
HARPUR COLLEGE OF ARTS AND SCIENCES

**Division of Humanities
Division of Science and
Mathematics
Division of Social Sciences
Interdisciplinary Majors
Cross-Disciplinary
Concentrations**

UNDERGRADUATE INFORMATION

Harpur College strives to provide its students with a sound liberal education as well as specialization in some area of the humanities, social sciences, arts or sciences.

Prospective applicants should see the general section on Admissions in this *Bulletin*.

The Liberal Arts Program Basis

The program fosters development of knowledge, skills and interpretive abilities and offers other opportunities for growth outside the classroom.

1. *Substantive knowledge.* The quantity of substantive knowledge that a student can assimilate in four years is limited. Harpur deems no single body of knowledge indispensable. Each student, however, is encouraged, and given the opportunity, to acquire understanding of the physical and biological world in which we live; of humankind as individuals, creators and philosophers; and of human relations and arrangements in past and contemporary societies.

2. *Skills.* Students of the liberal arts are expected to master a number of academic skills necessary for rational discourse. The most essential of these are logical argument and clear expression. Such skills are normally supplemented by particular kinds of competence—mathematic, linguistic and the like—as required by individual fields of study.

3. *Interpretive ability.* In the application of learned skills to subject matter, it is assumed that students acquire theoretical understanding and the power of interpretation. The premise here is

that theory provides a means of comprehending and extending fundamental knowledge and perspective.

4. *Supplementary opportunities.* Since students do not now and will not in years to come exclusively inhabit classrooms, libraries, or laboratories, Harpur encourages and provides for a wide range of extracurricular and credit-bearing activities to aid in the continued growth of individual talents, social competency and participatory government among its students.

Academic Organization

Most departments of Harpur College are contained administratively within three principal divisions: humanities (including fine arts), science and mathematics, and social sciences. For most matters, the principal academic and administrative unit is the department. Several interdisciplinary major programs are not attached to any division. Students ordinarily pursue academic major programs supervised by departments, although several interdepartmental majors are available.

Planning a Program Of Study

The all-college distribution requirements, determined by the faculty, provide for exposure to broad areas of learning. Usually, students complete the distribution requirements as early as possible, both because they provide a general introduction to the Harpur College curriculum and because they provide a basis for choosing a major program.

During the first few semesters at Harpur College, students may seek academic advice on planning a program of study from several sources: the academic advising office, relevant academic departments and/or individual faculty members. These academic advisers help to guide students toward a planned and organized program, rather than a random selection of courses.

Normally, students declare a major program by their fifth semester of residence. Those students who receive state financial aid are encouraged to read in the "Financial Information" section of this *Bulletin* about the academic

progress required to maintain state or federal aid. Timely declaration of the major is an important consideration for such students. The declaration process is initiated by students through the academic advising office. When this is done, students are assigned to a faculty academic adviser within the major department program for information about and guidance in the major. The academic advising office remains available to all students throughout their education for information about all-college requirements and other aspects of the undergraduate degree.

Academic Requirements

BA, BFA, BMUS, BS DEGREES

In addition to the bachelor of arts (BA) degree, Harpur College offers a bachelor of fine arts (BFA), bachelor of music (BMus) and bachelor of science (BS) degree in some fields. The general requirements and the all-college distribution requirements for these degrees are the same, but more courses are specified for major requirements for a BS degree than for a BA degree. Whereas no more than 15 courses may be required for a major program leading to the BA, a minimum of 16 courses is required for a major program leading to the BS. Except for interdisciplinary programs, such as biochemistry and psychobiology, every department that offers the BS also offers the BA. More courses are also required for the BFA and BMus degrees. Students must choose whether to earn a BA, BFA, BMus or BS degree, since two degrees may not be earned simultaneously. Note that although students may receive only one degree from Harpur College, they may have two majors or more.

REQUIREMENTS FOR GRADUATION

To qualify for a bachelor of arts, bachelor of fine arts, bachelor of music or bachelor of science degree from Harpur College, the following conditions must be met:

1. Students must complete the General Education requirements. These are described in the Academic Policies and Procedures section of this *Bulletin* under the heading "Undergraduate General Education Program." Certain General Education courses automatically fulfill all-college requirements (e.g., an aesthetics course always counts as a humanities course; a science/lab course and a mathematics/reasoning course always count as two science/math division courses). Others, such as American pluralism, global interdependencies and composition courses, may count toward the all-college divisional requirements, depending on which division a given course is in. General Education courses may also satisfy major requirements.

