

Undergraduate Degrees and Programs

DEGREE PROGRAMS

BACHELOR OF ARTS (B.A.), BACHELOR OF SCIENCE (B.S.)

Stanford University confers the degree of Bachelor of Arts (B.A.) or the degree of Bachelor of Science (B.S.) on those candidates who have been recommended by the Committee on Academic Appraisal and Achievement (C-AAA), who have applied in advance for conferral of the degree, and who have fulfilled the following requirements:

1. A minimum of 180 units of allowable University work. (As described below, units above the allowable limits for activity courses and for courses taken on a satisfactory/no credit basis cannot be counted towards the 180 minimum.)
2. The Writing, General Education, and Language Requirements (see below).
3. Curricular requirements of at least one major department or program and the recommendation of the department(s). (Descriptions of curricular and special degree requirements are included in each department's section of this bulletin.)
4. (Students admitted prior to Autumn Quarter, 2001.) A minimum of 90 units (including the last 15) at Stanford. In special cases, students who have earned at least 135 units in resident work and who have completed the Writing, General Education, and Language Requirements, as well as all major requirements, may petition for a waiver of the last 15 units-in-residence requirement.
5. (Students admitted prior to Autumn Quarter, 2001 or thereafter.) A minimum of 135 units (including the last 15) at Stanford. In special cases, students who have earned at least 135 units in resident work and who have completed the Writing, General Education, and Language Requirements, as well as all major requirements, may petition for a waiver of the last 15 units-in-residence requirement.

Stanford confers the Bachelor of Science degree on candidates who fulfill these requirements in the School of Earth Sciences, in the School of Engineering, or in the departments of Applied Physics, Biological Sciences, Chemistry, Mathematics, or Physics in the School of Humanities and Sciences. The University also awards B.S. degrees to candidates in the Program in Science, Technology, and Society; in the Program in Mathematical and Computational Science; in the Program in Symbolic Systems; and, when appropriate, in the Program for Individually Designed Majors. Candidates who fulfill these requirements in other schools or departments receive the Bachelor of Arts degree.

Students who complete the requirements for two or more majors which ordinarily would lead to the same degree (B.A. or B.S.) should review "The Major" section of this bulletin to ensure that they have an understanding of the requirements for multiple or secondary majors.

BACHELOR OF ARTS AND SCIENCE (B.A.S.)

The University confers the degree of Bachelor of Arts and Science (B.A.S.) on candidates who have completed, with no overlapping courses, the curricular requirements of two majors which ordinarily would lead to different bachelor's degrees (that is, a Bachelor of Arts degree and a Bachelor of Science). These students must have applied in advance for graduation with the B.A.S. degree instead of the B.A. or B.S. degree, been recommended by the C-AAA, and have fulfilled requirements 1, 2, and 4 above in addition to the requirements for multiple majors.

Students who cannot meet the requirements for both majors without overlapping courses are not eligible for the B.A.S., but may apply to have a secondary major recorded on their transcripts. (See "The Major" section below.)

DUAL BACHELOR'S DEGREES (CONCURRENT B.A. AND B.S.)

A Stanford undergraduate may work concurrently toward both a B.A. and a B.S. degree. To qualify for both degrees, a student must complete:

1. A minimum of 225 units of University work. (As described below, units above the allowable limits for activity courses and for courses taken on a satisfactory/no credit basis cannot be counted towards the 225 minimum.)
2. The Writing, General Education, and Language Requirements.
3. The curricular requirements of two majors (one of which leads to a Bachelor of Arts degree and the other to a Bachelor of Science degree).
4. A minimum of 135 units (including the last 15) at Stanford. In special cases, as described above, students may petition for waiver of the last 15 units-in-residence requirement.

A student interested in dual bachelors' degrees should file a statement of intention with the Registrar's Office no later than two quarters in advance of completing the program. The statement should be submitted on a standard petition form along with recommendations of appropriate representatives from the two departments whose major requirements the student is expecting to fulfill.

Students who do not meet the higher unit and residence requirements of the dual degree option may be eligible instead for the B.A.S. degree as described above.

SECOND BACHELOR'S DEGREE

Stanford does not award a second Bachelor of Arts degree to an individual who already holds a Bachelor of Arts, nor a Bachelor of Science degree to an individual who already holds a Bachelor of Science degree. However, the holder of a Bachelor of Arts degree from Stanford may apply to the Subcommittee for Exceptions to Academic Policy for admission to candidacy for a Bachelor of Science degree, and the holder of a Bachelor of Science degree from Stanford may apply for candidacy for a Bachelor of Arts degree. A recommendation of the major department for the second bachelor's degree must accompany the application.

Generally, a student may not apply for a second bachelor's degree after having been a graduate student, although a student may submit a petition for exception. The Office of the Registrar's Academic Standing section in the Old Union, room 141, reviews these petitions. A student approved for this program may register as an undergraduate and is subject to the usual rules and regulations affecting undergraduates. Requirements for a second Stanford bachelor's degree are the same as those described above for dual bachelor's degrees.

COTERMINAL BACHELOR'S AND MASTER'S DEGREES

The coterminal degree program allows undergraduates to study for a master's degree while completing their bachelor's degree(s) in the same or a different department. Undergraduates with strong academic records may apply for admission to a coterminal master's program as early as the eighth quarter (or upon completion of 105 units) but no later than early in the 11th quarter of undergraduate study, and at least four quarters in advance of the anticipated date of conferral of the master's degree. Units completed during summer quarters, as well as undergraduate transfer credit, are also counted towards quarters of undergraduate study. Students who wish to apply for a master's program after these deadlines must apply through the regular graduate admissions process.

To apply for admission to a coterminal master's program, students must submit to the prospective graduate department the following: coterminal application, statement of purpose, preliminary program proposal, two letters of recommendation from Stanford professors, and a current Stanford transcript. Graduate Record Examination (GRE) scores or other requirements may be specified by the prospective department.

For coterminal students, the quarter following completion of 180 units (or 225 units for dual undergraduate degree students) is identified as the first graduate quarter. Beginning with this quarter, coterminal students are subject to graduate student policies and procedures, as described in the "Graduate Degrees" section of this bulletin. These policies include

continuous registration or leave of absence for quarters not enrolled (rather than the stopping out procedure for undergraduates) and minimal progress guidelines.

In the first graduate quarter, a coterminal student is assigned an adviser in the master's department for assistance in planning a program of study to meet the requirements for the master's degree. The plan is outlined on the Program Proposal for a Master's Degree, which is approved by the master's department by the end of the first graduate quarter. Authorizations for master's programs expire three calendar years from the first graduate quarter. An extension requires review of academic performance by the department.

The specific University residency, unit requirement, and additional policies for a bachelor's/master's program are described under Residency and Unit Requirements in Coterminal Programs in the "Graduate Degrees" section of this bulletin.

Conferral of each degree is applied for separately by the deadlines given in the University *Time Schedule*. The master's degree must be conferred simultaneously with, or after, the bachelor's degree.

DEGREE REQUIREMENTS

A LIBERAL EDUCATION

As do all major universities, Stanford provides the means for its undergraduates to acquire a liberal education—an education that broadens the student's knowledge and awareness in each of the major areas of human knowledge, that significantly deepens understanding of one or two of these areas, and that prepares him or her for a lifetime of continual learning and application of knowledge to career and personal life.

