## Revelle College

Revelle College, the first college on the UCSD campus, was named in honor of Dr. Roger Revelle, former university-wide dean of research and for many years director of UCSD's Scripps Institution of Oceanography. Dr. Revelle is perhaps best known for his prediction of the Greenhouse Effect.

Revelle College was established in 1958. With the establishment of Revelle College, the faculty was given a rare opportunity to shape an undergraduate curriculum that would, insofar as any educational program can, prepare its students for the modern world. From the outset of planning the curriculum, the faculty asked: What sort of knowledge must students have if they are to be liberally educated? In what areas? To what depth? How specialized must that education be in the undergraduate years?

The educational philosophy of Revelle College was developed in response to such fundamental questions. Its undergraduate program is based on the assumption that students who are granted the bachelor's degree will have attained:

1. An acceptable level of general education in mathematics; foreign language; the physical, biological, and social sciences; the fine arts; and the humanities.
2. Preprofessional competence in one academic discipline.
3. An understanding of an academic area outside their major field
To this end, a lower-division curriculum has been established which enables students to acquire an understanding of the fundamental problems, methods, and powers of the humanities and the arts, the social and behavioral sciences, mathematics, and the natural sciences.

The lower-division curriculum assumes that undergraduates should not concentrate heavily in a special field until they have had a chance to learn something about the various fields that are open to them. Their general education must, then, be thorough enough for them to see the possibilities in those fields. Early in their careers, they should know three languages: their own, a foreign language, and the universal language of mathematics.

During the students' junior and senior years, their main efforts will be devoted to intensive work in their major field at a level of competence that will enable them to continue their study at the graduate level. In addition to the major, students will study an area of learning distinctly different in content from the major.

Revelle College stresses the broad character of its curriculum. Every student, for example, is required to achieve a certain competence in calculus. The emphasis on calculus and physical science is in some respects a deviation from educational theory of the last hundred years. The older "general-education" theory demanded that scientists achieve a reasonable competence in the social sciences and humanities. The rising importance of science and technology justifies the application of the theory to nonscientists as well.

Four years of college can at best yield only a limited knowledge; the major task is to train students so that they can adapt quickly and effectively to the rapidly changing world.

## General-Education Requirements

Students are encouraged to meet the gener-al-education requirements and the prerequisites to the major as rapidly as possible. Variations within the program will occur, of course, depending on the student's interest, prior training, and ability to make use of individual study.

Freshmen who enter with Advanced Placement credits can use many of these advanced courses to meet general-education requirements (see Advanced Placement chart in "Undergraduate Admissions, Policies and Procedures"). Transfer students may meet all general-education requirements before entering by following articulation agreements with community colleges or taking at any institution courses which Revelle College deems approximately equivalent in content to those at UCSD.

Those who demonstrate superior achievement and competence in an academic area may take advanced courses and individual study programs.

In order to fulfill the requirements in the principal fields of knowledge, the student takes a recommended set of courses, the prerequisites
for which have been met by the general admission standards of the university.

The general-education requirements are:

1. Satisfaction of the general University of California requirements in Subject A and American History and Institutions.
2. A five-course sequence in an interdisciplinary humanities program including two six-unit courses with intensive instruction in universi-ty-level writing. Written work is also required in the remaining (four-unit) three-quarter courses.
3. One course in the fine arts.
4. Three lower-division courses in the social sciences, to include two courses in the same social science and at least one course in American cultures.
5. Three courses in mathematics (three quarters of calculus).
6. Five courses in the physical and biological sciences to include four quarters of physics and chemistry and one quarter of biology.
7. Basic conversational and reading proficiency in a modern foreign language or advanced reading proficiency in a classical language or completion of the fourth quarter of foreign language instruction with a passing grade.
8. Three courses in an area unrelated to the major and focused in one department, subject area, or topic.

## 1. SUBJECT A AND AMERICAN HISTORY AND INSTITUTIONS

Satisfaction of the university requirements in Subject A and American History and Institutions. (See "Subject A," "Undergraduate Registration," "Academic Regulations," "Humanities," and "Undergraduate Admissions, Policies and Procedures: American History and Institutions.")

## 2. HUMANITIES

The purposes of the general-education requirement in humanities are two-fold: (a) to confront students with significant humanistic issues in the context of a rigorous course which can serve as an introduction to the academic disciplines of history, literature, and philosophy; (b)
to provide training and practice in rhetorical skills, especially persuasive written expression.