2. Students must have credit for a minimum of 31 1/2 academic courses (126 credits). (Note:

In Harpur College a course is defined as four credits. Students may apply a maximum of 32 external examination credits toward the Harpur College degree. See "Advanced Placement" in this *Bulletin*.)

3. Students must complete either a third-semester-level course in one foreign language or a second-semester-level course in each of two foreign languages. This requirement may be fulfilled prior to entry into Harpur College and while in high school by having taken and passed three years of one language or two years each of two different languages. American Sign Language is acceptable toward the foreign language requirement.

Make-up of any admission deficiencies in mathematics must also be completed; that is, students must earn four credits of mathematics. (See "Freshman Admission" in the "Admission" section of this *Bulletin* and item 6 in "All-College Distribution Requirements" below.)

4. Students must complete the all-college distribution requirements and the requirements of their major field.

5. Students must complete the all-college writing requirement described later in this section.

6. Students must complete at least 30 Harpur credits in residence.

7. Students must be in residence at Harpur College during the last 7 1/2 courses (30 credits) immediately preceding graduation, unless specifically exempted from this requirement by the Harpur College Academic Standards Committee.

8. Students must be in good academic standing, i.e., must present a minimum cumulative grade-point average of 2.0.

9. Students must pay or satisfactorily adjust all fees and bills.

10. Students must not be under any disciplinary action.

11. Students must be duly recommended by the faculty.

12. Finally, the State University Trustees by formal action must admit the student to the degree.

Harpur College reserves the right to make changes in the requirements for graduation, except that no increase in total courses required for graduation shall retroactively affect any student already matriculated when the change is made.

ALL-COLLEGE DISTRIBUTION REQUIREMENTS

The following distribution among courses is required of all students for the BA, BFA, BMus or BS degree from Harpur College. Courses counted as part of an academic major may also be used to fulfill the all-college distribution requirements.

1. Two courses in the Division of Humanities.

2. Two courses in the Division of Science and Mathematics.

3. Two courses in the Division of Social Sciences.

4. An additional four liberal arts courses chosen from the two divisions other than the division of the student's major department. Interdisciplinary courses may be included among these four courses if they are cross-listed with a division not encompassing the student's major. (See section on interdisciplinary courses.) Physical education courses may not be included among these four courses.

5. Students may apply a maximum of six physical education activity credits toward the 126 required for graduation.

6. The following courses are ineligible for fulfillment of the all-college distribution requirements:

a. Developmental courses, as designated by the Educational Planning and Policies Committee (currently, BIOL 100; HARP 104, 105, 106, 107; MATH 101, 102, 103, 104; RHET 100, 101; CHEM 100; ESL 110, 205, 210). No student may be permitted to apply more than 16 credit hours of developmental courses toward a Harpur College degree;

b. Mathematics or language courses used to fulfill admission deficiencies;

c. Independent studies, internships and teaching practica as well as honors theses courses (-91, -95, -97, -98, 99).

d. Innovational Projects Board (IPB) courses and courses labeled "HARP" or "OCC";

e. Other courses as designated by departments and then recommended by the curriculum committee and approved by the Harpur College Council.

7. Students may count no more than 16 credits of independent study (typically course numbers ending in -97, -98 or -99), no more than eight credits of teaching practica (-91), no more than eight credits of internship (typically -95) and no more than eight credits of theoretical physical education courses (listed as PENR) toward the 126 required for graduation. Also, there is an overall limit of 20 credits on independent study, teaching practica, internship and PENR credits that may count toward the graduation requirement of 126 credits.

Note: Four credit hours in one division will be counted as one course.

ALL-COLLEGE WRITING REQUIREMENT

To ensure that all students obtain considerable experience and receive significant guidance or

instruction in writing during their baccalaureate studies, Harpur College establishes the following requirements relating to enrollment in composition (C) and writing (W) courses:

All candidates for a baccalaureate degree from Harpur College must present one of the following combinations of C and W courses for completion of the writing requirement at the minimum level:

two C and three W *or*

three C and one W *or*

four C

Transfer credit in English expository writing (composition, rhetoric or literature) may be applied to this requirement up to a maximum of three courses, of which only one may count as a C course.