The undergraduate curriculum at Stanford allows considerable flexibility. It permits each student to plan an individual program of study that takes into account personal educational goals consistent with particular interests, prior experience, and future aims. All programs of study should achieve some balance between depth of knowledge acquired in specialization and breadth of knowledge acquired through exploration. Guidance as to the limits within which that balance ought to be struck is provided by the University's General Education Requirements and by the requirements set for major fields of study.

These educational goals are achieved through study in individual courses that bring together groups of students examining a topic or subject under the supervision of scholars. Courses are assigned credit units. To earn a bachelor's degree, the student must complete at least 180 allowable units and, in so doing, also complete the Writing Requirement, the General Education Requirements, the Language Requirement, and the requirements of a major.

The purpose of the Writing Requirement is to promote effective communication by ensuring that every undergraduate can write clear and effective English prose. Words are the vehicles for thought, and clear thinking requires facility in writing and speech.

The Language Requirement ensures that every student gains a basic familiarity with a foreign language. Foreign language study extends the student's range of knowledge and expression in significant ways, providing access to materials and cultures that otherwise would be out of reach.

The General Education Requirements provide guidance toward the attainment of breadth and stipulate that a significant share of a student's work must lie outside an area of specialization. These requirements ensure that every student is exposed to different ideas and different ways of thinking. They enable the student to approach and to understand the important "ways of knowing" to assess their strengths and limitations, their uniqueness, and, no less important, what they have in common with others.

Depth, the intensive study of one subject or area, is provided through specialization in a major field. The major relates more specifically to a student's personal goals and interests than do the general requirements outlined above. Stanford's curriculum provides a wide range of standard majors through its discipline-oriented departments, a number of interdisciplinary majors in addition to department offerings, and the opportunity for students to design their own major programs.

Elective courses, which are not taken to satisfy requirements, play a special role in tailoring the student's program to individual needs. For most students, such courses form a large portion of the work offered for a degree. Within the limitations of requirements, students may freely choose any course for which previous studies have prepared them.

Following are more detailed descriptions of these various requirements and the rationales upon which they are based.

THE WRITING REQUIREMENT

All instructors at Stanford University expect students to express themselves effectively in speech and writing. The Writing Requirement helps students meet those high expectations.

All candidates for the bachelor's degree, regardless of the date of matriculation, must satisfy the writing requirement. Transfer students are individually advised at the time of matriculation by the Transfer Evaluation Office and, if necessary, the Program in Writing and Rhetoric (PWR), as to their status with regard to the requirement.

The current Writing Requirement, revised in 1996, has two parts: completion of the first-year course or courses (described in more detail below) and completion of a writing-intensive course in the major. Courses that fulfill the Writing in the Major (WIM) requirement are designated under individual department listings.

All undergraduates must satisfy the first-year requirement in one of four ways:

1. Writing and Rhetoric 1, 2: a two-quarter sequence of courses emphasizing writing, research, and argument.
2. Writing and Rhetoric 3: an accelerated one-quarter course open only to students with a score of 4 or 5 on the CEEB Advanced Placement Test in English or a score of 6 or 7 on the International Baccalaureate Higher Level Exam.
3. Writing instruction in connection with the Structured Liberal Education (SLE) program.
4. Transfer credit approved by the Transfer Evaluation Office for this purpose.

A complete listing of PWR courses is distributed to all entering undergraduates and is also available on the PWR web site at <http://pwr.stanford.edu>, and at the PWR office, Building 460, Room 223.

For a full description of the Program in Writing and Rhetoric (PWR), see "Writing and Rhetoric, Program in" under the School of Humanities and Sciences' Course Descriptions.

THE GENERAL EDUCATION REQUIREMENTS

PURPOSE

The General Education Requirements are an integral part of undergraduate education at Stanford. Their purpose is two-fold: to introduce students to a broad range of fields and areas of study within the humanities, social sciences, natural sciences, applied sciences, and technology, and to help students prepare to become responsible members of society. Whereas the concentration of courses in the major is expected to provide depth, the General Education Requirements have the complementary purpose of providing breadth to a student's undergraduate program. The requirements are also intended to introduce students to the major social, historical, cultural, and intellectual forces that shape the contemporary world.

Fulfillment of the General Education Requirements in itself does not provide a student with an adequately broad education any more than acquiring the necessary number of units in the major qualifies the student as a specialist in the field. The major and the General Education Requirements are meant to serve as the nucleus around which the student is expected to build a coherent course of study by drawing on the options available among the required and elective courses.

Information regarding specific courses that have been certified to fulfill the General Education Requirements, and regarding a student's status in meeting these requirements, is available at the Office of the Registrar. Course planning and advising questions related to the General Education Requirements should be directed to the Undergraduate Advising Center.

It is the responsibility of each student to ensure that he or she has fulfilled the requirements by checking in Axess within the Undergraduate Progress function or by checking with the Office of the Registrar. This should be done at least two quarters before graduation.

Students should be extremely careful to note which set of General Education Requirements apply to them. The date of matriculation at Stanford determines which requirements apply to an individual student.

CURRENT SYSTEM

To fulfill the General Education Requirements (GER), undergraduates who entered Stanford in Autumn Quarter 1996 and thereafter must complete a minimum of nine courses certified for this purpose in four areas as follows:

Area 1 Program—Introduction to the Humanities courses (one-quarter introductory courses followed by two-quarter thematic sequences)

Students are expected to satisfy the Area One Requirement during their freshman year.

For a full description of the Introduction to the Humanities Program (I-HUM), see “Introduction to the Humanities Program” under the School of Humanities and Sciences’ Course Descriptions.

Area 2: Natural Sciences, Applied Science and Technology, and Mathematics—Students can fulfill this requirement by completing three certified GER courses in this area, with no more than two of these courses from the same subarea.

Area 3: Humanities and Social Sciences—Students are required to complete three certified GER courses in this area with at least one course in the humanities subarea and one in the social sciences subarea.

Area 4: World Cultures, American Cultures, and Gender Studies—While satisfying requirements for areas 1 or 3, or by taking additional courses, students must complete at least one certified GER course in two of the three subareas.

Courses certified as meeting the General Education Requirements must be taken for a letter grade and a minimum of 3 units of credit. A single course may be certified as fulfilling only one subarea within the General Education Requirements; the one exception is that a course may be certified to fulfill an Area 4 subarea in addition to an Area 3 subarea.

Courses that have been certified as meeting the requirements are identified throughout this bulletin with the notational symbols listed below. A comprehensive list of certified courses also appears as an Appendix to this bulletin.

Area 1 Program

GER 1a: first-quarter course

GER 1b: second-quarter course

GER 1c: third-quarter course

Area 2: Natural Sciences, Applied Science and Technology, and Mathematics

GER 2a: Natural Sciences subarea

GER 2b: Applied Science and Technology subarea

GER 2c: Mathematics subarea

Area 3: Humanities and Social Sciences

GER 3a: Humanities subarea

GER 3b: Social Sciences subarea

Area 4: World Cultures, American Cultures, and Gender Studies

GER 4a: World Cultures subarea

GER 4b: American Cultures subarea

GER 4c: Gender Studies subarea

Continuing undergraduates who entered Stanford prior to Autumn 1996 may elect to complete either the set of Distribution Requirements in effect when they entered or the set of General Education Requirements effective Autumn 1996 and described above. Note: students will not, however, be permitted to mix the requirements of the two systems or to change from one system to the other after they have elected the system under which they wish to be monitored for graduation. If the 1996 program of General Education Requirements is chosen, only certified courses passed with a letter grade and taken for 3 or more units can fulfill the requirements.