Students may meet this requirement by satisfactorily completing five courses of the interdisciplinary humanities program offered by the Departments of History, Literature, and Philosophy, which focus on some of the great documents of civilization. The sequence of courses, Humanities 1 through 5 , is designed to meet the humanities and writing requirement of Revelle College. (Students must have satisfied the university's Subject A requirement before registering for this sequence.)
In connection with learning about the Western tradition, students in Humanities 1 and 2 (six units each) will receive intensive instruction in university-level writing. Instruction in writing is provided in discussion sections, and frequent writing exercises are required. Written work is also required in the remaining three quarters of the sequence (Humanities 3-4-5, four units each).

For course descriptions, see "Courses, Curricula, and Programs of Instruction: Humanities."

## 3. FINE ARTS

One course is required to provide an introduction to the fundamental experience in the interpretation of creativity in theatre, dance, music, or visual arts. (See "Courses, Curricula, and Programs of Instruction: Theatre and Dance, Music, and Visual Arts.")

## 4. SOCIAL SCIENCES

Three lower-division courses offered by the Departments of Anthropology, Critical Gender Studies, Economics, Human Development, Linguistics, Political Science, Psychology, Sociology, or Urban Studies and Planning. At least one of these courses must be from a list approved as meeting the requirement in American Cultures (TAG students exempt).

## 5. MATHEMATICS

As an integral part of their liberal education, students will be brought into contact with a significant area of mathematics. Furthermore, they will gain the facility to apply mathematics in their studies of the physical, biological, and behavioral sciences.

There are two beginning-year sequences which meet the Revelle College mathematics requirement. Both sequences include integral and differential calculus. Freshman placement in
these sequences is dependent upon the student's high school or college preparation in mathematics (as evidenced by a placement examination) as well as future plans. Students are urged to keep their mathematical skills at a high level by taking mathematics during their senior year in high school. (See "Courses, Curricula, and Programs of Instruction: Mathematics.")

## 6. NATURAL SCIENCES

The natural science courses, including the physical and biological sciences, present the fundamental concepts of modern physics, chemistry, and biology. For the student who may major in one of these disciplines, the courses provide a background and preparation for further study; for those students who will continue their studies outside the natural sciences, they offer an opportunity to gain a certain understanding and appreciation of current developments in these fields.

Students choose their five required physical and biological science courses from the following sequences depending upon their interests, prior preparation, and intended majors. The Department of Chemistry offers Chemistry 11, 12, 13 (for non-science majors), Chemistry 6A-BC , and $6 \mathrm{AH}-\mathrm{BH}-\mathrm{CH}$ (honors). The Department of Physics offers four acceptable sequences: Physics $1 A-B-C, 2 A-B-C-D$, and $4 A-B-C-D-E$, and $11 A-11 B$ (for non-science majors). The Department of Biology offers Biology 1 or 3 or 10 (for non-science majors) to meet the Revelle biology requirement. (See "Chemistry," "Physics," and "Biology" in the "Courses, Curricula, and Programs of Instruction" section of this catalog.)

Students planning to major in a science must consult the appropriate departmental listing under "Courses, Curricula, and Programs of Instruction" to find the additional preparation needed for their major.

## 7. FOREIGN LANGUAGE

Revelle College students are required to demonstrate basic conversational and reading proficiency in any modern foreign language, or advanced reading proficiency in a classical language or complete the fourth quarter of foreign language instruction with a passing grade.

Modern foreign language programs are currently offered in Chinese, French, German, Hebrew, Italian, Japanese, Korean, Russian, Spanish, and classical language programs are
offered in Greek, Latin, and Hebrew. Students who have preparation in other languages should see the Office of the Revelle Provost to arrange a proficiency examination. This exam may also be taken by native speakers of any foreign language without further course study.

## 8. AREA OF FOCUS

Three courses in an area noncontiguous to the major are required. The three courses must be interrelated and should focus on some discipline, subject area, or topic. For the purposes of this requirement, the humanities/arts, the social sciences, and the natural sciences/engineering/mathematics are considered three different areas. Courses from a single department will be considered focused. Courses from more than one department should be approved prior to enrolling. The area of focus is not posted to the diploma or transcript.

These three courses may not be used on any other requirements. These courses may be upper-division or lower-division but one should keep in mind that graduation requirements stipulate that at least sixty units of all work must be from upper-division courses. The courses may be taken pass/not pass and Advanced Placement or International Baccalaureate credits may be used.

Students may complete an optional noncontiguous minor to replace this requirement, if they wish to do so.