Harpur College believes that writing is central to a liberal arts education. The labels C (composition) and W (writing) in the listing of Harpur College courses each semester guide students in the selection of courses that should help them to develop their writing. These labels also appear on student transcripts to document the extent of students' structured experience in college-level writing. Students are strongly urged to take at least one four-credit C course within their first two semesters (32 credits) at Harpur College.

Composition (C) courses provide substantial experience in writing as well as guidance or explicit instruction designed to develop writing expertise sufficient to the demands of college-level thinking and learning in the particular discipline in which the course is offered. Written assignments in C courses constitute 60-100 percent of the basis for the grade in the course and typically comprise a minimum of 20 pages (5,000 words) of writing.

Writing (W) courses provide considerable experience in and feedback on writing as a tool of college-level teaching and learning. Written assignments in W courses constitute 30-100 percent of the basis for the grade in the course and typically comprise a minimum of 10 pages (2,500 words) of writing.

MAJOR REQUIREMENTS

All students must pursue an approved academic major. Because it is often difficult to complete all requirements for an academic major by the end of the senior year unless a concrete plan is developed early in the academic career, students normally declare a major program before their fifth semester of residence. Although the declaration of major is initiated by students in the Harpur College academic advising office, students should contact appropriate persons in individual departments or programs for advice prior to declaring.

The following major programs are available.

Within the Division of Humanities, the BA degree in:

Africana Studies	German
Arabic	Hebrew
Art	Italian
Art History	Judaic Studies
Cinema	Music
Classical Studies	Philosophy
Comparative Literature	Spanish
English	Theatre
English and Rhetoric	
French	

the BFA degree in: Studio Art

the BMus degree in: Music

Within the Division of Science and Mathematics:

Biochemistry, BS
Biological Sciences, BA, BS
Chemistry, BA, BS
Geological Sciences, BA, BS
Mathematical Sciences, BA, BS
Physics, BA, BS
Psychobiology, BS
Psychology, BA

Within the Division of Social Sciences:

Anthropology, BA, BS
Economics, BA, BS
Geography, BA
History, BA
Political Science, BA
Sociology, BA

In interdisciplinary major departments and programs, the BA degree in:

Environmental Studies (BS also)
Latin American and Caribbean Area Studies
Interdepartmental Studies Program
(see Innovational Projects Board)
Medieval Studies
Philosophy, Politics, and Law

Grading System

Students taking Harpur College courses are graded in one of two ways: 1) normal option using grades of A, A-, B+, B, B-, C+, C, C-, D, F; or 2) Pass/Fail option using grades of P for Pass and F for Fail. In the Pass/Fail option, P is defined as the equivalent of D or better.

1. For each course in which they enroll, students choose (with some limited exceptions; see points 2 and 3 below) one of the two grading options at registration. The decision may be changed (either from normal to P/F or vice versa) at any time up to the last day for dropping courses, usually during the ninth week of the semester. The registrar informs the course instructor of the students' grading choices, and the instructor submits grades accordingly.

2. Students not on probation may elect to use the Pass/Fail option in a maximum of 24 credits

of coursework. Mandatory P/F courses are not included in this 24-credit limit.

3. The instructor of any course may choose to limit the grading option of any course exclusively to the Pass/Fail system. Such a limitation must have approval of the appropriate department and of the Harpur College Curriculum Committee, and must be noted in the preregistration schedule given to students. An indication that P is the only available grade in the course is noted on the student's transcript.

4. All transcripts are complete, semester-by-semester records of courses carried beyond the drop deadline. The explanatory notes that accompany the transcripts contain a clear description of the system used in recording grades.

5. A notation of Incomplete, rather than a grade, may be reported by the instructor when a student has not been able to complete a course for what, in the instructor's judgment, is a compelling reason. It is the student's responsibility to request the Incomplete in a timely fashion so that the instructor can evaluate the circumstance before grades are due to the registrar. The submission of an Incomplete means that a student has made a substantial commitment to the course, that is, has completed more than half of the work required in the course, but some remainder of the work—less than half—must still be accomplished before an evaluation can be made.

Students may not retake a course in order to complete an Incomplete. See the "Repeating Courses" section of this *Bulletin*.

Students must determine with the instructor, consistent with the provisions of the policy stated above, what work is necessary for completion of the course and when the work must be submitted.