CREDIT TRANSFER

While courses taken in fulfillment of the General Education Requirements should be taught by Stanford faculty members who are Academic Council members or Senior Lecturers, students may propose that work taken at another college or university be accepted in fulfillment of a General Education Requirement. In such cases, the Office of the Registrar’s Credit Evaluation staff determines, after appropriate faculty consultation, whether the work is comparable to any of the specifically certified courses or course sequences.

UNDERGRADUATES WHO ENTERED PRIOR TO AUTUMN 1996

Stanford has a long tradition of ensuring curricular breadth through some system of requirements, variously described as “distribution requirements,” “general studies requirements,” or “general education requirements.” A student returning to Stanford to complete an interrupted degree program may satisfy either the distribution program in place at the time of matriculation or the current program of requirements. Such a student should consult the *Stanford Bulletin* or its predecessors appropriate to the original entrance year or seek the advice of the Undergraduate Degree Coordinator, room 132, Old Union. Students completing requirements in effect 1991 or later may find the Appendix to this bulletin helpful in providing them with a list of certified courses. This list indicates which courses fulfill the Distribution Requirements in effect in 1991, as well as the General Education Requirements in effect beginning Autumn 1996.

THE LANGUAGE REQUIREMENT

To fulfill the Language Requirement, undergraduates who entered Stanford in Autumn 1996 and thereafter are required to complete one year of college-level study or the equivalent in a foreign language. Students may fulfill the requirement in any one of the following ways:

1. Complete three quarters of a first-year language course at Stanford or the equivalent at another recognized post-secondary institution.
2. Score 4 or 5 on the Advanced Placement (AP) test in a language other than English.
3. Achieve a satisfactory score on the SAT II Subject Tests in the following languages:

Chinese	630	Italian	630
French	640	Japanese	620
German	630	Latin	630
Hebrew	540	Spanish	630
4. Take a diagnostic test in a particular language which either:
 - a) Places them out of the requirement, *or*
 - b) Diagnoses them as needing one, two, or three additional quarters of college-level study. In this case, the requirement can then be fulfilled either by passing the required number of quarters of college-level language study at Stanford or the equivalent elsewhere, or by retaking the diagnostic test at a later date and placing out of the requirement.

Written placements are offered online throughout the summer in Chinese, French, German, Japanese, Russian, Spanish, and Spanish for home background speakers.

For a full description of Language Center offerings, see “Language Center” under the school of Humanities and Sciences’ Course Descriptions.

CREDIT

ADVANCED PLACEMENT

Stanford University allows up to 45 units of credit toward graduation for work completed in high school as part of the College Entrance Examination Board (CEEB) Advanced Placement curriculum. The awarding of such credit is based on CEEB Advanced Placement test scores and is subject to University and department approval.

The faculty of a given department determine whether any credit toward the 180-unit requirement can be based on achievement in the CEEB Advanced Placement Program in their discipline. Stanford departments electing to accept the Advanced Placement (AP) credit are bound by these University policies:

- Credit is usually granted for an AP score of 4 or 5. Usually, 10 quarter units are awarded (but occasionally fewer than 10). No more than 10 quarter units may be given for performance in a single examination. If the student has scores of 4 or 5 on two exams within the same language (for example, French Language and Literature), or within the same subject (for example, Music Theory and Music History), the student is given a maximum total of 10 quarter units based on only one of the scores—the higher of the two, if different. The Studio Art and Art History examinations are treated separately and yield 10 quarter units each for scores of 4 or 5.
- Whether credit is to be given for an AP score of 3 is a matter for departmental discretion; up to 10 units may be awarded.
- No credit may be authorized for an AP score lower than 3.

Performance on an AP exam can indicate the appropriate placement for continuing course work in that subject at Stanford. Students may not enroll in courses at Stanford for which they received equivalent credit through the AP program. The chart below shows the current AP credit and placement policies. Further information is available from the Office of the Registrar's Transfer Credit Evaluator, room 141, Old Union.

AP SCORES AND PLACEMENT

Test Subject	Score	Placement Quarter	Units of Credit
U.S. Government and Politics	4, 5	Not applicable	5
U.S. History	4, 5	Not applicable	10
Art History	4, 5	Not applicable	10
Art (Studio)	4, 5	Not applicable	10
Biology	4, 5	Not applicable	10
Chemistry	4, 5	Chem. 32 or above	4
Comparative Gov. and Politics	4, 5	Not applicable	5
Computer Science AB	4, 5	CS 106X*	5
Computer Science A	4, 5	CS 106X*	5
Macro/Micro Economics	≥8	Econ. 50†	5
English	4, 5	Writ. & Rhetoric 3	6
Environmental Science	4, 5	Not applicable	5
European History	4, 5	Not applicable	10
French	4, 5	Second year and above	10
German	4, 5	Second year or above	10
	3	Take placement test	5
	1, 2	Take placement test	—
Human Geography	4, 5	Not applicable	7
Latin	4, 5	100 series	10
	1, 2, 3	Consult Classics dept.	—
Math. AB	5	Math. 51	10
	4	Math. 42	5
	1, 2, 3	Math. 19 or 41	—
Math. BC	4, 5	Math. 51	10
	3	Math. 42	5
	1, 2	Math. 19 or 41	—
Math. AB Subscore	5	Math. 51	10
	4	Math. 42	5
	1, 2, 3	Math. 19 or 41	—
Music	4, 5	Not applicable	10
Physics B	5	(placing out of 21&23) take 25 <i>or</i> (placing out of 53) take 51 then 55 <i>or</i> (with strong math bkgd.) take 61 then 63&65	10
	4	(placing out of 21) take 23 then 25 <i>or</i> (placing out of 53) take 51 then 55 <i>or</i> (with strong math bkgd.) take 61 then 63&65	5
	3	(placing out of 21) take 23&25 <i>or</i> take 51 then 53&55	—

Physics C (2 parts)			
Mech. only	4, 5	(placing out of 21) take 23 then 25 <i>or</i> (placing out of 53) take 51 then 55 <i>or</i> (with strong math bkgd.) take 61 then 63&65	5
	3	(placing out of 21) take 23 then 25 <i>or</i> take 51 then 53 then 55 <i>or</i> (with strong math bkgd.) take 61 then 63&65	4
E&M only	4, 5	(placing out of 23) take 21 then 25 <i>or</i> (placing out of 55) take 51 then 53 <i>or</i> (with strong math bkgd.) take 61 then 63&65	5
	3	(placing out of 23) take 21&25 <i>or</i> take 51 then 53&55 <i>or</i> (with strong math bkgd.) take 61 then 63&65	4
Both Parts	4, 5	(placing out of 21&23) take 25 <i>or</i> take 51 then 53&55 <i>or</i> (with strong math bkgd.) take 61 then 63&65	10
	3	(placing out of 21&23) take 25 <i>or</i> take 51 then 53 then 55	8
Psychology	4, 5	Psych. 2 or above	4
Spanish	4, 5	Second year or above	10
Statistics	4, 5	Stat. 61	5

* Students may skip Computer Science 106A, B and X and complete Computer Science 103, 107, or 109 to receive an additional 5 quarter units.

