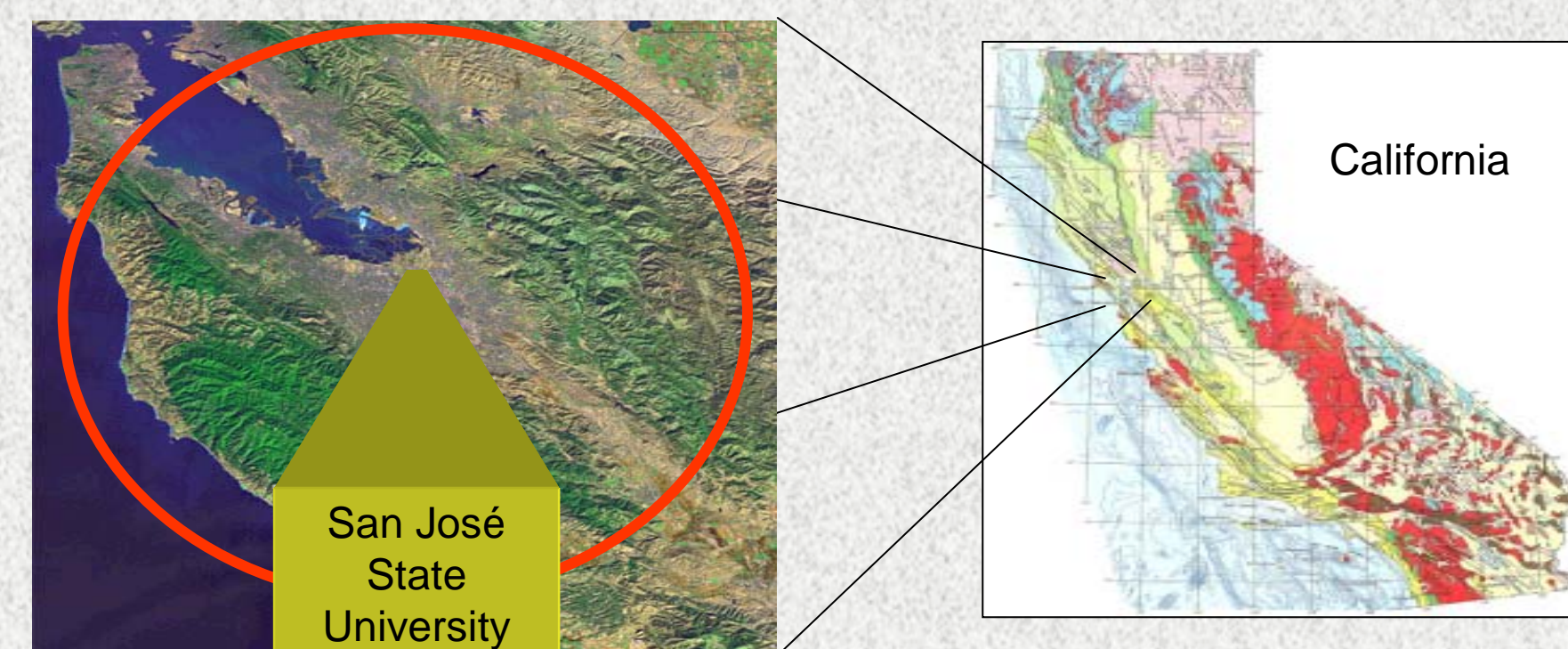
Teamwork and Resources– Essential Elements of an Effective Geoscience Department

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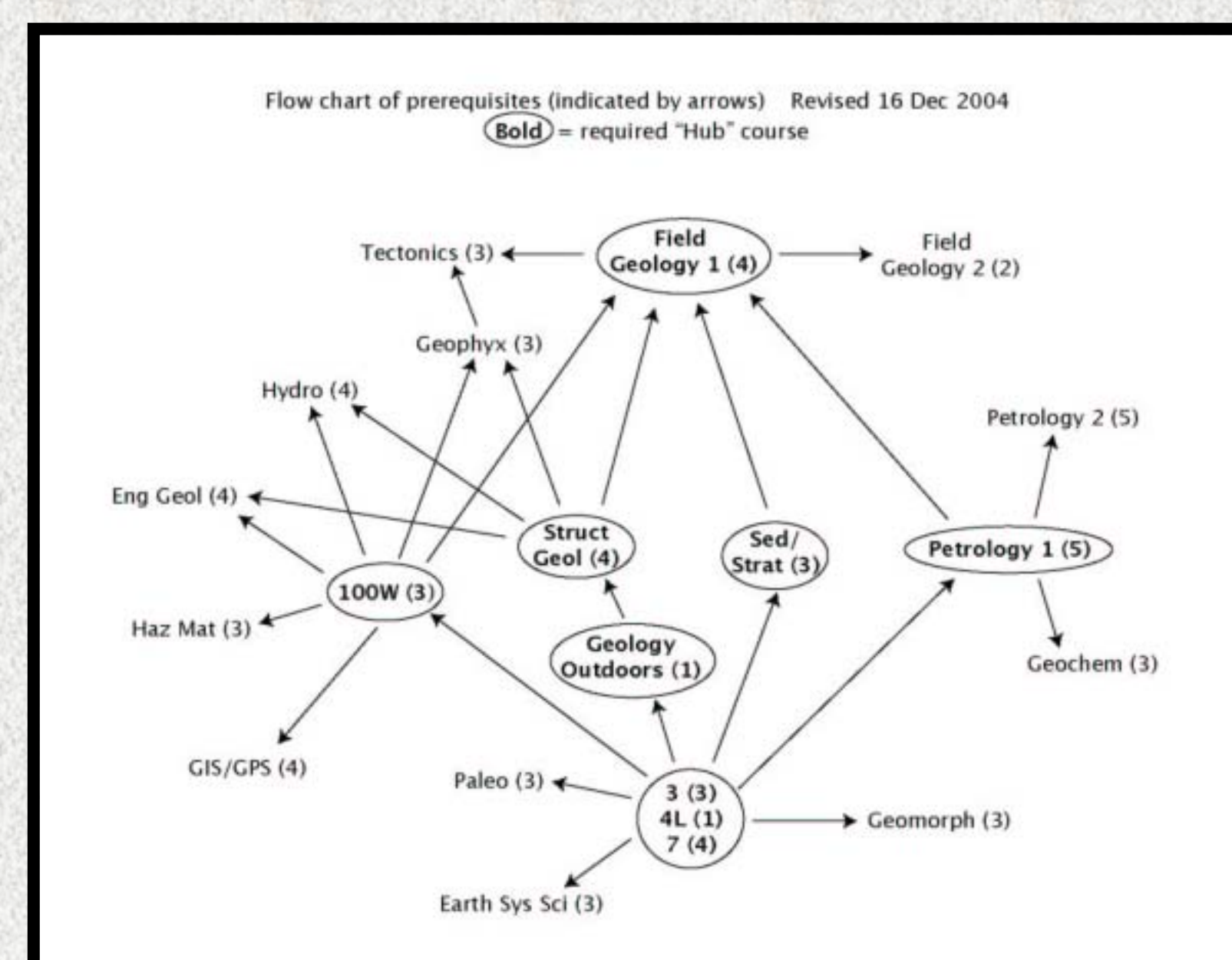
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The effectiveness of a department is symbolized by the area of overlap of all factors. If any circle symbolizing a particular element shrinks, the overlap area is reduced as is the overall effectiveness of the department.