Ordinarily all Incomplete notations must be replaced with grades by the end of the next semester, whether or not the student is in college. Incomplete notations change to an F grade at the end of the next semester unless an official extension has been filed with the Registrar's office. It is the student's responsibility to initiate a request for an extension, having reached agreement with the instructor for an alternate completion date. The appropriate form, Request for Extension of Incomplete, may be obtained from the Registrar's office. An Incomplete may be extended for only a limited time. See point 7 below.

6. No change may be made in a grade unless one of the following situations occurs: (a) cheating is discovered; (b) the instructor testifies that a mechanical error has been made; or (c) the instructor receives satisfactory evidence that events beyond control prevented the submission of the student's required work, and so changes the grade to Incomplete.

7. No changes from one letter grade to another and no extensions of an Incomplete are permitted after 18 months from the date of the last day of class in the semester in which a course was offered. However, faculty are required to keep graded work not returned to students for only one semester following the end of the course.

8. Harpur College students taking courses offered by other schools at the University are graded according to the grading system of the school offering the course.

Academic Progress

Academic progress is determined by grade-point average (GPA) calculation, in which:

A	=	4.0
A-	=	3.7
B+	=	3.3
B	=	3.0
B-	=	2.7
C+	=	2.3
C	=	2.0
C-	=	1.7
D	=	1.0
F	=	0.0

GPA is based on all Binghamton University courses taken for credit, except for courses with the grade of P or notations of W, I, MG and AU. Physical education activity courses are not included in the GPA calculation.

To maintain satisfactory academic progress, students are required to earn a minimum cumulative GPA of 2.0 in all Binghamton University courses taken for credit. Students who fail to meet this requirement are placed on probation and are expected to raise their average to a 2.0 level or better within a reasonable period of time. Students on probation may not elect to use the Pass/Fail grading option. Academic probation does not imply dismissal and does not preclude students from registering or from receiving financial aid. For further information about financial eligibility, see the "Financial Information" section of this *Bulletin*.

While students may carry an overall GPA slightly below a 2.0 and be allowed to continue their studies "on probation," those who fall considerably below a cumulative GPA of 2.0 are subject to dismissal. These decisions are made in accordance with the following guidelines:

Academic Dismissal Index

<i>Hours Attempted*</i>	<i>Minimum Cumulative GPA</i>
1-34	1.440
35-51	1.625
52-68	1.715
69-85	1.800
86-102	1.875
103-119	1.950
120+	2.000

**"Hours attempted" includes all external credit (transfer credit, external examination credit, advanced placement credit) evaluated and accepted by Harpur College toward the student's degree program and all Binghamton University course credits carried to the end of a semester, whether passed or not.*

READMISSION AFTER ACADEMIC DISMISSAL

Students who have been dismissed by the college may apply for readmission in writing through the Admissions office. Students are not eligible for readmission until at least two semesters have passed since their notification of dismissal. If readmitted, students will continue on probation until their overall GPA is a 2.0 or better. Readmitted students who fail to achieve an overall 2.0 in a reasonable period of time are dismissed permanently.

REPEATING COURSES

Students may retake courses in which they have received a passing grade by special petition to the faculty member teaching the course and the Harpur College academic advising office. This is to allow a student to demonstrate mastery of a given subject matter most notably (but not exclusively) in foundation courses, on which successful performance in later courses may depend. If approved, the repeated course does not count toward rate of progress. That is, when a student repeats a course previously passed, both grades will appear on the transcript, but only the first grade will be counted in the GPA calculations for rate-of-progress purposes.

Students may retake courses in which they have received a failing grade; they are not required to do so by Harpur College, although major requirements may dictate otherwise. When a student repeats a course previously failed, both grades will appear on the transcript,

and both will be counted in the GPA. Students are encouraged to speak with the academic advising office as they make their decision about repeating any failed course.

When a student retakes a course whose content remains essentially the same, on the transcript the first grade will bear a footnote reading "course retaken."

DROPPING A COURSE AND WITHDRAWING FROM THE UNIVERSITY

Students may formally drop a course from their schedule without penalty, if they do so by the announced drop deadline, i.e., five class days past the midpoint of the semester. Students are permitted to drop courses after the drop deadline only if they cite extraordinary extenuating circumstances and they successfully petition the Harpur College Academic Standards Committee through the academic advising office. Courses dropped late by petition will have a W notation on the transcript.