† A minimum score of 4 on *both* tests will receive 5 units.

ACTIVITY COURSES

For undergraduates who entered Autumn 1996 and thereafter, a maximum of 8 units of credit earned in activity courses, regardless of the offering department or if accepted as transfer units, count towards the 180 (225 if dual degrees are being pursued) units required for the bachelor's degree. All activity courses are offered on a satisfactory/no credit basis.

Undergraduates who entered Stanford between Autumn 1986 and the end of the 1995-96 academic year may apply a maximum of 12 units in activity courses (Physical Education or Music Activity) to the 180/225 unit requirement for graduation.

COURSES TAKEN ON SATISFACTORY/NO CREDIT OR CREDIT/NO CREDIT BASIS

For undergraduates who entered Autumn 1996 and thereafter, a maximum of 36 units of credit taken at Stanford or its overseas campuses for a "CR" or "S" grade may be applied towards the 180 (225 if dual degrees are being pursued) units required for the bachelor's degree. For those who entered Stanford as transfer students in Autumn 1996 and thereafter, the maximum is 27 units.

Departments may also limit the number of satisfactory or credit courses accepted towards the requirements for a major. Satisfactory/credit courses applied towards a minor may be similarly limited. Courses not letter-graded are not accepted in fulfillment of the General Education Requirements applicable to undergraduate students who entered Stanford in Autumn 1996 and thereafter. Writing in the Major courses are usually offered letter grade only. In those instances where the course is offered for a letter grade or CR/NC, the course must be taken for a letter grade.

INTERNSHIP GUIDELINES

Undergraduate internships should not by themselves carry any credit. However, an individual student may arrange with a faculty member for a research or other academic project to be based on the internship. Arrangements between students and faculty regarding credit are expected

to be made well in advance of the internship. Credit should be arranged within departmental rules for directed reading or independent study and should meet the usual department standards.

TRANSFER WORK

Academic credit for work done elsewhere will be allowed toward a Stanford bachelor's degree under the following rules and conditions:

1. Credit may be granted for work completed at institutions in the U.S. only if the institutions are accredited.
2. Study in institutions outside the U.S., when validated by examination results, tutorial reports, or other official evidence of satisfactory work, may be credited toward a Stanford bachelor's degree, subject to the approval of the credit evaluator and the appropriate departments.
3. Credit is officially allowed only after the student has been unconditionally admitted to Stanford.
4. Credit is allowed for work completed at institutions in the U.S. only on the basis of an official transcript received by the Registrar at Stanford directly from the institution where the credit was earned.
5. Credit from another institution will be transferred for courses which are substantially equivalent to those offered at Stanford University on the undergraduate level, subject to the approval of the credit evaluator. A maximum of 20 quarter units may represent courses which do not parallel specific courses at Stanford, again, subject to the approval of the credit evaluator as to quality and suitability.
6. The credit allowed at Stanford for one quarter's work may not exceed the number of units that would have been permissible for one quarter if the work had been done at Stanford; for work done under a system other than the quarter system, the permissible maximum units are calculated at an appropriate ratio of equivalence.
7. Credit is allowed at Stanford for work graded 'A,' 'B,' 'C,' or 'Pass,' but not for work graded 'D' or below.
8. No more than 90 quarter units of credit for work done elsewhere may be counted toward a bachelor's degree at Stanford.
9. Credit earned in extension and correspondence courses is transferable only if the university offering the courses allows that credit toward its own bachelor's degree. Such credit is limited to a maximum of 45 quarter units for extension courses, a maximum of 15 quarter units for correspondence study, and a maximum of 45 quarter units for the combination of extension and correspondence courses.
10. Credit earned in military training and service is not transferable to Stanford, unless offered by an accredited college or university in the U.S. and is evaluated as above by the credit evaluator.

CONCURRENT ENROLLMENT

Students may enroll concurrently at Stanford and at another college or university. The following policies apply to Concurrent Enrollment:

1. Students may not exceed 20 units between both schools. This is the same unit maximum for undergraduate students at Stanford.
2. Satisfactory academic progress is determined only by Stanford courses and units. Transfer work completed at other institutions is not considered in this calculation.
3. Students are expected to consult with the Transfer Credit Evaluator (Old Union, room 141) if planning to transfer the work back to Stanford. Consultations should be completed prior to enrolling in the transfer institution.

THE MAJOR

The primary purpose of the major is to encourage each student to explore a subject area in considerable depth. This in-depth study complements the breadth of study promoted by the General Education Requirements and, in many cases, by a student's choice of electives. Work in depth permits practice in critical analysis and the solving of problems. Because of its depth, such study also provides a sense of how knowledge grows and is shaped by time and circumstances.

The structure of a major should be a coherent reflection of the logic of the discipline it represents. Ideally, the student should be introduced to the subject area through a course providing a general overview, and

upper-division courses should build upon lower-division courses. The course of study should, if feasible, give the student the opportunity and responsibility of doing original, creative work in the major subject. Benefits of the major program are greatest when it includes a culminating and synthesizing experience such as a senior seminar, an undergraduate thesis, or a senior project.

REQUIREMENTS

Undergraduates must select a major by the time they achieve junior status (85 units completed). All undergraduate major programs listed in this bulletin, except for certain honors degree programs that require application and admission in advance, are open to all students. Students may use A_XESS to declare, drop or exchange a major at any time. In some departments or programs, though, a late change could easily result in extending the period of undergraduate study. Students who have applied to graduate, wish to declare an individually designed major or pursue a dual B.A./B.S. degree, and cotermin students must use printed forms to select or change a major. Students requiring assistance should contact the Registrar's Degree Progress Office, Old Union, room 132.

Check individual department or program listings in this bulletin for the undergraduate degrees offered and for specific major requirements. If an area of study has no baccalaureate degree, that discipline is not available as a regular undergraduate major.

Faculty set the minimum requirements for the major in each department. These requirements usually allow latitude for tailoring a major program to a student's specific educational goals. The responsibility for developing a major program within department or program requirements lies ultimately with the individual student working in consultation with the major adviser.

MULTIPLE MAJORS

Although most students declare only one major, a student may formally declare more than one major within a single bachelor's degree (B.A., B.S., or B.A.S.) program. The student may do that either at the time of initial major declaration or, as may be more advisable given the planning required to complete more than one major, by amending the original declaration. The student's major departments or programs will have access routinely to all information pertinent to that student's academic record (for example, course and grade information), and each is expected to provide advising and other assistance. Students may pick up appropriate information regarding major declarations from the Registrar's Office. To be awarded a bachelor's degree with multiple majors, the student must fulfill the following requirements:

1. Formally declare all majors to the Registrar's Office.
2. Satisfy the requirements of each major without applying any course towards the requirements of more than one major or any minor unless
 - a) overlapping courses constitute introductory skill requirements (for example, introductory math or a foreign language)
 - b) overlapping courses enable the student to meet school requirements (for example, for two majors within the School of Engineering). Currently, only the School of Engineering has school requirements for its undergraduate majors.