In less than a one-hour drive, the SJSU faculty and students have the opportunity to study the processes of a high energy coastal environment, the characteristics of the San Andreas Fault, and rock from the Franciscan melange to the younger bay muds.



The recently revised curricular roadmap for undergraduate majors.

Department of Geology SJSU – www.geosun.sjsu.edu

ABSTRACT

The team approach to dealing with the many and complex issues facing departments of geoscience has proved to be very effective for the Department of Geology at San José State University. This pattern has been used successfully for decades and has become the accepted method of dealing with tasks such as curriculum development, program review, hiring, teaching assignments, etc. Quality curriculum, adequate fiscal and physical resources, and an ideal geologic setting add to the success of the department.

FEATURES OF SJSU'S GEOLOGY DEPARTMENT

Teamwork

Teamwork is an essential component of any strong and effective organization. Today's academic department in the geosciences requires team players who can communicate, problem solve, and negotiate. Team members must be flexible, adaptable, and able to work together to further their department's goals. Team development can lead to organizational improvement and individual development. Effective teams combine the power of group process, shared responsibility and team learning. The use of a team approach to deal with the many and complex problems of the academic setting has been very effective for the Department of Geology at San José State University.

Quality Curriculum

A department has a modern and comprehensive curriculum, taught by a highly qualified staff to provide the roadmap to career and academic success for students.

Adequate Fiscal and Physical Resources

Adequate funding for the acquisition and maintenance of the tools necessary to provide instruction is essential and available.

Spectacular Geological Setting

The immediate vicinity of the campus provides the opportunity to take advantage of varied geology for educational experiences.

COMPONENTS OF SJSU'S QUALITY DEPARTMENT

Curriculum development at both the undergraduate and graduate levels: All faculty understand the issues and participate in the development of solutions. Quality curriculum is the roadmap of the department's educational activities. This allows for the preparation of students for the next steps in their geoscience careers whether employment or graduate school.

Teaching pattern: In the course of one to two years, all faculty teach at each of the department's teaching levels – general education (non-major), undergraduate major, and graduate classes; therefore, all faculty understand better the challenges of providing appropriate instruction for the diverse student population.

Program planning and review: As a result of their participation in five-year review process, all staff understand and appreciate the components that make up the whole (staff, resources, demographics, etc.).

Hiring of new faculty: All faculty participate in the development of long-range hiring plans, including candidate appraisal, thus promoting a more cohesive environment.

Team teaching: This provides students with the opportunity to benefit from skills of multiple faculty associated with related topics.

Unique projects: SJSU is hosting the Cordilleran Section of the Geological Society of America Spring 2005 meeting. This permits the collective talents, experiences and energy of the department to be focused on a project that will enhance the stature of the department.

Physical and fiscal resources are the nuts and bolts items needed to operate an effective program. Without gas, the bus will not operate; without equipment, the labs cannot function.

Ideal geological location: The SJSU campus, located in a geologically dynamic setting, provides educational opportunities to bring students face-to-face with geology in action as well as the resources provided by such organizations as the US Geological Survey, other universities and colleges, state geological survey, etc.



SJSU student studies a trench used to evaluate fault activity in northwestern California.



A general education class discusses the Devil's Slide along the San Mateo County coastline.



Summer field camp (northeastern Nevada), the capstone course for the department



A classic example of a department resource (transportation) needing departmental teamwork to be effective



Departmental graduate students head out on an "outreach mission" to local schools.



A TA (graduate student teaching associate) works in an introductory geology lab to provide quality general education and possibly to inspire potential majors.