By filing a Withdrawal Form, Harpur College students may withdraw entirely from the University up to the last day of classes. If the Withdrawal Form is submitted before the drop deadline, registered courses are deleted. If the Withdrawal Form is submitted after the drop deadline, a W grade is assigned to each course. In either case, withdrawal results in a notation on the transcript, "withdrew from the University."

Course Information

PREREQUISITES AND COURSE NUMBERING

Specific course prerequisites are listed clearly in the course descriptions of this *Bulletin*. Instructors may waive prerequisites in particular cases if the student presents appropriate qualifying evidence.

Harpur College courses with numbers 100 through 199 are introductory courses that normally have no prerequisites and are open to all students.

Courses with numbers 200 through 299 are intermediate-level courses that may or may not have prerequisites.

Courses with numbers 300 through 399 are intermediate courses, normally with prerequisites.

Courses with numbers 400 through 499 are advanced-level courses with specific course prerequisites.

Certain numbers indicate special learning situations. Courses noted -80 are intended for special topics, -91 for teaching practica, -95 for internships, -97 for independent study, and -98-99 for honors thesis.

INDEPENDENT STUDY

Independent study accommodates advanced students who wish to pursue individual research under the direct supervision of a faculty member, and is normally reserved for students who cannot pursue their intellectual interests through normal course offerings. Independent study registrations must be signed by the sponsoring faculty member, the student and the appropriate department representative.

First-semester freshmen may not register for independent study courses. Independent study courses may not satisfy all-college distribution requirements.

ATTENDANCE

In addition to the University-wide attendance policy explained in this *Bulletin*, note that individual instructors are free to set more stringent attendance requirements in accordance with the academic needs of their classes.

PROGRAM LOAD

Students may register for up to 18 academic credits without review. Those wishing to register for more than 18 credits must petition through the academic advising office before exceeding the 18-credit limit. Physical education activity courses are not included in these provisions.

COURSES IN THE GRADUATE SCHOOL

Arts and sciences courses numbered 500 and above are graduate courses, ordinarily open only to graduate students. Harpur College students, however, may be permitted to count any course they are qualified to take in the Graduate School toward the 31-1/2 courses required for the baccalaureate degree. The procedure must be initiated by petition and approved by the instructor of the course, the department chair and the academic advising office.

Undergraduate students at Harpur College who have completed all but two courses required for graduation may register for up to two courses of graduate credit to be recorded on a graduate transcript. Such students must be accepted by the Graduate School prior to registering for the courses. Courses submitted for graduate credit by such students may not be counted toward the undergraduate degree. Interested students should consult the academic advising office for details.

COURSES IN OTHER SCHOOLS AT BINGHAMTON UNIVERSITY

Harpur College students may count up to a total of 32 credit hours of non-liberal arts courses toward the 126 credit hours required for the baccalaureate degree. Within the 32-credit limit are included non-liberal arts courses taken at

other institutions, courses in the Decker School, the School of Education and Human Development, the School of Management, the Watson School, and physical education non-activity (PENR) courses.

The School of Management has two programs of interest to Harpur College students: an adjunct option in management science, as a supplement to appropriate major programs in Harpur; and a master of business administration program, with special provisions for Harpur undergraduates. Please see the School of Management section of this *Bulletin* for details of these programs.

Harpur students interested in a minor in computer science should consult the Watson School section of this *Bulletin*.

Academic Honors

DEPARTMENTAL HONORS

Many of the departments and major programs of Harpur College offer qualified students the opportunity to pursue special studies that, if successfully completed, lead to a degree with honors in that field, e.g., "Honors in English" or "Distinguished Independent Work in Chemistry." Students interested in such special programs should check appropriate sections of this *Bulletin* and then consult their major advisers. Normally, consultation with the adviser takes place no later than during the student's fourth semester of residence.

DEAN'S LIST

To qualify for the Harpur Dean's List at the end of each regular semester, students must have a 3.5 or better semester grade-point average, at least 12 graded credits and no missing grades or Incompletes. Recognition is given for each semester in which students meet these criteria. The award is noted on the transcript.

COLLEGE-WIDE HONORS

Students with outstanding academic records receive college-wide honors upon graduation. To qualify students must meet the cumulative grade-point averages specified below, have at least 48 graded Binghamton University credits and have no missing grades or Incompletes. Honors are awarded as follows:

- a) 3.50-3.69 GPA, cum laude
- b) 3.70-3.84 GPA, magna cum laude
- c) 3.85-4.00 GPA, summa cum laude

The appropriate graduation honors are indicated on the diploma and on the final transcript.