Students pursuing multiple majors must complete a multiple major program sheet indicating which courses they plan to apply toward each major and any minor(s). Departments must certify that the plan of study meets all requirements for the majors and any minor(s) without unallowable overlaps in course work. To facilitate advance planning, multiple major program sheets are available at any time in the Degree Progress Office, room 132, Old Union.

When students cannot meet the requirements of multiple majors without overlaps, the secondary major, outlined below, may be relevant.

SECONDARY MAJOR

In some cases, students may complete course requirements for more than one major, but they may not meet the requirements outlined for the multiple major option. For example, the student may develop a course plan in which courses requisite for one major overlap with requirements for another. In these cases, the student may declare a secondary major

UNDERGRADUATE MAJOR UNIT REQUIREMENTS

Major Department	Units required outside the dept./program	Units required within the dept./program	Total # of units	Notes/Special Requirements	WIM Course
School of Earth Sciences					
Earth Systems	84-100	24	109-125	Internship/Senior Seminar	ESys 210
Geological & Environmental Sciences					GES 54Q, 110,112,140,151
Geological Sciences	39-42	41-56	min. 80	advanced summer field experience	152,185,190
Environmental Sciences	45-46	46-59	min. 91		
Engr.Geol. & Hydrogeology	40	56-61	min. 96		
Geophysics	42-47	15	min. 66		GES 110
Petroleum Engineering	72	39-40	111-112		PE 180
School of Engineering					E 102M, ME 103
Chemical Engineering	63-68	54	117-122		ChemE 185A,185B
Civil Engineering	60-63	50-53	110-116		CEE 100
Computer Science	33-34	61-65	96-106	Senior Project	CS 191W,194,201
Computer Systems Engineering	71-72	36-40	103-105	Senior Project	CS 191W,194,201
Electrical Engineering	45	68	113		Engr. 102E and EE 121
Engineering (Individually Designed)	min. 41	40	90-107		Engr 102
Management Science and Engineering	57-80	35-63	109-124		MS&E 152,164,193,197
Material Science and Engineering	68-74	40	105-111		MSE 161
Mechanical Engineering	69-79	47-49	114-119		Engr. 102M and ME 103
Product Design	72-74	31	103-105		Engr. 102M and ME 103
School of Humanities and Sciences					
African and African American Studies	50	10	60	CSRE Senior Sem.	AAAS 105
American Studies	approx. 55	10	approx. 70		AS 151, 200, 250
Anthropological Sciences	—	45	65		ANSI 190
Archaeology	—	—	—		CASA 139
Art					Art 1
History	—	50	50	library orientation	
Studio	—	65	65	library orientation	
Asian American Studies	55	5	60	CSRE Senior Sem.	See CSRE
Asian Languages					
Chinese	0-16	27-43	min. 43		Chinese 133
Japanese	0-20	23-43	min. 43		Japanese 138
Biological Sciences	50-52	24	74-76		Bio. 44X,44Y,145/245,175H,176H
Chemistry	34	53	87		Chem. 134
Chicana/o Studies	55	5	60	CSRE Senior Sem.	See CSRE
Classics		60	60		Classics 176
Communication	5	min. 60	65		Comm. 141A,141B
Comparative Literature		60-65	depends on track		CL 101
Comparative Studies in Race & Ethnicity	55	5	60	CSRE Senior Sem.	CSRE 200X
Cultural and Social Anthropology	—	40	65		CASA 90

Major Department	Units required outside the dept./program	Units required within the dept./program	Total # of units	Notes/Special Requirements	WIM Course
Drama	—	58	58		Drama 161,162,163
East Asian Studies	75	—	75	senior essay; seminar	Chinese 133; Japanese 138; Pol. Sci. 29/129,115B
Economics	—	75-77	75-77	—	Econ. 101
English		55	55		Eng. 150
w/ Creative Writing		65	65	dept. approval	
w/ Interdisciplinary Emphasis	30	45	75	dept. approval and interdisciplinary paper	
w/ Interdepartmental Emphasis	20	40	60	20 units in foreign lang. lit.; dept. approval	
Feminist Studies	45	15 core	60	—	FS 104
French and Italian					
French	max. 24	32 above #100	55-63 above #100	units vary by concentration	Fr. 123,261
French and English Literatures	max. 24	32 above #100	55-63 above #100	4 Eng. Lit. courses	
French and Italian Literatures	max. 24	32 above #100	55-63 above #100	4 Ital. Lit. courses	
Italian	max. 28	32 above #100	60 above #100	—	It. 114,115
Italian and English Literatures	max. 28	32 above #100	60 above #100	4 Eng. Lit. courses	
Italian and French Literatures	max. 28	32 above #100	60 above #100	4 Fr. Lit. courses	
German Studies	0-25	35-60	60	3 above #130	GS 123N,125,129
History	—	58-60	58-60	3 above #130	Hist. 204,213B, 217,260A Hist. 200A,B,C,X
Human Biology	min. 13	min. 43	87	Internship	HB 4B
Interdisciplinary Studies in Humanities					
Option I	approx. 60	27 (honors)	approx. 87	honors only major + 5 qtrs. language	
Option II	approx. 110 (incl. premed requirements)	27 (honors)	approx. 137	honors only major	
International Relations	55-65	0-10	65	2 yr. foreign lang.; Overseas studies 1 qtr.	IR 115B,130,131, 134,134B,199T Pol. Sci. 115B,119M Hist. 102A
Jewish Studies (Individually Designed)	60-62	—	60-62		See CSRE
Latin American Studies			60	field exper., senior honors/ internship, foreign lang @ 3rd-yr university level; senior seminar	LAS 80
Linguistics	—	50	50	foreign lang. @ 6th quarter level	Ling. 150
Mathematical & Computational Science			76-80		Math. 109,110,120
Mathematics	up to 15 units	49	64		Math. 109,110,120,171
Music	—	67-68	62-72	piano-proficiency & ear-training exam	3 from: Music 140,141, 142,143,144,145,151
Music, Science, & Technology	—	62	62-72	piano-proficiency & ear-training exam	Music 151
Native American Studies	55	5	60	CSRE Senior Sem.	See CSRE
Philosophy	—	55	55	course in 194 series	Phil. 80
Philosophy and Religious Studies	—	60	60	3 seminars; 20 units in each dept. + 20 advanced units fr. both depts.	Phil. 80 or RS 290

Major Department	Units required outside the dept./program	Units required within the dept./program	Total # of units	Notes/Special Requirements	WIM Course
Physics	21	55-57	76-78		Phy. 70
Political Science	0-10	50-60	60		PS 104,115B,119M,134B,143F,151B,151C,199R
Psychology	—	55	55		Psych. 50,60,70,110,161
Public Policy	55	28	83	15 units in concentration, Senior Seminar	Pub. Pol. 104
Religious Studies	—	60	60	3 seminars; 25 units in concentration	RS 290
Science, Technology, & Society					STS 110
B.A.	37	32	69	17 units in technical literacy 20 units in concentration	
B.S.	50	32	82	50 units in technical depth	
Slavic Languages and Literatures					Slavic 146
Russian Language and Literature	—	52	52	1st- and 2nd-	
Russian Language, Culture, & History	12-16	35-39	52	year Russian	
Sociology	—	60	60		Soc. 200
Spanish & Portuguese		20-25	50		Span. 102,298
Symbolic Systems	71	2	73	—	Phil. 80
Urban Studies	59	11	70		Urbs 120, Art 254

which will result in the transcript bearing an annotation that the course requirements for that major have also been met.