## Sample Program

| FALL | WINTER | SPRING |
| :--- | :--- | :--- |
| FRESHMAN YEAR |  |  |
| Foreign Language | Humanities 1 | Humanities 2 |
| Mathematics | Foreign Language | Foreign Language |
| Natural Science | Mathematics | Mathematics |
| Subject A or <br> Fine Arts | Natural Science | Natural Science |
| SOPHOMORE YEAR |  |  |
| Natural Science | Natural Science | Fine Arts or elective |
| Social Science | Social Science | Social Science |
| Humanities 3 | Humanities 4 | Humanities 5 |
| Major Preparation | Major Preparation | Major Preparation |

* Science majors may want to take part of the social science requirement in the junior year to allow time for additional science laboratories and/or mathematics.


## The Major

All undergraduate majors offered at UCSD are available to Revelle College students. An excep-
tional student who has some unusual but definite academic interest for which a suitable major is not offered on the San Diego campus may, with the consent of the provost of the college and with the assistance of a faculty adviser, plan his or her own major. The Revelle Individual Major must be submitted no later than three quarters before the student's intended graduation and be approved by the Executive Committee of the college before it may be accepted in lieu of a departmental or interdepartmental major. The faculty adviser will supervise the student's work, and the provost must certify that the student has completed the requirements of the individual major before the degree is granted.

Students who fail to attain a grade-point average of at least 2.0 in work taken in the prerequisites for the major, or in the courses in the major, may, at the option of the department, be denied the privilege of entering or of continuing in that major. Students majoring in MAE, biology, bioengineering, CSE, ECE, or math/computer science need to be aware of additional screening for acceptance into the major.

## Optional Minor

A minor is no longer required in Revelle College. However, if a student wishes to complete a Department Minor or a Project Minor and have it posted to the transcript, he or she may do so. If a student completes either of these types of minors in a field noncontiguous to that of the major, it will replace the three-course noncontiguous area of focus general education requirement.

There are two types of minors from which to choose in Revelle College:

1. Department Minor-All courses for the minor are taken in one department and they are chosen with the advice and approval of a minor adviser in that department.
2. Project Minor-A project minor centers on a topic or period chosen by the student. The project is often interdepartmental and interdisciplinary. The program must have the approval of a minor adviser. (See Academic Regulations: Undergraduate Minors and Programs of Concentrations.)
The current university guidelines for the minor require seven courses (twenty-eight units), five of which must be upper-division. Students
who entered prior to January 1, 1998, may complete their six course (twenty-four unit), three upper-division course minors.

## Pass/Not Pass Grading Option

1. No more than one-fourth of an undergraduate student's total course units taken at UCSD and counted in satisfaction of degree requirements may be graded on a Pass/Not Pass basis.
2. Courses used to satisfy the noncontiguous area of focus may be taken on a Pass/Not Pass basis. Use of Pass/Not Pass grades on the optional minor is decided by the department.
3. Courses taken as electives may be taken on a Pass/Not Pass basis.
4. The following general education courses may be taken Pass/Not Pass: American cultures, fine arts, language and area of focus. Non-science majors may take courses for the natural science requirement Pass/Not Pass.
5. Upper-division courses to be counted toward a departmental major may not be taken on a Pass/Not Pass basis. Individual departments may authorize exceptions to this regulation.

## The Graduation Requirements

In order to graduate from Revelle College, a student must:

1. Satisfy the University of California requirements in Subject A and American History and Institutions.
2. Satisfy the general-education requirements.
3. Successfully complete a major consisting of at least twelve upper-division courses as stipulated by the department and meet the department's major residence requirement if applicable.
4. Complete a minimum of fifteen upperdivision courses ( 60 units).
5. Pass at least 184 units for the B.A./B.S. degree. (No more than 3.0 units of physical education, whether earned at UCSD or transferred from another institution, may be counted towards graduation.)
6. Attain a C average (2.0) or better in all work attempted at the University of California (exclusive of University Extension). Departments may require a C average in all upperdivision courses used for the major and/or at
least $C$ - grades in each course used for the major.
7. Meet the senior residence requirement. (See "Academic Regulations: Senior Residence.")

## Honors

Particularly well-prepared students are invited to join the Freshman Honors Program. Students not eligible at admission will be invited to join the Freshman Honors Program upon obtaining a 3.7 GPA with at least twelve graded units during their first quarter. The program includes weekly participation in small faculty seminars, and a variety of other perquisites.

Quarterly provost's honors, honors at graduation, departmental honors, and Phi Beta Kappa honors are awarded. At least five outstanding graduating seniors are honored at graduation each year with a monetary honorarium. An honors banquet is given for the top two hundred students in Revelle each spring. Seniors are selected for participation in honors seminars. For additional information, see "Revelle Honors Program" and "Honors" in the index.