Optional Minors

An academic minor is an approved course sequence within an area of study, providing a degree of specialization in that area, a specialty within a discipline or a specialty integrating more

than one discipline. The area in which a student takes a minor is recorded on the student's transcript at graduation as certified by the minor department or program. Students may not declare more than two minors. *Students in Harpur College are not required to take an academic minor.* Departments are not required to offer a minor.

Minors are declared in the academic advising office. Minor requirements are described in detail in this *Bulletin* under each departments listing. The completed minor(s) will appear on the transcript when the degree is certified. Students may not complete minors after graduation.

GENERAL REQUIREMENTS

1. A minimum of 24 credits. (In Harpur College a course is defined as four credits.) Each department or program establishes requirements for its minor. A minor program must include not more than two introductory-level courses and at least two upper-level courses (numbered 300-499).

2. Courses counted as part of the academic minor may also be used to fulfill the all-college distribution requirements.

3. At least four of the courses in the student's minor program must be in addition to those counted toward fulfillment of the requirements for the student's major (and for the other minor if the student pursues two).

4. If a student declares two minors, at least two divisions must be represented in the three fields of study (major and two minors).

5. If a student wishes to minor in a separate specialization or track within the department or program of the major, the proposal must be consistent with stated policies of that department or program.

Innovational Projects Board

The Innovational Projects Board (IPB) is a standing committee of the Harpur College Council composed of faculty, students and administrative personnel. The IPB has authority to grant credit for innovative and interdisciplinary courses and group study projects. In addition, IPB may approve interdisciplinary majors for programs of study not listed in the *Bulletin*, such as Chinese studies, biological anthropology and human social interaction.

MAJOR PROGRAMS

Interdisciplinary major programs approved by the IPB usually consist of regular courses and independent study credits from Harpur College departments. Students with approved IPB majors are not permitted to select the Pass/Fail grading option in courses to fulfill their major requirements except with permission of the Innovational

Projects Board. Students who complete approved IPB majors are eligible for the BA degree.

Proposals to the IPB must be sponsored by at least one Harpur College faculty member and are reviewed initially by the IPB adviser in the academic advising office before submission to IPB for further consideration. Since specific procedures and submission deadlines are established semester by semester, students considering making an IPB proposal should consult early in their planning with the IPB adviser. Copies of application forms, guidelines and procedures are available from the Harpur College academic advising office.

REQUIREMENTS FOR IPB DEPARTMENTAL HONORS

For admission to an IPB departmental honors program, a candidate must:

- a. be an undergraduate IPB major who has completed sufficient coursework to submit a prospectus for the integrative project;
- b. have a cumulative grade-point average of at least 3.3 from all courses taken at Binghamton University;
- c. have a minimum grade-point average of 3.5 in all courses taken in the major;
- d. be recommended for the honors program by the faculty member(s) who sponsor(s) the major and integrative project;
- e. select a three-person committee, (composed of the student's sponsor [as chair], one member of the IPB and one other reader drawn from the University faculty), acceptable to the student;
- f. complete an honors project that represents work substantively in excess of that required by the usual integrative project.

Applications must be made to the Innovational Projects Board no later than the end of the first week of classes of the penultimate semester. A candidate whose project the Innovational Projects Board accepts and who successfully completes an oral defense of the project before his or her honors committee will be awarded "Honors In Interdisciplinary Studies."

Broome Area Community Studies

Broome Area Community Studies is part of a larger program of field-study opportunities. Off Campus College identifies internship opportunities in the local community and in selected out-of-state areas and plans student participation.

The internships give students direct experience in agencies and public service organizations. Internships generally are one-semester, four-credit learning and working experiences. Students work 8-12 hours a week in their

agencies under the day-to-day supervision of agency supervisors. Interns also meet weekly with faculty mentors who encourage the synthesis of fieldwork and formal academic training.

Students interested in internships may fill out an application available in the Off Campus College office. A complete list of internships and courses is published each semester prior to registration and is available from that office.

College-Wide Courses

Note: Unless otherwise noted, all undergraduate courses carry 4 credits and are offered every year.

HARP 105. COLLEGE SKILLS

Instruction and laboratory in reading. Instruction and practice in other developmental skills such as studying, notetaking, use of library, preparing research papers. Not open to students without prior consent of instructor. Does not satisfy major or all-college distribution requirements.