LIMITS OF THE MAJOR

In order to achieve the values of study in depth, a well-structured major should constitute approximately one-third of a student’s program (55-65 units). To ensure the values of breadth, a major should comprise no more than two-thirds of a student’s program (115-125 units). And, to avoid intellectual parochialism, a major program should not require a student to take more than about one-third of his or her courses from within a single department.

Major requirements in cognate subjects essential to the structure of a given major should be counted as part of the major program in applying these guidelines. Department or school requirements designed to provide extra disciplinary breadth should not be counted.

For a limited number of qualified students, many departments and programs offer special programs leading to degrees with honors. A student may apply to the major department or program for acceptance into the honors program. Demands on the student may vary, but all honors programs encourage creative, independent work at an advanced level in addition to the major requirements.

The guidelines set forth here are deliberately general; implementation must take into account the specific needs of a student’s program and the nature of the discipline or disciplines involved. The exercise of responsibility in achieving the desired educational balance belongs first with the student, who, after all, has the strongest interest in the value of his or her education. It belongs secondarily to departments and major programs, which must set the requirements of competence in the many majors offered.

MINORS AND HONORS

THE UNDERGRADUATE MINOR

Students completing a bachelor’s degree may elect to complete one or more minors in addition to the major. Minors must be officially declared by students no later than the deadline for their applications to graduate, according to declaration procedures developed and monitored by the

Registrar. Earlier deadlines for declaration of the minor may be set by the offering school or department. Satisfactory completion of declared minors is noted on the students’ transcripts after degree conferral.

A minor is a coherent program of study defined by the department or degree program. It may be a limited version of a major concentration or a specialized subset of a field. A minor consists of no fewer than six courses of 3 or more units to a maximum of 36 units of letter-graded work, except where letter grades are not offered. Departments and degree programs establish the structure and requirements of each minor in accordance with the policy above and within specific guidelines developed by the deans of schools. Programs which do not offer undergraduate degrees may also make proposals to their cognizant deans to establish a minor. Requirements for each minor are described in the individual department or program listings in this bulletin.

Students may not overlap (“double-count”) courses for completing major and minor requirements, unless:

1. Overlapping courses constitute introductory skill requirements (for example, introductory math or a foreign language), *or*
2. Overlapping courses enable the student to meet school requirements (for example, for a major within the School of Engineering and a minor). Currently, only the School of Engineering has school requirements for its undergraduate majors.

Undergraduate students use Axxess to declare or drop a minor.

Students with questions about declaring minors or double-counting courses towards combinations of majors and/or minors should consult with the departments or programs involved or the Registrar’s Degree Progress Office, room 132, Old Union.

BACCALAUREATE HONORS

With Distinction—In recognition of high scholastic attainment, the University, upon recommendation of a major department or program, awards the Bachelor’s Degree with Distinction to approximately 15 percent of the graduating class.

Students are also urged to consider the departmental honors programs that may give depth to their major study and to consider, as well, how the interdisciplinary honors programs might contribute to the quality of their undergraduate education.

Departmental Honors Programs—In recognition of successful completion of special advanced work, departments in more than 30 fields of study may recommend their students for honors. Departmental honors programs demand independent creative work at an advanced level in addition to the major requirements.

Interdisciplinary Honors Programs—In recognition of successful completion of honors program requirements, the following interdisciplinary programs can recommend students majoring in any field for honors in their program:

- Education
- Environmental Science, Technology, and Policy
- Ethics in Society
- Feminist Studies
- Humanities
- Jewish Studies
- Latin American Studies (a new honors program is being considered)
- Science, Technology, and Society

The interdisciplinary honors programs are designed to complement study in a department major. The requirements for these honors programs are described in the department sections of this bulletin.

Foreign Language Proficiency—The notation “proficiency in (language)” appears on the official transcripts of those students whose levels of achievement are found by procedures established by the language department to be roughly equivalent to knowledge an excellent student can be expected to demonstrate late in the third quarter of the third year of study in that language.

UNDERGRADUATE ADVISING

Assistant Vice Provost and Program Director: Lori White
Associate Director: Dandre DeSandies
Associate Director: Kathy Wright

The Undergraduate Advising Center coordinates the advising program for students who have not declared a major field of concentration. Freshman are assigned to academic advisers according to their residence and their preliminary academic interest. Most sophomores who are undecided about their majors continue to work with their advisers from the first year. Some sophomores participate in the Sophomore Mentoring Program (SMP), which matches faculty mentors with students who have shared intellectual interests through a freshman seminar or sophomore college class. By the end of the sophomore year, undergraduates must declare a major. In junior and senior year, students are advised by faculty from the major department or program.

The Undergraduate Advising Center (UAC) partners with faculty and staff to address students’ intellectual and developmental goals. The center staff includes professional advisers who meet with students individually to set academic goals and to devise strategies for achieving those goals. The staff also coordinates a comprehensive array of academic advising programs and services designed to support and enhance the undergraduate curriculum.

The UAC staff of professional advisers provides advising to all students, freshmen through seniors. These UAC advisers offer students help when the academic adviser is unavailable or when additional advice is needed. Other UAC services include: assistance with curriculum planning; help with choosing a major; information on designing an individually designed major; academic and personal counseling related to academic performance; advice regarding plans to attend graduate or professional school; peer tutoring; and learning skills classes. Reference guides to graduate or professional schools are available. The Undergraduate Advising Center is located on the first floor of Sweet Hall. For detailed information, see the UAC web site at <http://uac-server.stanford.edu/> or request a copy of the UAC brochure by phoning (650) 723-2426.

UNDERGRADUATE RESEARCH PROGRAMS

Director: Susan Brubaker-Cole
Associate Director for Student Services: Laura Selznick
Associate Director for Honors Writing Programs: Hilton Obenzinger

Undergraduate Research Programs (URP), a division of the office of the Vice Provost for Undergraduate Education (VPUE), seeks to foster and expand undergraduate participation in the creation of new knowledge at Stanford. URP sponsors and supports a broad range of programs and services that encourage undergraduates to work closely and individually with faculty on such research, advanced scholarship, and creative projects. Programs are designed to serve students who are able to take on advanced scholarship, and creative projects. Programs are designed to serve students who are new to research, as well as those with considerable research experience who are able to take on advanced, independent projects. URP actively maintains the university’s commitment to diversity, and the range of research projects and topics reflects the broad diversity of Stanford’s faculty and student populations. The URP office is located on the fourth floor of Sweet Hall.

ONLINE RESOURCE FILES

Stanford students can obtain free access to two databases through the World Wide Web designed to facilitate undergraduate and faculty research collaborations. Odyssey lists openings for student research assistants on faculty projects. The Iliad Faculty Interests file contains information about the research interests of individual Stanford faculty across the University. Faculty members with ongoing research programs are encouraged to identify a piece of their project appropriate to undergraduate competencies and to list it through Odyssey. The project may be offered either for credit or for an hourly research assistant wage.