HARP 106. TEST-TAKING SKILLS *2 credits*

Instruction, collaborative work and practice in preparing for and taking quizzes/exams. The course emphasizes critical thinking and active learning in conjunction with other strategies. Not open to students without prior consent of instructor. Does not satisfy major or all-college distribution requirements.

HARP 107. READING STRATEGIES *2 credits*

Instruction, collaborative work and practice in reading strategies, including reading for different purposes, with particular emphasis on critical reading. Not open to students without prior consent of instructor. Does not satisfy major or all-college distribution requirements.

OCC 395. INTERNSHIP

Internships are supervised, experience-based learning opportunities in an office or agency setting. Local internships are community-service oriented. Potomac Area internships benefit from the unique relationship between current students and Binghamton alumni who work in our nation's capital. Various assignments are directed by faculty mentors in conjunction with agency supervisors, including research on public policy questions and participation in agency operations. Students must apply to Off Campus College for internships. Open to all students, regardless of collegiate residence. Does not satisfy major or all-college distribution requirements. Sponsored by Off Campus College.

IPB 497. INNOVATIVE INDEPENDENT STUDY

2 to 16 credits

Tutorial or group seminar study of a particular topic. Students must submit a proposal to the Innovational Projects Board one semester in advance according to the guidelines of the IPB; guidelines available from the IPB office in Academic Advising. Study must be supervised by a member of the Binghamton faculty. Open to all students; offered each semester.

IPB 499. INDEPENDENT RESEARCH

Independent research under the supervision of the IPB three-member honors committee. Must be taken as a one-semester project. Includes an oral defense. Prerequisites: support of the faculty sponsor, eligibility for honors and approval of the IPB.

Professional Career Preparation

American professional training in engineering, law, teaching, medicine, dentistry and the sciences is ordinarily built on a foundation of undergraduate education, usually including a program of four years leading to the bachelor's degree. Students contemplating graduate training for a profession should begin early to consult the bulletins of the graduate and professional schools. Students interested in preparing for a career in teaching and education at the primary and secondary levels should contact the School of Education and Human Development for information about graduate curricular options. Students eligible for the Collegiate Science and Technology Entry Program (CSTEP) should contact the pre-health or pre-law advisers for academic and career information. Additional assistance is available through the CSTEP office (777-2678).

HEALTH PROFESSIONS

The pre-health professions advising office is a key resource for students who wish to continue their studies in the health professions. Students may consult, as often as they wish, with a full-time adviser who is a specialist in the health professions. The office has professional school bulletins, brochures, application forms, reference and study guides, videos, testing materials and current information on the health fields. In addition, pre-health students may join discussions on *bing.prehealth*, the Binghamton University pre-health newsgroup on Usenet. The newsgroup provides an Internet-based forum in which ideas and information can be exchanged with the pre-health professions adviser and among students themselves.

For more information about pre-medical education, see *Medical School Admission Requirements*, published annually by the Association of American Medical Colleges, 2450 N Street NW, Washington, DC 20037-1126. This book covers all aspects of preparation for and admission to medical education, including specific requirements of the individual schools. Although there is some variation, most medical schools (allopathic and osteopathic) require the following college-level courses: one year each of English, biology, inorganic chemistry, organic chemistry and general physics. Some medical schools also require one year of calculus. These sciences must include laboratory experience. As there are well over twice as many applicants as there are positions available in medical schools, it is unlikely that the above minimal requirements will be sufficient.

Dental school requirements are similar. Students interested in dentistry are referred to

Admission Requirements of U.S. and Canadian Dental Schools, published annually by the American Association of Dental Schools, 1619 Massachusetts Avenue NW, Washington, DC 20036. This book presents pertinent information about preparation for dental education, as well as information about individual dental schools.

Requirements for optometry and veterinary medicine are considerably more varied.

ARTICULATION AGREEMENTS

Binghamton University has entered into agreements with five health professional schools that make it easier for students to make a transition between Harpur College and professional school. Students interested in the rural primary care program should consult the Admissions office or the Biological Sciences Department as soon as possible. Students interested in the other programs should consult the pre-health professions adviser in a timely fashion.

Medicine: rural primary care program.