UNDERGRADUATE RESEARCH OPPORTUNITIES (URO)

URO administers research grants directly to Stanford undergraduates. All currently registered undergraduates are eligible to apply for grants, which may support the expenses of faculty-mentored research projects or need-based replacement of financial aid so that they may pursue research. Applicants must file a cover sheet on the World Wide Web at <http://www-uro.stanford.edu>. Faculty recommendation forms and samples of previous successful grant applications are available at 414 Sweet Hall. Grant advice is available both in person and on the URO web pages. The deadlines for major grants (up to \$3,000) for 2001-02 are Friday, April 5 for projects in social sciences, natural sciences, and engineering, and Friday, April 19 for projects in humanities and creative arts. Students with interdisciplinary projects are encouraged to apply by the earlier deadline. Small grants (\$500 maximum per project) are awarded each quarter. The deadlines are October 26, February 8, and April 19.

Major grants differ from small grants in the scope of the project proposed rather than the level of reimbursement requested. Small and major grants are restricted to supplies and expenses associated with research. Major grants are awarded once a year, during Spring Quarter, to as many as 150 students. Students on financial aid may sometimes receive funds to replace summer earning expectations. Summer earnings can occasionally be replaced for small grant winners with a high level of financial need.

The Chappell-Lougee Scholars program is a special opportunity for sophomores in the humanities and social sciences to be involved in research under faculty mentorship. Faculty may nominate students or students may nominate themselves. Financial need is considered, as well as the academic goals of the proposed project. Applications and nominations are due to the URO office by Friday, December 7, 2001. The URO office has information on applications and criteria.

The Future Faculty Incentives Program encourages URO grant recipients from all categories to consider a career in college or university teach-

ing. The award provides undergraduate loan repayment up to \$10,000 for graduate work toward a Ph.D. Preference is given to students from disadvantaged backgrounds who would add diversity to the professoriate in their field of study. Financial need and evidence of disadvantaged background are also considered in the selection process. The application deadline is May 15 of the year in which the student plans to matriculate in a graduate program.

Stanford Fund Research Assistantships and Research Awards enable undergraduates in the humanities and social sciences with financial need to gain research experience in lieu of a campus job. Assistantships are for students who have not yet declared a major, but wish to explore a particular field under faculty supervision. Research Awards are for declared students with subject-matter expertise who wish to pursue that interest further. Recipients may have from 10-15 weeks of term time earnings replaced. High financial need is a criterion for acceptance. A maximum of 25 weeks of work in undergraduate employment may be replaced.

Mellon Minority Undergraduate Fellowships promote diversity by encouraging the pursuit of honors at Stanford and enrollment in a Ph.D. program in the humanities after graduation from Stanford. Benefits include earnings replacement, scholarship expenses, and undergraduate loan repayment totaling a maximum of \$20,000. The deadline is Friday, June 14, 2002.

DEPARTMENTAL AND FACULTY-SPONSORED RESEARCH OPPORTUNITIES

DEPARTMENTAL AND RESEARCH CENTER PROGRAMS

Departments, interdisciplinary programs, and Stanford research centers may apply through the URP office for VPUE departmental Grants for Undergraduate Research and Independent Study to support programs that provide undergraduates with close mentorship and training in scholarship and research. Typically, departments pair students with a faculty member or faculty-led research group according to their mutual scholarly interests. Students conduct substantive, directed research on a particular aspect of the faculty's research project, either part-time (during the school year) or full-time (during the summer), and they meet frequently with their faculty mentors to discuss progress and future directions for the project. Students should check with URP staff to determine which departments and centers currently sponsor programs.

FACULTY GRANTS FOR UNDERGRADUATE INDEPENDENT STUDY AND RESEARCH

Individual faculty members may also apply through the URP office for VPUE Faculty Grants for Undergraduate Independent Study and Research. Faculty Grants provides funding for undergraduates to work closely with faculty on a directed research project. Typical student research activities include conducting literature reviews, developing and conducting research surveys, collecting and analyzing data, aiding in the development of course materials, and conducting laboratory experiments. Faculty determine student participation in this program, so students should contact departments and faculty for more information.

SUMMER RESEARCH COLLEGE

The Summer Research College (SRC) provides a 10-week, residential supplement to undergraduate research programs funded by grants through the URP office. The program is designed to enrich, but not interfere with, the student's primary responsibility to his or her faculty mentor and departmental research expectations. Benefits of the SRC include a subsidy for room and board expenses, residential programming (including faculty guests), special dinners, and cultural and social excursions. The 2002 SRC will run from June 24 to August 29. Students must move into the College by June 24, and must be engaged full-time in a departmental research program for a minimum of eight weeks. Students should contact the URP office or departments for more information.

HONORS PROGRAMS

Qualified undergraduates are encouraged to participate in honors programs offered by departments and interdisciplinary programs. These capstone programs, usually completed in the senior year, provide opportunities for students to engage in advanced research, analysis, and articulation with faculty guidance. Honors programs may require in-depth research or field work with an extended written thesis, laboratory work accompanied by a report, or a creative project. Some honors programs require a public oral and visual presentation of the project's results. Each department and interdisciplinary program develops its own requirements for entry into its program and criteria for honors projects. Some honors programs require students to be majors, while other programs are available to any undergraduate with relevant preparation. Students are urged to check with each department and program to determine eligibility and other requirements.

HONORS WRITING PROGRAMS

In addition to thesis writing support organized by departments and programs, URP offers writing consultation in the form of workshops during seminars, as well as consultation with graduate student assistants and faculty providing writing support for different honors programs. Students writing honors theses can also obtain individual editorial consultation at the URP office. Editorial support is also offered for other advanced writing needs, such as revision of a paper for publication in a professional journal, and personal statements and essays for master's and doctoral programs, and for national fellowship competitions (see Fellowships and Graduate School Applications Services below).

HONORS COLLEGE

The Honors College brings students writing honors theses to campus in September before the start of the regular school year for a program of group and major-based activities. By concentrating solely on the thesis for nearly three weeks, Honors College participants begin the senior year with a serious commitment to independent scholarship in an atmosphere of shared intellectual purpose. The college sponsors cross-disciplinary forums, such as writing workshops and methodology panels, as well as residential activities, such as cultural and social outings, and a celebratory concluding banquet to which students invite their research advisors. Students participating in Honors College receive a research stipend, room and board, and special access to computers and a photocopier. For students with demonstrated financial need, summer-time earnings replacement funds are also available.

FELLOWSHIPS AND GRADUATE SCHOOL APPLICATIONS SERVICES

Fellowships and Graduate School Applications Services provides practical advice to Stanford undergraduates and recent graduates on how to apply for master's and doctoral programs and for scholarships and fellowships such as the Truman, Rhodes, Fulbright, Goldwater, Beinecke, and Mellon. The URP staff provides workshops and individual consultations on choosing a graduate school and fellowship program, writing personal statements, soliciting letters of recommendation, and speaking in interviews. The URP office also administers campus nomination competitions for the Goldwater, Udall, Beinecke, and Truman scholarships, and works with the Overseas Resource Center on preparing students for international scholarship competitions.

CENTER FOR TEACHING AND LEARNING

Assistant Vice Provost and Director: Michele Marincovich
Senior Associate Director (Science and Engineering): Robyn Wright Dunbar
Associate Director (Humanities): Valerie Ross
Administrators: Cristy Osborne and Janet Rutherford

Lecturers: Doree Allen, Thomas Freeland, James Milojkovic, James Wagstaffe

Oral Communication Program Director: Doree Allen

The Center for Teaching and Learning is a university-wide resource on effective teaching and public speaking.

SERVICES TO FACULTY, LECTURERS, AND TEACHING ASSISTANTS

CTL provides the Stanford Community with services and resources on effective teaching.

Our goals are: to identify and involve successful teachers who are willing to share their talents with others; to provide those who are seeking to improve their teaching with the means to do so; to acquaint the Stanford community with important innovations and new technologies for teaching; to prepare inexperienced teachers for their responsibilities; to contribute to the professional development of teaching assistants; to expand awareness of the role of teaching at research universities; and to increase the rewards for superior teaching.

CTL also has responsibility for helping teaching assistants (TAs) with their preparation for and effectiveness in teaching, and for helping departments with designing effective TA training programs. Goals are realized through continuing programs such as: videotaping and consultation; small group evaluation; workshops and lectures; a handbook on teaching and a library of teaching materials; quarterly teaching orientations; an informative quarterly newsletter; and work with individuals, groups, and departments on their specific needs. CTL offices are on the fourth floor of Sweet Hall. For further details, see CTL's teaching handbook or the CTL brochure, both available by calling (650) 723-1326; or consult our Web page at <http://www-ctl.stanford.edu>.

You may email us with your questions or requests at TeachingCenter@stanford.edu

ORAL COMMUNICATION PROGRAM

The Oral Communication Program at CTL provides opportunities for undergraduate and graduate students to develop or improve their oral communication skills. Courses and workshops offer a comprehensive approach to speech communication, including training in the fundamental principles of public speaking and the effective delivery of oral presentations. The goal is to enhance students' general facility and confidence in oral expression. The program also provides innovative, discipline-based instruction to help students refine their personal speaking styles in small groups and classroom settings. Those interested in individualized instruction or independent study are invited to visit the program's Speaking Center in Sweet Hall, where trained student consultants, audio/video technology, and instructional resource materials are available on an ongoing basis. For further details, call (650) 725-4149 or 723-1326 or consult our web page at <http://www-ctl.stanford.edu>.

COURSES

115. Voice Workshop—An innovative workshop focusing on breath, voice production, expansion of vocal range and stamina, and clarity of articulation. Geared toward public speaking generally: presentations, lectures, job talks, etc. Can be taken in conjunction with CTL 117.

1 unit, Aut, Win (Freeland)

117. The Art of Effective Speaking—Introduction to the principles and practice of effective oral communication. Through formal and informal speaking activities, students develop skills framing and articulating ideas through speech. Strategies are presented for speaking extemporaneously, preparing and delivering presentations, formulating persuasive arguments, refining critical clarity of thought, and enhancing general facility and confidence in oral self-expression.

3 units, Aut, Win (Freeland, Allen)

118. Public Speaking—A practical approach to the art of public speaking. Emphasis is on developing skills in various speech types: exposition,

argumentation, and persuasion. Students sharpen their skills with the aid of textbooks, videotapes, texts of famous speeches and participation in a final program of talks. Students also evaluate presentations by others.

3 units, Sum (Wagstaffe)

119. Teaching Oral Communication—Seminar for students with a strong background in public speaking who wish to train as public speaking consultants for CTL's Oral Communications Program. Readings, exercises, and supervised teaching refine speaking skills. Preparation to serve as a peer consultant in a variety of academic disciplines. Prerequisite: consent of instructor.

3 units, Spr (Allen, Freeland)

219. Oral Communication for Graduate Students—Speaking activities such as teaching (delivering lectures, guiding discussion, and facilitating small groups), professional presentations and conference papers, and preparation for orals and defenses. In-class projects, discussion, and individual evaluation assist students in developing effective techniques for improving oral communication skills.

1-3 units, Sum (Allen)

FRESHMAN AND SOPHOMORE PROGRAMS

Assistant Vice Provost and Program Director: Sharon Palmer

Freshman and Sophomore Programs (FSP), a division of the office of the Vice Provost for Undergraduate Education, sponsors and supports Stanford Introductory Seminars, including Freshman Seminars, Sophomore Seminars and Dialogues, and Sophomore College. FSP also coordinates initiatives that encourage faculty and students to build on relationships formed in introductory seminars by forming on-going mentoring and research partnerships based on their shared intellectual interests. FSP is located on the fourth floor of Sweet Hall. For detailed information, see the FSP web site at <http://fsp.stanford.edu/> or call (650) 723-4338.

STANFORD INTRODUCTORY SEMINARS

Stanford Introductory Seminars provide opportunities for first- and second-year students to work closely with faculty in an intimate and focused setting. These courses aim to intensify the intellectual experience of the freshman and sophomore years by allowing students to work with faculty members in a small group setting; introducing students to the variety and richness of academic topics, methods, and issues which lie at the core of particular disciplines; and fostering a spirit of mentorship between faculty and students. Over 200 faculty from more than 60 departments take part in the introductory seminars programs. The courses are given department credit and most count towards an eventual major in the field. Some also fulfill General Education Requirements (GERs).

Some faculty who have taught Freshman Seminars or Sophomore College volunteer to continue working with their students through a formal advising relationship during the students' sophomore years.

FRESHMAN SEMINARS AND SOPHOMORE SEMINARS AND DIALOGUES

Freshman and Sophomore Seminars and Dialogues are offered in a variety of disciplines throughout the academic year. Freshman preference seminars are given for 3–5 units to a maximum of 16 students, and generally meet twice weekly. Although preference for enrollment is given to freshman, sophomores may participate on a space-available basis and with the consent of the instructor. Sophomore preference seminars and dialogues, similarly, give preference to sophomores, but freshmen may participate on a space-available basis and with the consent of the instructor. Sophomore preference seminars are given for 3–5 units to a maximum of ten to twelve students, while sophomore preference dialogues take the form of a directed reading, and are given for 1–2 units to a max-

imum of four to five students. All seminars require a brief application. For a list of introductory seminars offered in 2001–02, please see the Stanford Introductory Seminars section in this bulletin. See the Stanford Introductory Seminars annual course catalogue, published each September, or web site, <http://introsems.stanford.edu/>, for an application or more information.

SOPHOMORE COLLEGE

Sophomore College offers second-year students the opportunity to study intensively in small groups with Stanford faculty for several weeks before the beginning of Fall Quarter. Students immerse themselves in a subject and collaborate with peers, upperclass sophomore assistants, and faculty in constructing a community of scholars. They are also encouraged to explore the full range of Stanford's academic resources in workshops and individually. Each Sophomore College course enrolls twelve students, who live together in a Stanford residence and receive two units of academic credit. Eligible students will have been enrolled for no more than three academic quarters; be in good academic standing; and have completed at least 36 units of academic work by the end of spring quarter. Students must also have an on-campus housing assignment for the ensuing academic year. Room, board, and other academic expenses are covered by Sophomore College. Courses are announced in March, and applications are due in April. For more information or to apply, see the Sophomore College web site at <http://soco.stanford.edu/>.

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