Through the cooperation of Binghamton University, the SUNY Health Science Center at Syracuse and four two-year colleges, this program was initiated and designed to address the need for primary care physicians in rural and other underserved areas of New York.

The Rural Primary Care Scholars Program recruits high school seniors from rural areas of New York state. Participants are guaranteed admission to both Binghamton University to earn the baccalaureate degree and the SUNY Health Science Center at Syracuse for the medical degree. A scholarly research project is required in the senior year at Binghamton University.

The Two-year College Rural Primary Care Recruitment Program enlists applicants from rural areas of New York state who are freshmen at Broome Community College, Corning Community College, and the SUNY colleges of technology at Cobleskill, Delhi and Morrisville. Students complete the associate degree and are guaranteed admission to both Binghamton University, to complete a four-year degree, and the SUNY Health Science Center at Syracuse, to earn the medical degree.

The Early Acceptance Program for UMEDS (Underrepresented Minority or Economically Disadvantaged Students) recruits high school seniors from New York state who are economically disadvantaged or are members of minorities underrepresented in medicine, i.e., African American, Mexican American, Native American or Mainland Puerto Rican. Accepted applicants are simultaneously guaranteed admission to Binghamton University and the SUNY Health Science Center at Syracuse.

Each program provides three years of medical enrichment experiences for students while in college. Questions about this program should be

directed to the Admissions office or to the Biology Department adviser.

Medicine: early assurance. Binghamton University has established agreements with two medical schools (the College of Medicine at SUNY Health Science Center at Syracuse and the School of Medicine at SUNY Buffalo) that allow Binghamton students to participate in early assurance programs. Second-semester sophomores accepted into an early assurance program will be guaranteed admission into medical school upon satisfactory completion of their remaining two years at Binghamton (i.e., receiving their bachelor's degree). Interested students should contact the pre-health professions adviser at the *beginning* of their sophomore year.

Dentistry. Binghamton University and the School of Dental Medicine at SUNY Buffalo have established an early assurance program. This allows students to be guaranteed admission to dental school at the end of the sophomore year, providing they successfully complete their remaining two years at Binghamton. Interested students should contact the pre-health professions advising office.

Optometry. Binghamton University and SUNY College of Optometry have a joint degree program leading to a BA in biology from Binghamton and an OD from the College of Optometry. This program takes seven years instead of the usual eight necessary to obtain both the liberal arts degree and the professional school degree. After three years at Binghamton, participants attend the optometry college, with the first year of professional school counting also as the fourth year at Binghamton. The BA is awarded at the end of the participant's first year of professional school. There are a limited number of spaces (for prospective or current freshmen only) in this program, and there are a number of steps to the admissions process after acceptance into Binghamton (Harpur College). Interested students are encouraged to contact the pre-health professions office or the Admissions office.

Health-related professions. Binghamton University and the College of Health-Related Professions at SUNY Health Science Center at Syracuse have established an articulation

agreement for a 2 + 2 program. Although this agreement does not guarantee admission to the College of Health-Related Professions, it does ensure that Binghamton students will be able to apply to the College of Health-Related Professions as transfer students without the loss of credit and/or status that usually accompanies transfer admissions. This program is available for the professions of cytotechnology, medical technology, physical therapy and respiratory care. Interested students should contact the pre-health professions adviser and the College of Health-Related Professions as soon as possible, because this program is highly structured and precise scheduling is important.

Chemical engineering technology. Binghamton University and Broome Community College have entered into a joint degree program that allows students to receive a bachelor's degree from Binghamton and an AAS degree in chemical engineering technology from Broome in four years. Although open to all students, this program is of special interest to pre-health professions students because the pre-health courses comprise more than half the coursework necessary to obtain the chemical engineering technology degree. Interested students should consult with the pre-health professions adviser.

LEGAL CAREERS

Unlike other graduate and professional schools, law schools do not require specific courses for admission. Students interested in legal careers may pursue a variety of majors. A well-rounded liberal arts education that develops disciplined habits of study, analytical thought and expression skills is the best preparation for law school. The Pre-law Advising office has services and materials available to help students interested in a legal career. The pre-law adviser is available to all students for individual counseling and assistance with the law school application process. The Pre-law Advising office provides a resource library, law school admissions data, test preparation materials and an annual law school recruitment program.

Additional information is available in the *Official Guide to U.S. Law Schools*, prepared by the Law School Admission Council and Law School Admission Services, Box 2000, Newtown, PA 18940.